Universal Enclosures

More than 50 years protecting your equipment

2010 General catalogue

Schneider Electric

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The specific offer

If you decide that a more customised product is right for you, you can choose to modify any of our standard products or start from scratch with a newly designed, comprehensive solution.

A co-development service

We create the enclosure in response to your application based on our industrial expertise.

Specific

When standard enclosures don't meet your needs...
... a dedicated organisation will work with you to deliver an enclosure solution that meets your exact specifications.

Specific offer

The co-development solution tailor-made for you:

Agreed delivery time

- Cut-outs according to your specific requests
- Painting
- Assemblies
- Special dimensions
- Special claddings
- Mounted standard and special accessories

Save time

Use our definition help sheets to streamline your design process and help you choose the best enclosure for your application.

To receive a quote

Contact your representative and explain your needs. A professional team is at your service to develop your specific solution.

Manufacturing

DXF diagram will be sent for your approval.

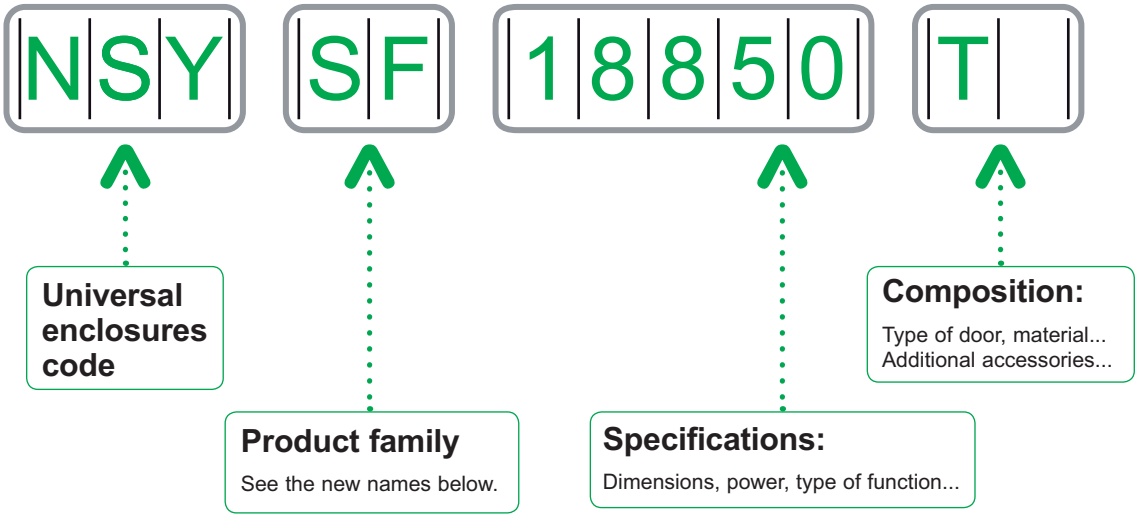
For studies

A dedicated technical office will help you define your product.

Our objective:

Quality and cost by sharing our expertise to help you determine which enclosure would best fit your needs

Understand our references



New product family names:

> ClimaSys:

ClimaSys CV Ventilation system
ClimaSys CA Natural Airing
ClimaSys CU Cooling Units
ClimaSys CE Exchangers
ClimaSys CR Resistance Heaters
ClimaSys CC Thermal Control

> Thalassa insulating enclosures:

Thalassa TBP Industrial boxes PC (UL)
Thalassa TBS Industrial boxes in ABS
Thalassa PLS Insulating modular boxes
Thalassa PLM Wall-mounting in polyester
Thalassa PLA Floor-standing in polyester
Thalassa PLD Floor-standing DIN in polyester

> Spacial metal enclosures:

Spacial S44 - S57 - S24 - SDB Steel industrial boxes
Spacial S3D Steel Wall-mounting
Spacial SF Steel floor-standing suitable
Spacial SM Steel floor-standing compact
Spacial SD Steel Control desk
Spacial S3X Stainless-steel wall-mounting
Spacial SMX Stainless-steel floor-standing monobloc
Spacial SFX Stainless-steel floor-standing suitable
Spacial SDX Stainless-steel control desk

Schneider Electric Universal Enclosures brings you a brighter future

The colour RAL 7035 is now standard across our range of industrial enclosures.

RAL 7032

RAL 7035

Why change?

This colour change is in direct response to customer requests and market trends.

What products will be affected?

All our **Spacial** range of metal industrial products:
- Boxes.
- Wall-mounting enclosures.
- Floor-standing enclosures.
- Climasys thermal products.
- Many accessories associated with these products will also be available in RAL 7035.

How can I obtain RAL 7032 enclosures?

Through our customisation service: the configured and specific offers allow you to quickly obtain RAL 7032 enclosures with industrial quality.

Will the new RAL 7035 colour offer the same properties as RAL 7032?

Yes, our paint will continue to meet all recognised standards.

Spacial Steel

Boxes
From 74 x 74 mm
To 500 x 300 mm

S44 Industrial boxes IP 66
S57 Screw fixed cover boxes IP 66
S24 Safety boxes IP 55
SDB Derivation boxes

Wall-mounting enclosures
From 300 x 200 mm
To 1200 x 1000 mm

S3D Wall-mounting steel
- S3DB Terminal enclosures
- S3DBFL Terminal enclosures with FL21 cut-out
- S3DM Distribution modular enclosures
- VDM 19" enclosures
- S3DEX Potentially explosive atmospheres
- S3HF Electromagnetic compatibility
- S3CM Human-machine dialogue

Floor-standing enclosures
From 500 x 500 mm
To 2200 x 1600 mm

SM Floor-standing compact
SF Floor-standing suitable
- Compartimentalised application
- PC rack
- Electronic application
- Power distribution
- Prisma Plus application
- Automobile application

Control desks
From 1000 x 600 mm
To 1400 x 1600 mm

SD Control desk
SDF With console and desk

ClimaSys
Thermal management

CV-CA
Ventilation/Airing

CE Exchangers

CU Cooling Units

Accessories

Mounting

Power distribution

Cable management

Customised offer available, please contact us.

Spacial Stainless-steel

Thalassa Insulating materials

PLS Insulating modular boxes
TBP Polycarbonate industrial boxes
TBS ABS industrial boxes

S3X Wall-mounting
S3XEX Potentially explosive atmospheres

PLM Wall-mounting polyester
PLMEX Potentially explosive atmospheres

SMX Floor-standing monobloc
- PC Rack

SFX Floor-standing suitable

PLA Floor-standing polyester enclosures
PLD Floor-standing DIN polyester enclosures

SDX Control desk

CR Resistance Heaters

CC Thermal Control

ProClima 5.0
Thermal software

Lighting & sockets

Door accessories

Earthing

Customised offer available, please contact us.

Steel industrial boxes
Selection guide

External dimensions (mm)			Steel industrial box references				
			IK 08			IK 10	Opaque door + screws
Height	Width	Depth	Empty	Plate	Uprights (1)		
80	80	45	NSYSBS884	-	-	-	-
100	100	55	NSYSBS10105	-	-	-	-
130	130	60	NSYSBS13136	-	-	-	-
160	160	65	NSYSBS16166	-	-	-	-
165	120	65	NSYSBS16126	NSYSBS16126S	-	-	-
180	130	96		-	-	-	NSYSBS18139F
180	165	96		-	-	-	NSYSBS18169F
200	200	90	NSYSBS20209	NSYSBS20209S	-	-	-
230	210	126		-	-	-	NSYSBS232112F
250	250	100	NSYSBS252510	NSYSBS252510S	-	-	-
300	200	110		-	NSYSBS302011R	-	-
300	200	150		-	-	NSYSBS302015	-
300	300	100	NSYSBS303010	NSYSBS303010S	-	-	-
300	300	150		-	-	NSYSBS303015	-
400	200	110		-	NSYSBS402011R	-	-
400	300	150		-	-	NSYSBS403015	-
400	400	110	NSYSBS404011	NSYSBS404011S	-	-	-
500	200	110		-	NSYSBS502011R	-	-
500	300	110		-	NSYSBS503011R	-	-
500	300	200		-	-	NSYSBS503020	-
600	200	110		-	NSYSBS602011R	-	-
600	300	110		-	NSYSBS603011R	-	-

(1) Uprights along small sides (Width)

Metallic junction boxes IP 55 (IEC 60529)

	External dimensions (mm)			Models without knock-outs	Models with knock-outs, n° of drill holes, knock-outs and group			Dimensions (mm)			Plain mounting plate	Weight (kg)
	Height (A)	Width (B)	Depth (C)	Reference	Reference	Height (A)	Width (B)	D	E	F		
Low cover models	85	85	49	NSYDBN88	NSYDB88M	1 n° 1	1 n° 1	58	58	-	-	0.18
	105	105	49	NSYDBN1010	NSYDB1010M	2 n° 1	1 n° 1	76	76	-	-	0.25
	155	105	61	NSYDBN1510	NSYDB1510M	3 n° 1	1 n° 2	124	74	56	NSYPMD1510	0.38
	206	156	83	NSYDBN2015	NSYDB2015M	3 n° 3	2 n° 3	172	122	78	NSYPMD2015	1
	256	206	93	NSYDBN2520	NSYDB2520M	3 n° 4	2 n° 4	220	170	88	NSYPMD2520	1.5
	307	257	116	NSYDBN3025	NSYDB3025M	2 n° 3, 2 n° 4	3 n° 4	268	218	110	NSYPMD3025	3.3
	357	307	136	NSYDBN3530	NSYDB3530M	2 n° 3, 3 n° 4	2 n° 3, 2 n° 4	318	268	130	NSYPMD3530	4.8
High cover models	155	105	88	NSYDAN1510	NSYDA1510M	3 n° 2	1 n° 2	124	74	83	NSYPMD1510	0.45
	206	156	122	NSYDAN2015	NSYDA2015M	3 n° 3	2 n° 3	172	122	121	NSYPMD2015	1.2
	256	206	140	NSYDAN2520	NSYDA2520M	3 n° 4	2 n° 4	220	170	131	NSYPMD2520	1.9

Small metallic enclosures IP 55 (IEC 60529)

	External dimensions (mm)			Models without knock-outs	Dimensions (mm)				Plain mounting plate	Weight (kg)
	Height (A)	Width (B)	Depth (C)	Reference	D	E	F	G		
Low cover models	206	156	83	NSYDBN2015D	172	122	78	55	NSYPMD2015	1
	256	206	93	NSYDBN2520D	220	170	88	55	NSYPMD2520	1.5
	307	257	116	NSYDBN3025D	268	218	110	55	NSYPMD3025	3.3
	357	307	136	NSYDBN3530D	318	268	130	55	NSYPMD3530	4.8
High cover models	206	156	122	NSYDAN2015D	172	122	121	45	NSYPMD2015	1.2
	256	206	140	NSYDAN2520D	220	170	131	45	NSYPMD2520	1.9
	307	257	174	NSYDAN3025D	268	218	168	45	NSYPMD3025	4
	357	307	210	NSYDAN3530D	318	268	204	45	NSYPMD3530	5.8

Insulating industrial boxes
Selection guide

Universal boxes with IP 66

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Overall external dimensions (mm)			Overall internal dimensions (mm)			Body (mm)	Cover (mm)	Material			
								ABS IP 66 IK 07		PC-UL IP 66 IK 08	
Height	Width	Depth	Height	Width	Depth			Opaque cover	Transparent cover	Opaque cover	Transparent cover
74	74	54	65	65	47	37	10	NSYTBS775	-	NSYTBP775	-
89	89	54	80	80	47	37	10	NSYTBS885	-	NSYTBP885	-
116	74	62	105	65	55	45	10	NSYTBS1176	-	NSYTBP1176	-
116	74	94	105	65	85	45	40	NSYTBS1179H	-	-	-
116	116	62	105	105	55	45	10	NSYTBS11116	-	NSYTBP11116	-
116	116	133	105	105	125	45	80	NSYTBS111113H	-	-	-
138	93	72	125	80	65	45	20	NSYTBS1397	NSYTBS1397T	NSYTBP1397	NSYTBP1397T
164	121	87	150	105	80	60	20	NSYTBS16128	NSYTBS16128T	NSYTBP16128	NSYTBP16128T
192	121	87	175	105	80	60	20	NSYTBS19128	NSYTBS19128T	NSYTBP19128	NSYTBP19128T
192	121	105	175	105	100	60	40	NSYTBS191210H	NSYTBS191210HT	NSYTBP191210H	NSYTBP191210HT
192	164	87	175	150	80	60	20	NSYTBS19168	NSYTBS19168T	NSYTBP19168	NSYTBP19168T
192	164	105	175	150	100	60	40	NSYTBS191610H	NSYTBS191610HT	NSYTBP191610H	NSYTBP191610HT
241	194	87	225	175	80	60	20	NSYTBS24198	NSYTBS24198T	NSYTBP24198	NSYTBP24198T
241	194	107	225	175	100	80	20	NSYTBS241910	NSYTBS241910T	NSYTBP241910	NSYTBP241910T
241	194	107	225	175	100	60	40	NSYTBS241910H	NSYTBS241910HT	NSYTBP241910H	NSYTBP241910HT
241	194	127	225	175	120	80	40	NSYTBS241912H	NSYTBS241912HT	NSYTBP241912H	NSYTBP241912HT
291	241	88	275	225	80	60	20	NSYTBS29248	NSYTBS29248T	NSYTBP29248	NSYTBP29248T
291	241	128	275	225	120	100	20	NSYTBS292412	NSYTBS292412T	NSYTBP292412	NSYTBP292412T
291	241	128	275	225	120	60	60	NSYTBS292412H	NSYTBS292412HT	NSYTBP292412H	NSYTBP292412HT
291	241	168	275	225	160	100	60	NSYTBS292416H	NSYTBS292416HT	NSYTBP292416H	NSYTBP292416HT
341	291	128	325	275	120	100	20	NSYTBS342912	NSYTBS342912T	NSYTBP342912	NSYTBP342912T
341	291	168	325	275	160	100	60	NSYTBS342916H	NSYTBS342916HT	NSYTBP342916H	NSYTBP342916HT

Modular boxes

Dimensions (mm)			Cover boxes				
Height	Width	Depth	Transparent	Opaque	Polyester	Transparent in batches	Supply
180	270	180	NSYPLS1827	NSYPLSC1827	NSYPLSP1827	NSYPLS1827L	56
270	270	180	NSYPLS2727	NSYPLSC2727	NSYPLSP2727	NSYPLS2727L	56
270	270	230	NSYPLS2727A	NSYPLSC2727A		NSYPLS2727AL	56
270	360	180	NSYPLS2736	NSYPLSC2736	NSYPLSP2736	NSYPLS2736L	56
270	360	230	NSYPLS2736	NSYPLSC2736A	-	NSYPLS2736AL	56
270	540	180	NSYPLS2754	NSYPLSC2754	NSYPLSP2754	NSYPLS2754L	28
270	540	230	NSYPLS2754A	NSYPLSC2754A	-	NSYPLS2754AL	28
360	360	180	NSYPLS3636	NSYPLSC3636	NSYPLSP3636	NSYPLS3636L	28
360	540	180	NSYPLS3654	NSYPLSC3654	NSYPLSP3654	NSYPLS3654L	28
360	540	230	NSYPLS3654A	NSYPLSC3654A	-	NSYPLS3654AL	28
360	720	230	NSYPLS3672A	NSYPLSC3672A	-	NSYPLS3672AL	27
540	540	180	NSYPLS5454	NSYPLSC5454	NSYPLSP5454	NSYPLS5454L	14
540	540	230	NSYPLS5454A	NSYPLSC5454A	-	NSYPLS5454AL	14
540	720	230	NSYPLS5472A	NSYPLSC5472A	-	NSYPLS5472AL	14

Steel wall-mounting enclosures
Selection guide

Specifications						Spacial S3D		
Dimensions (1)			Nº of doors	IP	Weight (kg)*	Plain door		Glazed door
						With mounting plate	Without mounting plate	Without mounting plate
H	W	D				Page 2/8		
300	200	150	1	66	3.02	NSYS3D3215P	NSYS3D3215	-
300	250	150	1	66	3.48	NSYS3D32515P	NSYS3D32515	NSYS3D32515T
300	300	150	1	66	3.90	NSYS3D3315P	NSYS3D3315	NSYS3D3315T
300	300	200	1	66	4.50	NSYS3D3320P	NSYS3D3320	NSYS3D3320T
300	400	150	1	66	4.82	NSYS3D3415P	NSYS3D3415	NSYS3D3415T
300	400	200	1	66	5.60	NSYS3D3420P	NSYS3D3420	NSYS3D3420T
400	300	150	1	66	4.90	NSYS3D4315P	NSYS3D4315	NSYS3D4315T
400	300	200	1	66	5.00	NSYS3D4320P	NSYS3D4320	NSYS3D4320T
400	400	200	1	66	6.50	NSYS3D4420P	NSYS3D4420	NSYS3D4420T
400	600	200	1	66	10.50	NSYS3D4620P	NSYS3D4620	NSYS3D4620T
400	600	250	1	66	12.00	NSYS3D4625P	NSYS3D4625	NSYS3D4625T
500	300	200	1	66	7.50	NSYS3D5320P	NSYS3D5320	NSYS3D5320T
500	400	200	1	66	9.30	NSYS3D5420P	NSYS3D5420	NSYS3D5420T
500	400	250	1	66	10.20	NSYS3D5425P	NSYS3D5425	NSYS3D5425T
500	500	200	1	66	11.18	NSYS3D5520P	NSYS3D5520	NSYS3D5520T
500	500	250	1	66	12.06	NSYS3D5525P	NSYS3D5525	NSYS3D5525T
600	400	200	1	66	11.00	NSYS3D6420P	NSYS3D6420	NSYS3D6420T
600	400	250	1	66	12.00	NSYS3D6425P	NSYS3D6425	NSYS3D6425T
600	500	250	1	66	16.20	NSYS3D6525P	NSYS3D6525	NSYS3D6525T
600	600	200	1	66	14.00	NSYS3D6620P	NSYS3D6620	NSYS3D6620T
600	600	250	1	66	15.00	NSYS3D6625P	NSYS3D6625	NSYS3D6625T
600	600	300	1	66	17.00	NSYS3D6630P	NSYS3D6630	NSYS3D6630T
600	600	400	1	66	19.00	NSYS3D6640P	NSYS3D6640	NSYS3D6640T
600	800	300	1	66	25.50	NSYS3D6830P	NSYS3D6830	NSYS3D6830T
700	500	250	1	66	15.00	NSYS3D7525P	NSYS3D7525	NSYS3D7525T
800	600	200	1	66	21.00	NSYS3D8620P	NSYS3D8620	NSYS3D8620T
800	600	250	1	66	23.00	NSYS3D8625P	NSYS3D8625	NSYS3D8625T
800	600	300	1	66	25.00	NSYS3D8630P	NSYS3D8630	NSYS3D8630T
800	600	400	1	66	29.00	NSYS3D8640P	NSYS3D8640	NSYS3D8640T
800	800	250	1	66	30.00	NSYS3D8825P	NSYS3D8825	NSYS3D8825T
800	800	300	1	66	32.00	NSYS3D8830P	NSYS3D8830	NSYS3D8830T
800	1000	300	1	66	38.00	NSYS3D81030P	NSYS3D81030	-
800	1000	300	2	55	43.50	NSYS3D81030DP	NSYS3D81030D	-
800	1200	300	2	55	46.00	NSYS3D81230DP	NSYS3D81230D	-
1000	600	250	1	66	28.00	NSYS3D10625P	NSYS3D10625	NSYS3D10625T
1000	600	300	1	66	30.60	NSYS3D10630P	NSYS3D10630	NSYS3D10630T
1000	600	400	1	66	33.00	NSYS3D10640P	NSYS3D10640	NSYS3D10640T
1000	800	250	1	66	35.00	NSYS3D10825P	NSYS3D10825	NSYS3D10825T
1000	800	300	1	66	38.00	NSYS3D10830P	NSYS3D10830	NSYS3D10830T
1000	800	400	1	66	42.00	NSYS3D10840P	NSYS3D10840	NSYS3D10840T
1000	1000	300	1	66	46.00	NSYS3D101030P	NSYS3D101030	NSYS3D101030T
1000	1000	300	2	55	46.00	NSYS3D101030DP	NSYS3D101030D	NSYCRNG1010300T
1000	1200	300	2	55	53.00	NSYS3D101230DP	NSYS3D101230D	-
1000	1200	400	2	55	60.00	NSYS3D101240DP	NSYS3D101240D	-
1200	600	300	1	66	37.00	NSYS3D12630P	NSYS3D12630	NSYS3D12630T
1200	600	400	1	66	42.00	NSYS3D12640P	NSYS3D12640	NSYS3D12640T
1200	800	300	1	66	45.00	NSYS3D12830P	NSYS3D12830	NSYS3D12830T
1200	800	400	1	66	49.00	NSYS3D12840P	NSYS3D12840	NSYS3D12840T
1200	1000	300	1	66	53.00	NSYS3D121030P	NSYS3D121030	NSYS3D121030T
1200	1000	300	2	55	54.00	NSYS3D121030DP	NSYS3D121030D	NSYS3D121030DT
1200	1000	400	2	55	61.00	NSYS3D121040DP	NSYS3D121040D	-
1200	1200	300	2	55	64.00	NSYS3D121230DP	NSYS3D121230D	-
1200	1200	400	2	55	90.00	NSYS3D121240DP	NSYS3D121240D	-
1400	1000	300	2	55	80.00	NSYS3D141030DP	NSYS3D141030D	-

(1) For other dimensions, see our aplication offer.
(2) In inverted use, the marking is inverted.

Wall-fixing lugs
Steel: **NSYAEFPFSC**
Stainless steel: **NSYAEFPFXSC**
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Spacial S3DEX
ATEX
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Cable gland
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	Mounting plate							
	Plain mounting plate	Silkscreened mounting plate (2)	Micro-perforated mounting plate	Telequick mouning plate	Bakelite mounting plate	DIN rail chassis	Type	Aluminium vertical rails (3)
	Page 7/2		Page 7/3	Page 7/4	Page 7/5	Page 7/6		Page 7/8
	NSYMM32	-	-	NSYMR32	NSYMB32	-	-	NSYMDVR3
	NSYMM3025	-	NSYMF32	NSYMR3025	NSYMB3025	-	-	NSYMDVR3
	NSYMM33	-	NSYMF33	NSYMR33	NSYMB33	NSYMD33	B	NSYMDVR3
	NSYMM33	-	NSYMF33	NSYMR33	NSYMB33	NSYMD33	B	NSYMDVR3
	NSYMM43	NSYMS43	NSYMF43	NSYMR34	NSYMB43	-	-	NSYMDVR3
	NSYMM43	NSYMS43	NSYMF43	NSYMR34	NSYMB43	-	-	NSYMDVR3
	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYMB43	NSYMD43	B	NSYMDVR4
	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYMB43	NSYMD43	B	NSYMDVR4
	NSYMM44	NSYMS44	NSYMF44	NSYMR44	-	-	-	NSYMDVR4
	NSYMM64	NSYMS64	NSYMF64	NSYMR46	NSYMB64	-	-	NSYMDVR4
	NSYMM64	NSYMS64	NSYMF64	NSYMR46	NSYMB64	-	-	NSYMDVR4
	NSYMM53	NSYMS53	NSYMF53	NSYMR53	-	-	-	NSYMDVR5
	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYMB54	NSYMD54	B	NSYMDVR5
	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYMB54	NSYMD54	B	NSYMDVR5
	NSYMM55	NSYMS55	NSYMF55	NSYMR55	-	-	-	NSYMDVR5
	NSYMM55	NSYMS55	NSYMF55	NSYMR55	-	-	-	NSYMDVR5
	NSYMM64	NSYMS64	NSYMF64	NSYMR64	NSYMB64	NSYMD64	B	NSYMDVR6
	NSYMM64	NSYMS64	NSYMF64	NSYMR64	NSYMB64	NSYMD64	B	NSYMDVR6
	NSYMM65	-	NSYMF65	NSYMR65	NSYMB65	-	-	NSYMDVR6
	NSYMM66	NSYMS66	NSYMF66	NSYMR66	-	NSYMD66	A	NSYMDVR6
	NSYMM66	NSYMS66	NSYMF66	NSYMR66	-	NSYMD66	A	NSYMDVR6
	NSYMM66	NSYMS66	NSYMF66	NSYMR66	-	NSYMD66	A	NSYMDVR6
	NSYMM66	NSYMS66	NSYMF66	NSYMR66	-	NSYMD66	A	NSYMDVR6
	NSYMM86	NSYMS86	NSYMF86	NSYMR68	NSYMB86	NSYMD86**	A	NSYMDVR6
	NSYMM75	NSYMS75	NSYMF75	NSYMR75	NSYMB75	NSYMD75	B	NSYMDVR7
	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8
	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8
	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8
	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8
	NSYMM88	-	NSYMF88	NSYMR88	-	-	-	NSYMDVR8
	NSYMM88	-	NSYMF88	NSYMR88	-	-	-	NSYMDVR8
	NSYMM108	-	NSYMF108	NSYMR810	NSYMB108	-	-	NSYMDVR8
	NSYMM108	-	NSYMF108	NSYMR810	NSYMB108	-	-	NSYMDVR8
	NSYMM128	-	NSYMF128	2 × NSYMR86+	2 × NSYMB86+	2 × NSYMB86+	A	NSYMDVR8
	NSYMM106	-	NSYMF106	NSYMR106	NSYMB106	-	-	NSYMDVR10
	NSYMM106	-	NSYMF106	NSYMR106	NSYMB106	-	-	NSYMDVR10
	NSYMM106	-	NSYMF106	NSYMR106	NSYMB106	-	-	NSYMDVR10
	NSYMM108	-	NSYMF108	NSYMR108	NSYMB108	NSYMD108	A	NSYMDVR10
	NSYMM108	-	NSYMF108	NSYMR108	NSYMB108	NSYMD108	A	NSYMDVR10
	NSYMM108	-	NSYMF108	NSYMR108	NSYMB108	NSYMD108	A	NSYMDVR10
	NSYMM1010	-	NSYMF1010	NSYMR1010	-	-	-	NSYMDVR10
	NSYMM1010	-	NSYMF1010	NSYMR1010	-	-	-	NSYMDVR10
	NSYMM1210	-	NSYMF1210	NSYMR1012	NSYMB1210	-	-	NSYMDVR10
	NSYMM1210	-	NSYMF1210	NSYMR1012	NSYMB1210	-	-	NSYMDVR10
	NSYMM126	-	NSYMF126	-	-	-	-	NSYMDVR12
	NSYMM126	-	NSYMF126	-	-	-	-	NSYMDVR12
	NSYMM128	-	NSYMF128	NSYMR128	-	NSYMD128	A	NSYMDVR12
	NSYMM128	-	NSYMF128	NSYMR128	-	NSYMD128	A	NSYMDVR12
	NSYMM1210	-	NSYMF1210	NSYMR1210	NSYMB1210	-	-	NSYMDVR12
	NSYMM1210	-	NSYMF1210	NSYMR1210	NSYMB1210	-	-	NSYMDVR12
	NSYMM1210	-	NSYMF1210	NSYMR1210	NSYMB1210	-	-	NSYMDVR12
	NSYMM1212	-	2 × NSYMF126+	2 × NSYMR126+	-	-	-	NSYMDVR12
	NSYMM1212	-	2 × NSYMF126+	2 × NSYMR126+	-	-	-	NSYMDVR12
	NSYMM1410	-	-	NSYMR1410	-	-	-	-

*Enclosure without mounting plate.

* Possible assembling to ref. NSYDLM84P or NSYDLM112.

** Possible assembling to ref. NSYDLM168 or NSYDLM240.

+ Order **NSYCRNGSDR** for double mounting of the mounting plates.

(3) Order nuts ref. **NSYAMCSF**. Steel siderail ref. **NSYMDVR12**.

Other cable entries

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Clip-on nuts

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Self-tapping screw

ref. **NSYS13M5HS**

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Schneider Electric Universal Enclosures

The specialist in sealed equipment

History

Schneider Electric Universal Enclosures is based on two historical companies and brands created in 1958, Himel with origins in Spain, and Sarel with origins in France. These two companies have developed more than 50 years experience as leading specialists in the design, manufacturing and marketing of enclosure systems that manage installation and protection of automation and electrical devices while ensuring protection and safety in all types of environmental conditions.

Sarel & Himel are the roots of Schneider Electric Universal Enclosures.

55000 m²
Industrial sites

1300 employees
Dedicated to developing, manufacturing and delivering products for your needs.

Universal Enclosures

A permanent customer focus

From users and purchasing advisers, to distributors and those involved in implementation, Schneider Electric integrates their expectations into its global business approach through:

Products >

Equipment and materials adapted to all circumstances, whatever the configurations or applications, with all the guarantees of quality, reliability, speed and ease of use.

Services >

Customise products to your requirements and respond to specific needs with the greatest flexibility, efficiency and the highest levels of quality.

With this approach, Schneider Electric contributes to its customers competitiveness.

Helping you make the most of your energy

Steel floor-standing enclosures

Selection guide

Nominal dimensions (mm)			No. of doors	Spacial SF						
				Plain door		Transparent door	Side panels (fixing from the outside)	Cable-gland plate		
Height	Width	Depth		With mounting plate	Without mounting plate	Without mounting plate		Plain	1 entry	2 entries
1200	600	400	1	NSYSF12640P	NSYSF12640	-	NSY2SP124	NSYEC64	NSYEC641	-
1200	600	600	1	NSYSF12660P	NSYSF12660	-	NSY2SP126	NSYEC66	NSYEC661	NSYEC662
1200	800	300	1	-	-	-	-	-	-	-
1200	800	400	1	NSYSF12840P	NSYSF12840	-	NSY2SP124	NSYEC84	NSYEC841	-
1200	800	600	1	NSYSF12860P	NSYSF12860	-	NSY2SP126	NSYEC86	NSYEC861	NSYEC862
1200	1000	300	2	-	-	-	-	-	-	-
1200	1200	400	2	-	-	-	-	-	-	-
1400	600	300	1	-	-	-	-	-	-	-
1400	600	400	1	NSYSF14640P	NSYSF14640	-	NSY2SP144	NSYEC64	NSYEC641	-
1400	800	300	1	-	-	-	-	-	-	-
1400	800	400	1	NSYSF14840P	NSYSF14840	-	NSY2SP144	NSYEC84	NSYEC841	-
1400	1000	400	2	-	-	-	-	-	-	-
1400	1200	400	2	-	-	-	-	-	-	-
1600	600	300	1	-	-	-	-	-	-	-
1600	600	400	1	-	-	-	-	-	-	-
1600	600	600	1	NSYSF16660P	NSYSF16660	-	NSY2SP166	NSYEC66	NSYEC661	NSYEC662
1600	600	800	1	NSYSF16680P	NSYSF16680	-	NSY2SP168	NSYEC68	NSYEC681	NSYEC682
1600	800	300	1	-	-	-	-	-	-	-
1600	800	400	1	-	-	-	-	-	-	-
1600	800	600	1	NSYSF16860P	NSYSF16860	-	NSY2SP166	NSYEC86	NSYEC861	NSYEC862
1600	800	800	1	NSYSF16880P	NSYSF16880	-	NSY2SP168	NSYEC88	NSYEC881	NSYEC882
1600	1000	300	2	-	-	-	-	-	-	-
1600	1000	400	2	-	-	-	-	-	-	-
1600	1200	300	2	-	-	-	-	-	-	-
1600	1200	400	2	-	-	-	-	-	-	-
1800	400	400	1	-	NSYSF18440	-	NSY2SP184	NSYEC44	NSYEC441	-
1800	400	500	1	-	NSYSF18450	-	NSY2SP185	NSYEC45	NSYEC451	-
1800	400	600	1	-	NSYSF18460	-	NSY2SP186	NSYEC46	NSYEC461	NSYEC462
1800	600	300	1	-	-	-	-	-	-	-
1800	600	400	1	NSYSF18640P	NSYSF18640	NSYSF18640T	NSY2SP184	NSYEC64	NSYEC641	-
1800	600	500	1	NSYSF18650P	NSYSF18650	NSYSF18650T	NSY2SP185	NSYEC65	NSYEC651	-
1800	600	600	1	NSYSF18660P	NSYSF18660	-	NSY2SP186	NSYEC66	NSYEC661	NSYEC662
1800	600	800	1	-	-	NSYSF18680T	NSY2SP188	NSYEC68	NSYEC681	NSYEC682
1800	800	300	1	-	-	-	-	-	-	-
1800	800	400	1	NSYSF18840P	NSYSF18840	NSYSF18840T	NSY2SP184	NSYEC84	NSYEC841	-
1800	800	500	1	NSYSF18850P	NSYSF18850	NSYSF18850T	NSY2SP185	NSYEC85	NSYEC851	-
1800	800	600	1	NSYSF18860P	NSYSF18860	NSYSF18860T	NSY2SP186	NSYEC86	NSYEC861	NSYEC862
1800	800	600	2	NSYSF188602DP	NSYSF188602D	-	NSY2SP186	NSYEC86	NSYEC861	NSYEC862
1800	1000	400	1	NSYSF181040P	NSYSF181040	-	NSY2SP184	NSYEC104	NSYEC1041	-
1800	1000	400	2	NSYSF1810402DP	NSYSF1810402D	-	NSY2SP184	NSYEC104	NSYEC1041	-
1800	1000	500	1	NSYSF181050P	NSYSF181050	-	NSY2SP185	NSYEC105	NSYEC1051	-
1800	1000	500	2	-	-	-	-	-	-	-
1800	1000	600	1	NSYSF181060P	NSYSF181060	-	NSY2SP186	NSYEC106	NSYEC1061	NSYEC1062
1800	1000	600	2	NSYSF1810602DP	NSYSF1810602D	-	NSY2SP186	NSYEC106	NSYEC1061	NSYEC1062
1800	1200	400	2	NSYSF1812402DP	NSYSF1812402D	-	NSY2SP184	NSYEC124	NSYEC1241	-
1800	1200	500	2	NSYSF1812502DP	NSYSF1812502D	-	NSY2SP185	NSYEC125	NSYEC1251	-
1800	1200	600	2	NSYSF1812602DP	NSYSF1812602D	-	NSY2SP186	NSYEC126	NSYEC1261	NSYEC1262
1800	1600	400	2	-	-	-	-	-	-	-
1800	1600	500	2	-	-	-	-	-	-	-
2000	300	500	1	-	NSYSF20350	-	NSY2SP205	NSYEC35	NSYEC351	-
2000	300	600	1	-	NSYSF20360	-	NSY2SP206	NSYEC36	NSYEC361	-
2000	400	400	1	-	NSYSF20440	-	NSY2SP204	NSYEC44	NSYEC441	-
2000	400	500	1	-	NSYSF20450	-	NSY2SP205	NSYEC45	NSYEC451	-
2000	400	600	1	-	NSYSF20460	-	NSY2SP206	NSYEC46	NSYEC461	NSYEC462
2000	400	800	1	-	NSYSF20480	-	NSY2SP208	NSYEC48	NSYEC481	NSYEC482
2000	600	300	1	-	-	-	-	-	-	-
2000	600	400	1	NSYSF20640P	NSYSF20640	NSYSF20640T	NSY2SP204	NSYEC64	NSYEC641	-
2000	600	500	1	NSYSF20650P	NSYSF20650	NSYSF20650T	NSY2SP205	NSYEC65	NSYEC651	-
2000	600	600	1	NSYSF20660P	NSYSF20660	-	NSY2SP206	NSYEC66	NSYEC661	NSYEC662
2000	600	800	1	NSYSF20680P	NSYSF20680	-	NSY2SP208	NSYEC68	NSYEC681	NSYEC682
2000	800	300	1	-	-	-	-	-	-	-
2000	800	400	1	NSYSF20840P	NSYSF20840	NSYSF20840T	NSY2SP204	NSYEC84	NSYEC841	-
2000	800	500	1	NSYSF20850P	NSYSF20850	NSYSF20850T	NSY2SP205	NSYEC85	NSYEC851	-
2000	800	600	1	NSYSF20860P	NSYSF20860	NSYSF20860T	NSY2SP206	NSYEC86	NSYEC861	NSYEC862
2000	800	600	2	NSYSF208602DP	NSYSF208602D	-	NSY2SP206	NSYEC86	NSYEC861	NSYEC862
2000	800	800	1	NSYSF20880P	NSYSF20880	NSYSF20880T	NSY2SP208	NSYEC88	NSYEC881	NSYEC882
2000	1000	400	1	NSYSF201040P	NSYSF201040	NSYSF201040T	NSY2SP204	NSYEC104	NSYEC1041	-
2000	1000	400	2	NSYSF2010402DP	NSYSF2010402D	-	NSY2SP204	NSYEC104	NSYEC1041	-
2000	1000	500	1	NSYSF201050P	NSYSF201050	NSYSF201050T	NSY2SP205	NSYEC105	NSYEC1051	-
2000	1000	500	2	NSYSF2010502DP	NSYSF2010502D	-	NSY2SP205	NSYEC105	NSYEC1051	-
2000	1000	600	1	NSYSF201060P	NSYSF201060	NSYSF201060T	NSY2SP206	NSYEC106	NSYEC1061	NSYEC1062
2000	1000	600	2	NSYSF2010602DP	NSYSF2010602D	-	NSY2SP206	NSYEC106	NSYEC1061	NSYEC1062
2000	1000	800	1	NSYSF201080P	NSYSF201080	-	NSY2SP208	NSYEC108	NSYEC1081	NSYEC1082
2000	1200	400	2	NSYSF2012402DP	NSYSF2012402D	-	NSY2SP204	NSYEC124	NSYEC1241	-
2000	1200	500	2	NSYSF2012502DP	NSYSF2012502D	-	NSY2SP205	NSYEC125	NSYEC1251	-
2000	1200	600	2	NSYSF2012602DP	NSYSF2012602D	-	NSY2SP206	NSYEC126	NSYEC1261	NSYEC1262
2000	1200	800	2	NSYSF2012802DP	NSYSF2012802D	-	NSY2SP208	NSYEC128	NSYEC1281	NSYEC1282
2000	1600	400	2	NSYSF2016402DP	NSYSF2016402D	-	NSY2SP204	NSYEC164	NSYEC1641	-
2000	1600	500	2	NSYSF2016502DP	NSYSF2016502D	-	NSY2SP205	NSYEC165	NSYEC1651	-
2000	1600	600	2	NSYSF2016602DP	NSYSF2016602D	-	NSY2SP206	NSYEC166	NSYEC1661	NSYEC1662
2200	400	600	1	-	NSYSF22460	-	NSY2SP226	NSYEC46	NSYEC461	NSYEC462
2200	600	600	1	NSYSF22660P	NSYSF22660	-	NSY2SP226	NSYEC66	NSYEC661	NSYEC662
2200	600	800	1	NSYSF22680P	NSYSF22680	-	NSY2SP228	NSYEC68	NSYEC681	NSYEC682
2200	800	600	1	NSYSF22860P	NSYSF22860	-	NSY2SP226	NSYEC86	NSYEC861	NSYEC862
2200	800	800	1	NSYSF22880P	NSYSF22880	NSYSF22880T	NSY2SP228	NSYEC88	NSYEC881	NSYEC882
2200	1000	600	1	NSYSF221060P	NSYSF221060	-	NSY2SP226	NSYEC106	NSYEC1061	NSYEC1062
2200	1200	600	2	NSYSF2212602DP	NSYSF2212602D	-	NSY2SP226	NSYEC126	NSYEC1261	NSYEC1262
2200	1200	800	2	NSYSF2212802DP	NSYSF2212802D	-	NSY2SP228	NSYEC128	NSYEC1281	NSYEC1282

Schneider Electric

Spacial SF - SM

Spacial SM					Accessories SF/SM				
Plain door		Transparent door	Vertical adaptation profiles	Horizontal adaptation profiles	Mounting plate	Plinth height 100 mm		Plinth height 200 mm	
With mounting plate	Without mounting plate	Without mounting plate				Front kit	Side panels	Front kit	Side panels
-	-	-	-	-	NSYMP126	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200
-	-	-	-	-	NSYMP126	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200
NSYSM12830P	NSYSM12830	-	NSYSMVR12	NSYSMHR8	NSYMP128	NSYSPF8100	NSYSPS3100	NSYSPF8200	NSYSPS3200
-	-	-	-	-	NSYMP128	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200
-	-	-	-	-	NSYMP128	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
NSYSM1210302DP	NSYSM1210302D	-	NSYSMVR12	NSYSMHR10	NSYMP1210	NSYSPF10100	NSYSPS3100	NSYSPF10200	NSYSPS3200
NSYSM1212402DP	NSYSM1212402D	-	NSYSMVR12	NSYSMHR12	NSYMP1212	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200
NSYSM14630P	NSYSM14630	-	NSYSMVR14	NSYSMHR6	NSYMP146	NSYSPF6100	NSYSPS3100	NSYSPF6200	NSYSPS3200
NSYSM14640P	NSYSM14640	-	NSYSMVR14	NSYSMHR6	NSYMP146	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200
NSYSM14830P	NSYSM14830	-	NSYSMVR14	NSYSMHR8	NSYMP148	NSYSPF8100	NSYSPS3100	NSYSPF8200	NSYSPS3200
NSYSM14840P	NSYSM14840	NSYSM14840T	NSYSMVR14	NSYSMHR8	NSYMP148	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200
NSYSM1410402DP	NSYSM1410402D	-	NSYSMVR14	NSYSMHR10	NSYMP1410	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200
NSYSM1412402DP	NSYSM1412402D	-	NSYSMVR14	NSYSMHR12	NSYMP1412	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200
NSYSM16630P	NSYSM16630	-	NSYSMVR16	NSYSMHR6	NSYMP166	NSYSPF6100	NSYSPS3100	NSYSPF6200	NSYSPS3200
NSYSM16640P	NSYSM16640	NSYSM16640T	NSYSMVR16	NSYSMHR6	NSYMP166	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200
-	-	-	-	-	NSYMP166	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200
-	-	-	-	-	NSYMP166	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200
NSYSM16830P	NSYSM16830	NSYSM16830T	NSYSMVR16	NSYSMHR8	NSYMP168	NSYSPF8100	NSYSPS3100	NSYSPF8200	NSYSPS3200
NSYSM16840P	NSYSM16840	NSYSM16840T	NSYSMVR16	NSYSMHR8	NSYMP168	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200
-	-	-	-	-	NSYMP168	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
-	-	-	-	-	NSYMP168	NSYSPF8100	NSYSPS8100	NSYSPF8200	NSYSPS8200
NSYSM1610302DP	NSYSM1610302D	-	NSYSMVR16	NSYSMHR10	NSYMP1610	NSYSPF10100	NSYSPS3100	-	-
NSYSM1610402DP	NSYSM1610402D	-	NSYSMVR16	NSYSMHR10	NSYMP1610	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200
NSYSM1612302DP	NSYSM1612302D	-	NSYSMVR16	NSYSMHR12	NSYMP1612	NSYSPF12100	NSYSPS3100	NSYSPF12200	NSYSPS3200
NSYSM1612402DP	NSYSM1612402D	-	NSYSMVR16	NSYSMHR12	NSYMP1612	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200
-	-	-	-	-	-	NSYSPF4100	NSYSPS4100	NSYSPF4200	NSYSPS4200
-	-	-	-	-	-	NSYSPF4100	NSYSPS5100	NSYSPF4200	NSYSPS5200
-	-	-	-	-	-	NSYSPF4100	NSYSPS6100	NSYSPF4200	NSYSPS6200
NSYSM18630P	NSYSM18630	-	NSYSMVR18	NSYSMHR6	NSYMP186	NSYSPF6100	NSYSPS3100	NSYSPF6200	NSYSPS3200
NSYSM18640P	NSYSM18640	NSYSM18640T	NSYSMVR18	NSYSMHR6	NSYMP186	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200
NSYSM18650P	NSYSM18650	-	NSYSMVR18	NSYSMHR6	NSYMP186	NSYSPF6100	NSYSPS5100	NSYSPF6200	NSYSPS5200
-	-	-	-	-	NSYMP186	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200
-	-	-	-	-	NSYMP186	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200
NSYSM18830P	NSYSM18830	NSYSM18830T	NSYSMVR18	NSYSMHR8	NSYMP188	NSYSPF8100	NSYSPS3100	NSYSPF8200	NSYSPS3200
NSYSM18840P	NSYSM18840	NSYSM18840T	NSYSMVR18	NSYSMHR8	NSYMP188	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS6200
NSYSM18850P	NSYSM18850	NSYSM18850T	NSYSMVR18	NSYSMHR8	NSYMP188	NSYSPF8100	NSYSPS5100	NSYSPF8200	NSYSPS5200
NSYSM18860P	NSYSM18860	-	NSYSMVR18	NSYSMHR8	NSYMP188	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
-	-	-	-	-	NSYMP188	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
NSYSM181040P	NSYSM181040	-	NSYSMVR18	NSYSMHR10	NSYMP1810	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200
NSYSM1810402DP	NSYSM1810402D	-	NSYSMVR18	NSYSMHR10	NSYMP1810	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200
-	-	-	-	-	NSYMP1810	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200
NSYSM1810502DP	NSYSM1810502D	-	NSYSMVR18	NSYSMHR10	NSYMP1810	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200
-	-	-	-	-	NSYMP1810	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200
-	-	-	-	-	NSYMP1810	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200
NSYSM1812402DP	NSYSM1812402D	-	NSYSMVR18	NSYSMHR12	NSYMP1812	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200
NSYSM1812502DP	NSYSM1812502D	-	NSYSMVR18	NSYSMHR12	NSYMP1812	NSYSPF12100	NSYSPS5100	NSYSPF12200	NSYSPS5200
-	-	-	-	-	NSYMP1812	NSYSPF12100	NSYSPS6100	NSYSPF12200	NSYSPS6200
NSYSM1816402DP	NSYSM1816402D	-	NSYSMVR18	NSYSMHR16	NSYMP1816	NSYSPF16100	NSYSPS4100	NSYSPF16200	NSYSPS4200
NSYSM1816502DP	NSYSM1816502D	-	NSYSMVR18	NSYSMHR16	NSYMP1816	NSYSPF16100	NSYSPS5100	NSYSPF16200	NSYSPS5200
-	-	-	-	-	-	NSYSPF3100	NSYSPS5100	NSYSPF3200	NSYSPS5200
-	-	-	-	-	-	NSYSPF3100	NSYSPS6100	NSYSPF3200	NSYSPS6200
-	-	-	-	-	-	NSYSPF4100	NSYSPS4100	NSYSPF4200	NSYSPS4200
-	-	-	-	-	-	NSYSPF4100	NSYSPS5100	NSYSPF4200	NSYSPS5200
-	-	-	-	-	-	NSYSPF4100	NSYSPS6100	NSYSPF4200	NSYSPS6200
-	-	-	-	-	-	NSYSPF4100	NSYSPS8100	NSYSPF4200	NSYSPS8200
NSYSM20630P	NSYSM20630	-	NSYSMVR20	NSYSMHR6	NSYMP206	NSYSPF6100	NSYSPS3100	NSYSPF6200	NSYSPS3200
NSYSM20640P	NSYSM20640	NSYSM20640T	NSYSMVR20	NSYSMHR6	NSYMP206	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200
NSYSM20650P	NSYSM20650	-	NSYSMVR20	NSYSMHR6	NSYMP206	NSYSPF6100	NSYSPS5100	NSYSPF6200	NSYSPS5200
-	-	-	-	-	NSYMP206	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200
-	-	-	-	-	NSYMP206	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200
NSYSM20830P	NSYSM20830	NSYSM20830T	NSYSMVR20	NSYSMHR8	NSYMP208	NSYSPF8100	NSYSPS3100	NSYSPF8200	NSYSPS3200
NSYSM20840P	NSYSM20840	NSYSM20840T	NSYSMVR20	NSYSMHR8	NSYMP208	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200
NSYSM20850P	NSYSM20850	NSYSM20850T	NSYSMVR20	NSYSMHR8	NSYMP208	NSYSPF8100	NSYSPS5100	NSYSPF8200	NSYSPS5200
NSYSM20860P	NSYSM20860	NSYSM20860T	NSYSMVR20	NSYSMHR8	NSYMP208	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
-	-	-	-	-	NSYMP208	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
-	-	-	-	-	NSYMP208	NSYSPF8100	NSYSPS8100	NSYSPF8200	NSYSPS8200
-	-	-	-	-	NSYMP2010	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200
NSYSM2010402DP	NSYSM2010402D	-	NSYSMVR20	NSYSMHR10	NSYMP2010	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200
-	-	-	-	-	NSYMP2010	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200
NSYSM2010502DP	NSYSM2010502D	-	NSYSMVR20	NSYSMHR10	NSYMP2010	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200
-	-	-	-	-	NSYMP2010	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200
-	-	-	-	-	NSYMP2010	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200
-	-	-	-	-	NSYMP2010	NSYSPF10100	NSYSPS8100	NSYSPF10200	NSYSPS8200
NSYSM2012402DP	NSYSM2012402D	-	NSYSMVR20	NSYSMHR12	NSYMP2012	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200
NSYSM2012502DP	NSYSM2012502D	-	NSYSMVR20	NSYSMHR12	NSYMP2012	NSYSPF12100	NSYSPS5100	NSYSPF12200	NSYSPS5200
NSYSM2012602DP	NSYSM2012602D	-	NSYSMVR20	NSYSMHR12	NSYMP2012	NSYSPF12100	NSYSPS6100	NSYSPF12200	NSYSPS6200
-	-	-	-	-	NSYMP2012	NSYSPF12100	NSYSPS8100	NSYSPF12200	NSYSPS8200
NSYSM2016402DP	NSYSM2016402D	-	NSYSMVR20	NSYSMHR16	NSYMP2016	NSYSPF16100	NSYSPS4100	NSYSPF16200	NSYSPS4200
NSYSM2016502DP	NSYSM2016502D	-	NSYSMVR20	NSYSMHR16	NSYMP2016	NSYSPF16100	NSYSPS5100	NSYSPF16200	NSYSPS5200
NSYSM2016602DP	NSYSM2016602D	-	NSYSMVR20	NSYSMHR16	NSYMP2016	NSYSPF16100	NSYSPS6100	NSYSPF16200	NSYSPS6200
-	-	-	-	-	-	NSYSPF4100	NSYSPS6100	NSYSPF4200	NSYSPS6200
-	-	-	-	-	NSYMP226	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200
-	-	-	-	-	NSYMP226	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200
-	-	-	-	-	NSYMP228	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200
-	-	-	-	-	NSYMP228	NSYSPF8100	NSYSPS8100	NSYSPF8200	NSYSPS8200
-	-	-	-	-	NSYMP2210	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200
-	-	-	-	-	NSYMP2212	NSYSPF12100	NSYSPS6100	NSYSPF12200	NSYSPS6200
-	-	-	-	-	NSYMP2212	NSYSPF12100	NSYSPS8100	NSYSPF12200	NSYSPS8200

Steel floor-standing enclosures
Selection guide

Nominal dimensions (mm)			No. of doors	Vertical uprights	Bottom frame and top frame with roof	Rear panel	Side panels	Plain door (1)	Transparent door (Securit® glass) (1)	Mounting plate
Height (A)	Width (B)	Depth (C)		Painted with epoxy-polyester resin, textured RAL-7035						
1200	600	400	1	NSYSFV12	NSYSFC64	NSYBP126	NSY2SP124	NSYSFD126	NSYSFD126T	NSYMP126
1200	600	500	1	NSYSFV12	NSYSFC65	NSYBP126	NSY2SP125	NSYSFD126	NSYSFD126T	NSYMP126
1200	600	600	1	NSYSFV12	NSYSFC66	NSYBP126	NSY2SP126	NSYSFD126	NSYSFD126T	NSYMP126
1200	600	800	1	NSYSFV12	NSYSFC68	NSYBP126	NSY2SP128	NSYSFD126	NSYSFD126T	NSYMP126
1200	800	400	1	NSYSFV12	NSYSFC84	NSYBP128	NSY2SP124	NSYSFD128	NSYSFD128T	NSYMP128
1200	800	500	1	NSYSFV12	NSYSFC85	NSYBP128	NSY2SP125	NSYSFD128	NSYSFD128T	NSYMP128
1200	800	600	1	NSYSFV12	NSYSFC86	NSYBP128	NSY2SP126	NSYSFD128	NSYSFD128T	NSYMP128
1200	800	800	1	NSYSFV12	NSYSFC88	NSYBP128	NSY2SP128	NSYSFD128	NSYSFD128T	NSYMP128
1400	600	400	1	NSYSFV14	NSYSFC64	NSYBP146	NSY2SP144	NSYSFD146	NSYSFD146T	NSYMP146
1400	600	500	1	NSYSFV14	NSYSFC65	NSYBP146	NSY2SP145	NSYSFD146	NSYSFD146T	NSYMP146
1400	600	600	1	NSYSFV14	NSYSFC66	NSYBP146	NSY2SP146	NSYSFD146	NSYSFD146T	NSYMP146
1400	600	800	1	NSYSFV14	NSYSFC68	NSYBP146	NSY2SP148	NSYSFD146	NSYSFD146T	NSYMP146
1400	800	400	1	NSYSFV14	NSYSFC84	NSYBP148	NSY2SP144	NSYSFD148	NSYSFD148T	NSYMP148
1400	800	500	1	NSYSFV14	NSYSFC85	NSYBP148	NSY2SP145	NSYSFD148	NSYSFD148T	NSYMP148
1400	800	600	1	NSYSFV14	NSYSFC86	NSYBP148	NSY2SP146	NSYSFD148	NSYSFD148T	NSYMP148
1400	800	800	1	NSYSFV14	NSYSFC88	NSYBP148	NSY2SP148	NSYSFD148	NSYSFD148T	NSYMP148
1600	600	400	1	NSYSFV16	NSYSFC64	NSYBP166	NSY2SP164	NSYSFD166	NSYSFD166T	NSYMP166
1600	600	500	1	NSYSFV16	NSYSFC65	NSYBP166	NSY2SP165	NSYSFD166	NSYSFD166T	NSYMP166
1600	600	600	1	NSYSFV16	NSYSFC66	NSYBP166	NSY2SP166	NSYSFD166	NSYSFD166T	NSYMP166
1600	600	800	1	NSYSFV16	NSYSFC68	NSYBP166	NSY2SP168	NSYSFD166	NSYSFD166T	NSYMP166
1600	800	400	1	NSYSFV16	NSYSFC84	NSYBP168	NSY2SP164	NSYSFD168	NSYSFD168T	NSYMP168
1600	800	500	1	NSYSFV16	NSYSFC85	NSYBP168	NSY2SP165	NSYSFD168	NSYSFD168T	NSYMP168
1600	800	600	1	NSYSFV16	NSYSFC86	NSYBP168	NSY2SP166	NSYSFD168	NSYSFD168T	NSYMP168
1600	800	800	1	NSYSFV16	NSYSFC88	NSYBP168	NSY2SP168	NSYSFD168	NSYSFD168T	NSYMP168
1800	400	400	1	NSYSFV18	NSYSFC44	NSYBP184	NSY2SP184	NSYSFD184	-	-
1800	400	500	1	NSYSFV18	NSYSFC45	NSYBP184	NSY2SP185	NSYSFD184	-	-
1800	400	600	1	NSYSFV18	NSYSFC46	NSYBP184	NSY2SP186	NSYSFD184	-	-
1800	400	800	1	NSYSFV18	NSYSFC48	NSYBP184	NSY2SP188	NSYSFD184	-	-
1800	600	400	1	NSYSFV18	NSYSFC64	NSYBP186	NSY2SP184	NSYSFD186	NSYSFD186T	NSYMP186
1800	600	500	1	NSYSFV18	NSYSFC65	NSYBP186	NSY2SP185	NSYSFD186	NSYSFD186T	NSYMP186
1800	600	600	1	NSYSFV18	NSYSFC66	NSYBP186	NSY2SP186	NSYSFD186	NSYSFD186T	NSYMP186
1800	600	800	1	NSYSFV18	NSYSFC68	NSYBP186	NSY2SP188	NSYSFD186	NSYSFD186T	NSYMP186
1800	800	400	1	NSYSFV18	NSYSFC84	NSYBP188	NSY2SP184	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	500	1	NSYSFV18	NSYSFC85	NSYBP188	NSY2SP185	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	600	1	NSYSFV18	NSYSFC86	NSYBP188	NSY2SP186	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	600	2	NSYSFV18	NSYSFC86	NSYBP188	NSY2SP186	NSYSFD1882D	-	NSYMP188
1800	800	800	1	NSYSFV18	NSYSFC88	NSYBP188	NSY2SP188	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	800	2	NSYSFV18	NSYSFC88	NSYBP188	NSY2SP188	NSYSFD1882D	-	NSYMP188
1800	1000	400	1	NSYSFV18	NSYSFC104	NSYBP1810	NSY2SP184	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	400	2	NSYSFV18	NSYSFC104	NSYBP1810	NSY2SP184	NSYSFD18102D	-	NSYMP1810
1800	1000	500	1	NSYSFV18	NSYSFC105	NSYBP1810	NSY2SP185	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	600	1	NSYSFV18	NSYSFC106	NSYBP1810	NSY2SP186	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	600	2	NSYSFV18	NSYSFC106	NSYBP1810	NSY2SP186	NSYSFD18102D	-	NSYMP1810
1800	1000	800	1	NSYSFV18	NSYSFC108	NSYBP1810	NSY2SP188	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	800	2	NSYSFV18	NSYSFC108	NSYBP1810	NSY2SP188	NSYSFD18102D	-	NSYMP1810
1800	1200	400	2	NSYSFV18	NSYSFC124	NSYBP1812	NSY2SP184	NSYSFD18122D	NSYSFD18122DT	NSYMP1812
1800	1200	500	2	NSYSFV18	NSYSFC125	NSYBP1812	NSY2SP185	NSYSFD18122D	NSYSFD18122DT	NSYMP1812
1800	1200	600	2	NSYSFV18	NSYSFC126	NSYBP1812	NSY2SP186	NSYSFD18122D	NSYSFD18122DT	NSYMP1812
1800	1200	800	2	NSYSFV18	NSYSFC128	NSYBP1812	NSY2SP188	NSYSFD18122D	NSYSFD18122DT	NSYMP1812

(1) Hinges, locking bar catches and handle with 5-mm double-bar insert included.

More than 600 possible configurations with Spacial SF kit!

Schneider Electric

Steel floor-standing enclosures

Nominal dimensions (mm)			No. of doors	Vertical uprights	Bottom frame and top frame with roof	Rear panel	Side panels	Plain door (1)	Transparent door (Securit® glass) (1)	Mounting plate
Height (A)	Width (B)	Depth (C)		Painted with epoxy-polyester resin, textured RAL-7035						
2000	300	500	1	NSYSFV20	NSYSFC35	NSYBP203	NSY2SP205	NSYSFD203	-	-
2000	300	600	1	NSYSFV20	NSYSFC36	NSYBP203	NSY2SP206	NSYSFD203	-	-
2000	400	400	1	NSYSFV20	NSYSFC44	NSYBP204	NSY2SP204	NSYSFD204	-	-
2000	400	500	1	NSYSFV20	NSYSFC45	NSYBP204	NSY2SP205	NSYSFD204	-	-
2000	400	600	1	NSYSFV20	NSYSFC46	NSYBP204	NSY2SP206	NSYSFD204	-	-
2000	400	800	1	NSYSFV20	NSYSFC48	NSYBP204	NSY2SP208	NSYSFD204	-	-
2000	600	400	1	NSYSFV20	NSYSFC64	NSYBP206	NSY2SP204	NSYSFD206	NSYSFD206T	NSYMP206
2000	600	500	1	NSYSFV20	NSYSFC65	NSYBP206	NSY2SP205	NSYSFD206	NSYSFD206T	NSYMP206
2000	600	600	1	NSYSFV20	NSYSFC66	NSYBP206	NSY2SP206	NSYSFD206	NSYSFD206T	NSYMP206
2000	600	800	1	NSYSFV20	NSYSFC68	NSYBP206	NSY2SP208	NSYSFD206	NSYSFD206T	NSYMP206
2000	800	400	1	NSYSFV20	NSYSFC84	NSYBP208	NSY2SP204	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	500	1	NSYSFV20	NSYSFC85	NSYBP208	NSY2SP205	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	600	1	NSYSFV20	NSYSFC86	NSYBP208	NSY2SP206	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	600	2	NSYSFV20	NSYSFC86	NSYBP208	NSY2SP206	NSYSFD2082D	-	NSYMP208
2000	800	800	1	NSYSFV20	NSYSFC88	NSYBP208	NSY2SP208	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	800	2	NSYSFV20	NSYSFC88	NSYBP208	NSY2SP208	NSYSFD2082D	-	NSYMP208
2000	1000	400	1	NSYSFV20	NSYSFC104	NSYBP2010	NSY2SP204	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	400	2	NSYSFV20	NSYSFC104	NSYBP2010	NSY2SP204	NSYSFD20102D	-	NSYMP2010
2000	1000	500	1	NSYSFV20	NSYSFC105	NSYBP2010	NSY2SP205	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	500	2	NSYSFV20	NSYSFC105	NSYBP2010	NSY2SP205	NSYSFD20102D	-	NSYMP2010
2000	1000	600	1	NSYSFV20	NSYSFC106	NSYBP2010	NSY2SP206	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	600	2	NSYSFV20	NSYSFC106	NSYBP2010	NSY2SP206	NSYSFD20102D	-	NSYMP2010
2000	1000	800	1	NSYSFV20	NSYSFC108	NSYBP2010	NSY2SP208	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	800	2	NSYSFV20	NSYSFC108	NSYBP2010	NSY2SP208	NSYSFD20102D	-	NSYMP2010
2000	1200	400	2	NSYSFV20	NSYSFC124	NSYBP2012	NSY2SP204	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1200	500	2	NSYSFV20	NSYSFC125	NSYBP2012	NSY2SP205	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1200	600	2	NSYSFV20	NSYSFC126	NSYBP2012	NSY2SP206	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1200	800	2	NSYSFV20	NSYSFC128	NSYBP2012	NSY2SP208	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1600	400	2	NSYSFV20	NSYSFC164	NSYBP2016	NSY2SP204	NSYSFD20162D	-	NSYMP2016
2000	1600	500	2	NSYSFV20	NSYSFC165	NSYBP2016	NSY2SP205	NSYSFD20162D	-	NSYMP2016
2000	1600	600	2	NSYSFV20	NSYSFC166	NSYBP2016	NSY2SP206	NSYSFD20162D	-	NSYMP2016
2200	400	400	1	NSYSFV22	NSYSFC44	NSYBP224	NSY2SP224	NSYSFD224	-	-
2200	400	500	1	NSYSFV22	NSYSFC45	NSYBP224	NSY2SP225	NSYSFD224	-	-
2200	400	600	1	NSYSFV22	NSYSFC46	NSYBP224	NSY2SP226	NSYSFD224	-	-
2200	400	800	1	NSYSFV22	NSYSFC48	NSYBP224	NSY2SP228	NSYSFD224	-	-
2200	600	400	1	NSYSFV22	NSYSFC64	NSYBP226	NSY2SP224	NSYSFD226	NSYSFD226T	NSYMP226
2200	600	500	1	NSYSFV22	NSYSFC65	NSYBP226	NSY2SP225	NSYSFD226	NSYSFD226T	NSYMP226
2200	600	600	1	NSYSFV22	NSYSFC66	NSYBP226	NSY2SP226	NSYSFD226	NSYSFD226T	NSYMP226
2200	600	800	1	NSYSFV22	NSYSFC68	NSYBP226	NSY2SP228	NSYSFD226	NSYSFD226T	NSYMP226
2200	800	400	1	NSYSFV22	NSYSFC84	NSYBP228	NSY2SP224	NSYSFD228	NSYSFD228T	NSYMP228
2200	800	500	1	NSYSFV22	NSYSFC85	NSYBP228	NSY2SP225	NSYSFD228	NSYSFD228T	NSYMP228
2200	800	600	1	NSYSFV22	NSYSFC86	NSYBP228	NSY2SP226	NSYSFD228	NSYSFD228T	NSYMP228
2200	800	800	1	NSYSFV22	NSYSFC88	NSYBP228	NSY2SP228	NSYSFD228	NSYSFD228T	NSYMP228
2200	1000	400	1	NSYSFV22	NSYSFC104	NSYBP2210	NSY2SP224	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1000	500	1	NSYSFV22	NSYSFC105	NSYBP2210	NSY2SP225	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1000	600	1	NSYSFV22	NSYSFC106	NSYBP2210	NSY2SP226	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1000	800	1	NSYSFV22	NSYSFC108	NSYBP2210	NSY2SP228	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1200	400	2	NSYSFV22	NSYSFC124	NSYBP2212	NSY2SP224	NSYSFD22122D	NSYSFD22122DT	NSYMP2212
2200	1200	500	2	NSYSFV22	NSYSFC125	NSYBP2212	NSY2SP225	NSYSFD22122D	NSYSFD22122DT	NSYMP2212
2200	1200	600	2	NSYSFV22	NSYSFC126	NSYBP2212	NSY2SP226	NSYSFD22122D	NSYSFD22122DT	NSYMP2212
2200	1200	800	2	NSYSFV22	NSYSFC128	NSYBP2212	NSY2SP228	NSYSFD22122D	NSYSFD22122DT	NSYMP2212

(1) Hinges, locking bar catches and handle with 5-mm double-bar insert included.

Do it yourself, by using the kit version!

Stainless-steel wall-mounting enclosures
Selection guide

External dimensions (mm)			No. of locks	No. of doors	304L stainless steel		316L stainless steel	304L stainless-steel canopy	Plain mounting plate***
Height	Width	Depth			Plain door	Glazed door**	Plain door		
300	200	150	1	1	NSYS3X3215	-	NSYS3X3215H	NSYTX2015	NSYMM32
300	250	150	1	1	NSYS3X302515	-	NSYS3X302515H	NSYTX2515	NSYMM3025
300	300	150	1	1	NSYS3X3315	-	NSYS3X3315H	NSYTX3015	NSYMM33
400	300	150	1	1	NSYS3X4315	-	NSYS3X4315H	NSYTX3015	NSYMM43
400	300	200	1	1	NSYS3X4320	NSYS3X4320T	NSYS3X4320H	NSYTX3020	NSYMM43
400	400	200	1	1	NSYS3X4420	-	NSYS3X4420H	NSYTX4020	NSYMM44
400	600	200	1	1	NSYS3X4620	-	NSYS3X4620H	NSYTX6020	NSYMM46
500	400	200	2	1	NSYS3X5420	NSYS3X5420T	NSYS3X5420H	NSYTX4020	NSYMM54
600	400	200	2	1	NSYS3X6420	NSYS3X6420T	NSYS3X6420H	NSYTX4020	NSYMM64
600	600	250	2	1	NSYS3X6625	-	NSYS3X6625H	NSYTX6025	NSYMM66
700	500	250	2	1	NSYS3X7525	NSYS3X7525T	NSYS3X7525H	NSYTX5025	NSYMM75
800	600	250	2	1	NSYS3X8625	NSYS3X8625T	NSYS3X8625H	NSYTX6025	NSYMM86
800	800	300	2	1	NSYS3X8830	-	NSYS3X8830H	NSYTX8030	NSYMM88
1000	800	300	2	1	NSYS3X10830	NSYS3X10830T	NSYS3X10830H	NSYTX8030	NSYMM108
1000	1000	300	*	2	NSYS3X101030	-	NSYS3X101030H	NSYTX10030	NSYMM1010
1200	800	300	2	1	NSYS3X12830	-	NSYS3X12830H	NSYTX8030	NSYMM128
1200	1000	300	*	2	NSYS3X121030	-	NSYS3X121030H	NSYTX10030	NSYMM1210

*Three-point closure system.
**The glazed door has no reinforcement.
***See other mounting plates in common accessoires.

Selection guide for wall-mounting enclosures and main accessories

External dimensions (mm)			Enclosure reference	Mounting plate reference				DIN rail chassis	Step slides
Height	Width	Depth		Plain	Silkscreened	Microperforated	Telequick		
300	200	150	NSYS3XEX3215	NSYMM32	-	NSYMF32	NSYMR32	-	-
400	300	200	NSYS3XEX4320	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYMD43	NSYSDCR200
500	400	200	NSYS3XEX5420	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYMD54	NSYSDCR200
600	400	200	NSYS3XEX6420	NSYMM64	NSYMS64	NSYMF64	NSYMR64	NSYMD64	NSYSDCR200
700	500	250	NSYS3XEX7525	NSYMM75	NSYMS75	NSYMF75	NSYMR75	NSYMD75	NSYSDCR250
800	600	250	NSYS3XEX8625	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMD86	NSYSDCR250
1000	800	300	NSYS3XEX10830	NSYMM108	-	NSYMF108	NSYMR108	NSYMD108	NSYSDCR300

Stainless-steel floor-standing enclosures
Selection guide

Stainless-steel floor-standing monobloc

External dimensions (mm)			Number of front doors	Stainless-steel floor-standing enclosure 304L / 316L*	Brushed 316L stainless-steel plinth height 100 mm **		Brushed 316L stainless-steel plinth height 200 mm **		Plain mounting plate***
Height	Width	Depth			Front + corner	Side	Front + corner	Side	
1400	1000	300	2	NSYSMX141030	NSYSPXF10100H	NSYSPXS3100H	NSYSPXF10200H	2 × NSYSPXS3100H	NSYMP1410
1600	800	400	1	NSYSMX16840	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP168
1800	600	400	1	NSYSMX18640	NSYSPXF6100H	NSYSPXS4100H	NSYSPXF6200H	2 × NSYSPXS4100H	NSYMP186
1800	800	400	1	NSYSMX18840*	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP188
1800	1200	400	2	NSYSMX181240*	NSYSPXF12100H	NSYSPXS4100H	NSYSPXF12200H	2 × NSYSPXS4100H	NSYMP1812
1800	1600	400	2	NSYSMX181640*	NSYSPXF16100H	NSYSPXS4100H	NSYSPXF16200H	2 × NSYSPXS4100H	NSYMP1813
2000	800	500	1	NSYSMX20850	NSYSPXF8100H	NSYSPXS5100H	NSYSPXF8200H	2 × NSYSPXS5100H	NSYMP208
2000	1000	400	2	NSYSMX201040*	NSYSPXF10100H	NSYSPXS4100H	NSYSPXF10200H	2 × NSYSPXS4100H	NSYMP2010
2000	1200	500	2	NSYSMX201250*	NSYSPXF12100H	NSYSPXS5100H	NSYSPXF12200H	2 × NSYSPXS5100H	NSYMP2012
2000	1600	600	2	NSYSMX201660*	NSYSPXF16100H	NSYSPXS6100H	NSYSPXF16200H	2 × NSYSPXS6100H	NSYMP2016

* For version in AISI 316L stainless steel, add the lettre H to the end of the reference. Example NSYSMX18840H
** See section on stainless-steel composition accessories.
*** See other mounting plates in common accessoires.

Stainless-steel floor-standing suitable

External dimensions (mm)			Number of front doors	References in 304L stainless steel (1)			Brushed 316L stainless-steel plinth height 100 mm (2)		Brushed 316L stainless-steel plinth height 200 mm (2)		Plain mounting plate (3)
Height (A)	Width (B)	Depth (C)		Suitable enclosure	Set of 2 side panels	Coupling kit	Front + corner	Side	Front + corner	Side	
1800	600	400	1	NSYSFX18640	NSY2SPX184	NSYSFBK19	NSYSPXF6100H	NSYSPXS4100H	NSYSPXF6200H	2 × NSYSPXS4100H	NSYMP186
1800	800	400	1	NSYSFX18840	NSY2SPX184	NSYSFBK19	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP188
1800	1200	400	2	NSYSFX181240	NSY2SPX184	NSYSFBK19	NSYSPXF12100H	NSYSPXS4100H	NSYSPXF12200H	2 × NSYSPXS4100H	NSYMP1812
2000	600	500	1	NSYSFX20650	NSY2SPX205	NSYSFBK19	NSYSPXF6100H	NSYSPXS5100H	NSYSPXF6200H	2 × NSYSPXS5100H	NSYMP206
2000	800	400	1	NSYSFX20840	NSY2SPX204	NSYSFBK19	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP208
2000	800	600	1	NSYSFX20860	NSY2SPX206	NSYSFBK19	NSYSPXF8100H	NSYSPXS6100H	NSYSPXF8200H	2 × NSYSPXS6100H	NSYMP208
2000	1000	600	2	NSYSFX201060	NSY2SPX206	NSYSFBK19	NSYSPXF10100H	NSYSPXS6100H	NSYSPXF10200H	2 × NSYSPXS6100H	NSYMP2010
2000	1200	600	2	NSYSFX201260	NSY2SPX206	NSYSFBK19	NSYSPXF12100H	NSYSPXS6100H	NSYSPXF12200H	2 × NSYSPXS6100H	NSYMP2012

(1) 316L stainless-steel enclosures on request.
(2) See section on stainless-steel composition accessories.
(3) See other mounting plates in common accessoires.

Stainless-steel control desks

Dimensions (mm)			Reference	Number of front doors	316L stainless-steel plinth, height 100 mm (1)		316L stainless-steel plinth, height 200 mm (1)		Plain mounting plate (2)
Height	Width	Depth			Front + corner	Side	Front + corner	Side	
1000	600	500	NSYSDX6	1	NSYSPXF6100H	NSYSPXS5100H	NSYSPXF6200H	2 × NSYSPXS5100H	NSYPMP8560
1000	800	500	NSYSDX8	1	NSYSPXF8100H	NSYSPXS5100H	NSYSPXF8200H	2 × NSYSPXS5100H	NSYPMP8580
1000	1000	500	NSYSDX10	2	NSYSPXF10100H	NSYSPXS5100H	NSYSPXF10200H	2 × NSYSPXS5100H	NSYPMP85100
1000	1200	500	NSYSDX12	2	NSYSPXF12100H	NSYSPXS5100H	NSYSPXF12200H	2 × NSYSPXS5100H	NSYPMP85120

(1) See section on stainless-steel composition accessories.
(2) See other mounting plates in common accessoires.

Polyester wall-mounting enclosures
Selection guide

Polyester wall-mounting enclosures IP 66

External dimensions (mm)			ABS/PC wall-mounting enclosures IP 66		Polyester wall-mounting enclosures IP 66			
H	W	D	Plain door	Transp. door	Plain door	Transp. door	Plain door 3-point closure	Transp. door 3-point closure
			Page 6/18		Page 6/19 and 6/20		Page 6/20	
310	215	160	NSYPLM32	NSYPLM32T	-	-	-	-
308	255	160	-	-	NSYPLM3025	NSYPLM3025T	-	-
430	330	200	-	-	NSYPLM43	NSYPLM43T	NSYPLM43V	NSYPLM43TV
530	430	200	-	-	NSYPLM54	NSYPLM54T	NSYPLM54V	NSYPLM54TV
647	436	250	-	-	NSYPLM64	NSYPLM64T	NSYPLM64V	NSYPLM64TV
747	536	300	-	-	NSYPLM75	NSYPLM75T	NSYPLM75V	NSYPLM75TV
847	636	300	-	-	NSYPLM86	NSYPLM86T	NSYPLM86V	NSYPLM86TV
1056	852	350	-	-	NSYPLM108	NSYPLM108T	-	-

Polyester wall-mounting PLMEX

External dimensions (mm)			References	Metallic mounting plate references				References	
Height	Width	Depth	Enclosures	Plain	Silkscreened	Microperforated	Telequick	Step slides	Padlocking
308	255	160	NSYPLMEX3025	NSYMM3025	-	-	NSYMR3025	-	-
430	330	200	NSYPLMEX43	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYDPLM200	NSYKPLM
530	430	200	NSYPLMEX54	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYDPLM200	NSYKPLM
647	436	250	NSYPLMEX64	NSYMM64	NSYMS64	NSYMF64	NSYMR64	NSYDPLM250	NSYKPLM
747	536	300	NSYPLMEX75	NSYMM75	NSYMS75	NSYMF75	NSYMR75	NSYDPLM300	NSYKPLM
847	636	300	NSYPLMEX86	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYDPLM300	NSYKPLM
1056	852	350	NSYPLMEX108	NSYMM108	-	NSYMF108	NSYMR108	NSYDPLM350	NSYBCPL

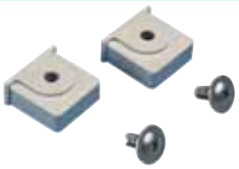
Polyester wall-mounting enclosures
Selection guide

Mounting accessories

External dimensions of the enclosures (mm)			Metallic mounting plates				Insulating mounting plates		Modular distribution chassis	Step slides	Symmetrical DIN rail
H	W	D	Plain	Silkscreened	Microperforated	Telequick	Bakelite	Polyester			
			Page 7/2		Page 7/3	Page 7/4	Page 7/5		Page 6/32	Page 6/29	Page 6/29
310	215	160	NSYMM32	-	-	NSYMR32	NSYMB32	NSYMPP32	-	-	NSYCS200PLM
308	255	160	NSYMM3025	-	-	NSYMR3025	NSYMB3025	NSYMPP3025	NSYDLPLM18	-	-
430	330	200	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYMB43	NSYMPP43	NSYDLA24	NSYDPLM200	NSYCS300PLM
530	430	200	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYMB54	NSYMPP54	NSYDLA48	NSYDPLM200	NSYCS400PLM
647	436	250	NSYMM64	NSYMS46	NSYMF64	NSYMR64	NSYMB64	NSYMPP64	NSYDLA48P	NSYDPLM250	NSYCS400PLM
747	536	300	NSYMM75	NSYMS75	NSYMF75	NSYMR75	NSYMB75	NSYMPP75	NSYDLA66 and NSYDLA88	NSYDPLM300	NSYCS500PLM
847	636	300	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMB86	NSYMPP86	NSYDLA84 and NSYDLA112	NSYDPLM300	NSYCS600PLM
1056	852	350	NSYMM108	-	NSYMF108	NSYMR108	NSYMB108	NSYMPP108	NSYDLA234	NSYDPLM350	NSYCS800PLM

Main accessories

External dimensions (mm)			Fixing lugs	Post-fixing device	Floor-mounting pillar	Coupling frame	Cable-gland plate	Internal door	Blanking plates
H	W	D							
			Page 6/25	Page 6/25	Page 6/24	Page 6/24	Page 6/24	Page 6/26	Page 6/25
310	215	160	NSYPFPLM32	-	-	-	-	-	NSYCEPLMA
308	255	160	NSYPFPLM	-	-	-	-	NSYPA3025PLM	-
430	330	200	NSYPFPLM	NSYSFP300	-	-	-	NSYPAP43	NSYCEPLMB
530	430	200	NSYPFPLM	NSYSFP400	NSYSFSPLM	-	-	NSYPAP54	NSYCEPLMB
647	436	250	NSYPFPLM	NSYSFP400	NSYSFSPLM	-	-	NSYPAP64	NSYCEPLMC
747	536	300	NSYPFPLM	NSYSFP500	-	NSYBUPLM	NSYTLA4420	NSYPAP75	NSYCEPLMC
847	636	300	NSYPFPLM	NSYSFP600	-	NSYBUPLM	NSYTLA4420	NSYPAP86	NSYCEPLMC
1056	852	350	NSYPFPLM	-	-	NSYBU108PLM	NSYTLA6420	NSYPAP108	-

Water drain plug	Rail-fixing nuts	Ventilation louvre
		
Page	Page	Page
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Polyester floor-standing enclosures IP 54
Selection guide

External dimensions (mm)				Completely sealed enclosures, IP 65			Enclosures with plinth-type open bottom part, IP 54	
				References of enclosures with door				
Height	Width	Depth	N° of doors	Plain	Glazed	Anti-posting	Plain	Anti-posting
500	500	320	1	NSYPLA553	NSYPLA553T	NSYPLA553R	NSYPLAZ553	NSYPLAZ553R
500	500	420	1	NSYPLA554	NSYPLA554T	NSYPLA554R	NSYPLAZ554	NSYPLAZ554R
500	750	320	1	NSYPLA573	NSYPLA573T	NSYPLA573R	NSYPLAZ573	NSYPLAZ573R
500	750	420	1	NSYPLA574	NSYPLA574T	NSYPLA574R	NSYPLAZ574	NSYPLAZ574R
500	1000	320	2	NSYPLA5103	NSYPLA5103T	NSYPLA5103R	NSYPLAZ5103	NSYPLAZ5103R
500	1000	420	2	NSYPLA5104	NSYPLA5104T	NSYPLA5104R	NSYPLAZ5104	NSYPLAZ5104R
500	1250	320	2	NSYPLA5123	NSYPLA5123T	NSYPLA5123R	NSYPLAZ5123	NSYPLAZ5123R
500	1250	420	2	NSYPLA5124	NSYPLA5124T	NSYPLA5124R	NSYPLAZ5124	NSYPLAZ5124R
750	500	320	1	NSYPLA753	NSYPLA753T	NSYPLA753R	NSYPLAZ753	NSYPLAZ753R
750	500	420	1	NSYPLA754	NSYPLA754T	NSYPLA754R	NSYPLAZ754	NSYPLAZ754R
750	750	320	1	NSYPLA773	NSYPLA773T	NSYPLA773R	NSYPLAZ773	NSYPLAZ773R
750	750	420	1	NSYPLA774	NSYPLA774T	NSYPLA774R	NSYPLAZ774	NSYPLAZ774R
750	1000	320	2	NSYPLA7103	NSYPLA7103T	NSYPLA7103R	NSYPLAZ7103	NSYPLAZ7103R
750	1000	420	2	NSYPLA7104	NSYPLA7104T	NSYPLA7104R	NSYPLAZ7104	NSYPLAZ7104R
750	1250	320	2	NSYPLA7123	NSYPLA7123T	NSYPLA7123R	NSYPLAZ7123	NSYPLAZ7123R
750	1250	420	2	NSYPLA7124	NSYPLA7124T	NSYPLA7124R	NSYPLAZ7124	NSYPLAZ7124R
1000	500	320	1	NSYPLA1053	NSYPLA1053T	NSYPLA1053R	NSYPLAZ1053	NSYPLAZ1053R
1000	500	420	1	NSYPLA1054	NSYPLA1054T	NSYPLA1054R	NSYPLAZ1054	NSYPLAZ1054R
1000	750	320	1	NSYPLA1073	NSYPLA1073T	NSYPLA1073R	NSYPLAZ1073	NSYPLAZ1073R
1000	750	420	1	NSYPLA1074	NSYPLA1074T	NSYPLA1074R	NSYPLAZ1074	NSYPLAZ1074R
1000	1000	320	2	NSYPLA10103	NSYPLA10103T	NSYPLA10103R	NSYPLAZ10103	NSYPLAZ10103R
1000	1000	420	2	NSYPLA10104	NSYPLA10104T	NSYPLA10104R	NSYPLAZ10104	NSYPLAZ10104R
1000	1250	320	2	NSYPLA10123	NSYPLA10123T	NSYPLA10123R	NSYPLAZ10123	NSYPLAZ10123R
1000	1250	420	2	NSYPLA10124	NSYPLA10124T	NSYPLA10124R	NSYPLAZ10124	NSYPLAZ10124R
1250	500	320	1	NSYPLA1253	NSYPLA1253T	NSYPLA1253R	NSYPLAZ1253	NSYPLAZ1253R
1250	500	420	1	NSYPLA1254	NSYPLA1254T	NSYPLA1254R	NSYPLAZ1254	NSYPLAZ1254R
1250	750	320	1	NSYPLA1273	NSYPLA1273T	NSYPLA1273R	NSYPLAZ1273	NSYPLAZ1273R
1250	750	420	1	NSYPLA1274	NSYPLA1274T	NSYPLA1274R	NSYPLAZ1274	NSYPLAZ1274R
1250	1000	320	2	NSYPLA12103	NSYPLA12103T	NSYPLA12103R	NSYPLAZ12103	NSYPLAZ12103R
1250	1000	420	2	NSYPLA12104	NSYPLA12104T	NSYPLA12104R	NSYPLAZ12104	NSYPLAZ12104R
1250	1250	320	2	NSYPLA12123	NSYPLA12123T	NSYPLA12123R	NSYPLAZ12123	NSYPLAZ12123R
1250	1250	420	2	NSYPLA12124	NSYPLA12124T	NSYPLA12124R	NSYPLAZ12124	NSYPLAZ12124R
1500	500	320	1	NSYPLA1553	NSYPLA1553T	NSYPLA1553R	NSYPLAZ1553	NSYPLAZ1553R
1500	500	420	1	NSYPLA1554	NSYPLA1554T	NSYPLA1554R	NSYPLAZ1554	NSYPLAZ1554R
1500	750	320	1	NSYPLA1573	NSYPLA1573T	NSYPLA1573R	NSYPLAZ1573	NSYPLAZ1573R
1500	750	420	1	NSYPLA1574	NSYPLA1574T	NSYPLA1574R	NSYPLAZ1574	NSYPLAZ1574R
1500	1000	320	2	NSYPLA15103	NSYPLA15103T	NSYPLA15103R	NSYPLAZ15103	NSYPLAZ15103R
1500	1000	420	2	NSYPLA15104	NSYPLA15104T	NSYPLA15104R	NSYPLAZ15104	NSYPLAZ15104R
1500	1250	320	2	NSYPLA15123	NSYPLA15123T	NSYPLA15123R	NSYPLAZ15123	NSYPLAZ15123R
1500	1250	420	2	NSYPLA15124	NSYPLA15124T	NSYPLA15124R	NSYPLAZ15124	NSYPLAZ15124R

Polyester floor-standing enclosures IP 44
Selection guide

External dimensions (mm)				Enclosures with ventilated canopy IP 44		Enclosures with plinth-type open bottom part and ventilated canopy, IP 44	
				References of enclosures with door			
Height	Width	Depth	N° of doors	Plain	Anti-posting	Plain	Anti-posting
500	500	320	1	NSYPLAT553	NSYPLAT553R	NSYPLAZT553	NSYPLAZT553R
500	500	420	1	NSYPLAT554	NSYPLAT554R	NSYPLAZT554	NSYPLAZT554R
500	750	320	1	NSYPLAT573	NSYPLAT573R	NSYPLAZT573	NSYPLAZT573R
500	750	420	1	NSYPLAT574	NSYPLAT574R	NSYPLAZT574	NSYPLAZT574R
500	1000	320	2	NSYPLAT5103	NSYPLAT5103R	NSYPLAZT5103	NSYPLAZT5103R
500	1000	420	2	NSYPLAT5104	NSYPLAT5104R	NSYPLAZT5104	NSYPLAZT5104R
500	1250	320	2	NSYPLAT5123	NSYPLAT5123R	NSYPLAZT5123	NSYPLAZT5123R
500	1250	420	2	NSYPLAT5124	NSYPLAT5124R	NSYPLAZT5124	NSYPLAZT5124R
750	500	320	1	NSYPLAT753	NSYPLAT753R	NSYPLAZT753	NSYPLAZT753R
750	500	420	1	NSYPLAT754	NSYPLAT754R	NSYPLAZT754	NSYPLAZT754R
750	750	320	1	NSYPLAT773	NSYPLAT773R	NSYPLAZT773	NSYPLAZT773R
750	750	420	1	NSYPLAT774	NSYPLAT774R	NSYPLAZT774	NSYPLAZT774R
750	1000	320	2	NSYPLAT7103	NSYPLAT7103R	NSYPLAZT7103	NSYPLAZT7103R
750	1000	420	2	NSYPLAT7104	NSYPLAT7104R	NSYPLAZT7104	NSYPLAZT7104R
750	1250	320	2	NSYPLAT7123	NSYPLAT7123R	NSYPLAZT7123	NSYPLAZT7123R
750	1250	420	2	NSYPLAT7124	NSYPLAT7124R	NSYPLAZT7124	NSYPLAZT7124R
1000	500	320	1	NSYPLAT1053	NSYPLAT1053R	NSYPLAZT1053	NSYPLAZT1053R
1000	500	420	1	NSYPLAT1054	NSYPLAT1054R	NSYPLAZT1054	NSYPLAZT1054R
1000	750	320	1	NSYPLAT1073	NSYPLAT1073R	NSYPLAZT1073	NSYPLAZT1073R
1000	750	420	1	NSYPLAT1074	NSYPLAT1074R	NSYPLAZT1074	NSYPLAZT1074R
1000	1000	320	2	NSYPLAT10103	NSYPLAT10103R	NSYPLAZT10103	NSYPLAZT10103R
1000	1000	420	2	NSYPLAT10104	NSYPLAT10104R	NSYPLAZT10104	NSYPLAZT10104R
1000	1250	320	2	NSYPLAT10123	NSYPLAT10123R	NSYPLAZT10123	NSYPLAZT10123R
1000	1250	420	2	NSYPLAT10124	NSYPLAT10124R	NSYPLAZT10124	NSYPLAZT10124R
1250	500	320	1	NSYPLAT1253	NSYPLAT1253R	NSYPLAZT1253	NSYPLAZT1253R
1250	500	420	1	NSYPLAT1254	NSYPLAT1254R	NSYPLAZT1254	NSYPLAZT1254R
1250	750	320	1	NSYPLAT1273	NSYPLAT1273R	NSYPLAZT1273	NSYPLAZT1273R
1250	750	420	1	NSYPLAT1274	NSYPLAT1274R	NSYPLAZT1274	NSYPLAZT1274R
1250	1000	320	2	NSYPLAT12103	NSYPLAT12103R	NSYPLAZT12103	NSYPLAZT12103R
1250	1000	420	2	NSYPLAT12104	NSYPLAT12104R	NSYPLAZT12104	NSYPLAZT12104R
1250	1250	320	2	NSYPLAT12123	NSYPLAT12123R	NSYPLAZT12123	NSYPLAZT12123R
1250	1250	420	2	NSYPLAT12124	NSYPLAT12124R	NSYPLAZT12124	NSYPLAZT12124R
1500	500	320	1	NSYPLAT1553	NSYPLAT1553R	NSYPLAZT15104	NSYPLAZT1553R
1500	500	420	1	NSYPLAT1554	NSYPLAT1554R	NSYPLAZT1554	NSYPLAZT1554R
1500	750	320	1	NSYPLAT1573	NSYPLAT1573R	NSYPLAZT1573	NSYPLAZT1573R
1500	750	420	1	NSYPLAT1574	NSYPLAT1574R	NSYPLAZT1574	NSYPLAZT1574R
1500	1000	320	2	NSYPLAT15103	NSYPLAT15103R	NSYPLAZT15103	NSYPLAZT15103R
1500	1000	420	2	NSYPLAT15104	NSYPLAT15104R	NSYPLAZT15104	NSYPLAZT15104R
1500	1250	320	2	NSYPLAT15123	NSYPLAT15123R	NSYPLAZT15123	NSYPLAZT15123R
1500	1250	420	2	NSYPLAT15124	NSYPLAT15124R	NSYPLAZT15124	NSYPLAZT15124R

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Polyester floor-standing enclosures
Accessory selection guide

Mounting accessories

Enclosure dimensions (mm)									
Height	Width	N° of doors	Metallic mounting plates		Insulating mounting plates		Modular distribution chassis		Internal door
			Plain	Telequick	Polyester	Bakelite			
			Page 6/58	Page 6/59	Page 6/58		Page 6/65		Page 6/54
500	500	1	**NSYPMM55**	**NSYPMR55**	**NSYPMA55**	**NSYPMB55**	-	-	**NSYPAPLA55**
500	750	1	**NSYPMM75**	**NSYPMR57**	**NSYPMA75**	**NSYPMB75**	-	-	**NSYPAPLA57**
500	1000	2	**NSYPMM510**	2 × **NSYPMR55**	**NSYPMA510**	**NSYPMB510**	-	-	2 × **NSYPAPLA55**
500	1250	2	**NSYPMM55** + **NSYPMM75**	**NSYPMR55** + **NSYPMR57**	**NSYPMA55** + **NSYPMA75**	**NSYPMB55** + **NSYPMB75**	-	-	**NSYPAPLA55** + **NSYPAPLA57**
750	500	1	**NSYPMM75**	**NSYPMR75**	**NSYPMA75**	**NSYPMB75**	**NSYDLP76**	**NSYDLP57**	**NSYPAPLA75**
750	750	1	**NSYPMM77**	**NSYPMR77**	**NSYPMA77**	**NSYPMB77**	**NSYDLP132**	**NSYDLP99**	**NSYPAPLA77**
750	1000	2	**NSYPMM710**	2 × **NSYPMR75**	**NSYPMA710**	**NSYPMB710**	2 × **NSYDLP76**	2 × **NSYDLP57**	2 × **NSYPAPLA75**
750	1250	2	**NSYPMM712**	**NSYPMR75** + **NSYPMR77**	**NSYPMA712**	**NSYPMB712**	**NSYDLP76** + **NSYDLP132**	**NSYDLP57** + **NSYDLP99**	**NSYPAPLA75** + **NSYPAPLA77**
1000	500	1	**NSYPMM105**	**NSYPMR105**	**NSYPMA105**	**NSYPMB105**	**NSYDLP114**	**NSYDLP95**	**NSYPAPLA105**
1000	750	1	**NSYPMM107**	**NSYPMR107**	**NSYPMA107**	**NSYPMB107**	**NSYDLP198**	**NSYDLP165**	**NSYPAPLA107**
1000	1000	2	**NSYPMM1010**	2 × **NSYPMR105**	**NSYPMA1010**	**NSYPMB1010**	2 × **NSYDLP114**	2 × **NSYDLP95**	2 × **NSYPAPLA105**
1000	1250	2	**NSYPMM1012**	**NSYPMR105** + **NSYPMR107**	**NSYPMA1012**	**NSYPMB1012**	**NSYDLP114** + **NSYDLP198**	**NSYDLP95** + **NSYDLP165**	**NSYPAPLA105** + **NSYPAPLA107**
1250	500	1	**NSYPMM125**	**NSYPMR125**	**NSYPMA125**	**NSYPMB125**	**NSYDLP133**	**NSYDLP114P**	**NSYPAPLA125**
1250	750	1	**NSYPMM127**	**NSYPMR127**	**NSYPMA127**	**NSYPMB127**	**NSYDLP231**	**NSYDLP198P**	**NSYPAPLA127**
1250	1000	2	**NSYPMM1210**	2 × **NSYPMR125**	**NSYPMA1210**	**NSYPMB1210**	2 × **NSYDLP133**	2 × **NSYPLD114P**	2 × **NSYPAPLA125**
1250	1250	2	**NSYPMM1212**	**NSYPMR125** + **NSYPMR127**	**NSYPMA1212**	**NSYPMB1212**	**NSYDLP133** + **NSYDLP231**	**NSYDLP114P** + **NSYDLP198P**	**NSYPAPLA125** + **NSYPAPLA127**
1500	500	1	**NSYPMM155**	**NSYPMR155**	**NSYPMA155**	**NSYPMB155**	**NSYDLP171**	**NSYDLP152**	**NSYPAPLA155**
1500	750	1	**NSYPMM157**	**NSYPMR157**	**NSYPMA157**	**NSYPMB157**	**NSYDLP297**	**NSYDLP264**	**NSYPAPLA157**
1500	1000	2	**NSYPMM1510**	2 × **NSYPMR155**	**NSYPMA1510**	**NSYPMB1510**	2 × **NSYDLP171**	2 × **NSYDLP152**	2 × **NSYPAPLA155**
1500	1250	2	**NSYPMM1512**	**NSYPMR155** + **NSYPMR157**	**NSYPMA1512**	**NSYPMB1512**	**NSYDLP171** + **NSYDLP297**	**NSYDLP152** + **NSYDLP264**	**NSYPAPLA155** + **NSYPAPLA157**

Step slides

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Uprights and mounting rails

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Door retainer

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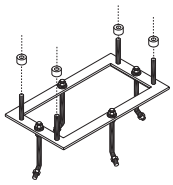
Polyester floor-standing enclosures
Accessory selection guide

Composition accessories



Enclosure dimensions (mm)		N plinth	H plinth	Floor-fixing frame	Canopy	Cable-entry plate
		Height 60 mm	Height 900 mm			
Width	Depth	Page 6/50		Page 6/51	Page 6/52	Page 6/53
500	320	NSYZNPLA53	NSYZHPLA53	NSYMFPLAZ53	NSYTJPLA53	NSYECPLAZ53
500	420	NSYZNPLA54	NSYZHPLA54	NSYMFPLAZ54	NSYTJPLA54	NSYECPLAZ54
750	320	NSYZNPLA73	NSYZHPLA73	NSYMFPLAZ73	NSYTJPLA73	NSYECPLAZ73
750	420	NSYZNPLA74	NSYZHPLA74	NSYMFPLAZ74	NSYTJPLA74	NSYECPLAZ74
1000	320	NSYZNPLA103	NSYZHPLA103	NSYMFPLAZ103	NSYTJPLA103	NSYECPLAZ103
1000	420	NSYZNPLA104	NSYZHPLA104	NSYMFPLAZ104	NSYTJPLA104	NSYECPLAZ104
1250	320	NSYZNPLA123	NSYZHPLA123	NSYMFPLAZ123	NSYTJPLA123	NSYECPLAZ123
1250	420	NSYZNPLA124	NSYZHPLA124	NSYMFPLAZ124	NSYTJPLA124	NSYECPLAZ124

VDI accessories

Enclosure dimensions (mm)		19" fixed chassis	Number of U	19" swing chassis	Number of U
Height	Width	Page 6/68		Page 6/68	
500	750	NSYBRF8PLA	8	NSYBRP7PLA	7
750	750	NSYBRF12PLA + NSYSPLA75	12	NSYBRP11PLA + NSYSPLA75	11
1000	750	NSYBRF17PLA + NSYSPLA100	17	NSYBRP16PLA + NSYSPLA100	16
1250	750	NSYBRF21PLA + NSYSPLA125	21	NSYBRP20PLA + NSYSPLA125	20
1500	750	NSYBRF26PLA + NSYSPLA150	26	NSYBRP25PLA + NSYSPLA150	25

Door switch

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Insert

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Document pocket

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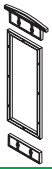
VDI accessories and fixings

Page 3/118

Coupling Kit



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Anti-graffiti paint

Page 6/64

Handles and inserts

Page 6/56

Wall-fixing lug

Page 6/52

Schneider Electric Universal Enclosures

Our ranges, solutions for each application

Spacial

Metal enclosures and boxes

From our small boxes to large suitable floor-standing enclosures, with the Spacial range you can find the perfect fit for your applications. Our extensive range of easy-to-use accessories helps you save time during your projects.

Select between steel or stainless steel to better suit the installation environment. In our stainless-steel offer you can find the optimal solution where cleanliness is required, or for highly corrosive environments.

Thalassa

Insulating enclosures

Working in difficult environments can, without the right protection, expose your installation to chemical or aggressive substances. Developed to efficiently protect it; our Thalassa offer, from boxes to floor-standing enclosures, made in fibreglass-reinforced polyester, resists in hard conditions and outdoor applications.

Our Thalassa industrial boxes in ABS or polycarbonate are strong, easy to install and designed to be used in highly demanding environments.

ClimaSys

Thermal management

Preserving and keeping the right temperature inside your enclosure is vital for maximising the lifetime of your installed devices. With our Climasys offer you can find the right solution, be it Ventilation, Cooling or Heating, including control units for temperature, humidity and much more.

Industry and Infrastructure Offer
A material for every environment

> Steel

Indoor non-clean industrial environment

The industrial environment in mechanical plants is especially demanding as regards the protection of electric and electronic components against dust, splashing with oil and impacts. This environment therefore requires a range that is suited to the applications and easy to implement.

- **Universal range**, for industry.
- **E.M.C. range**, against electromagnetic disturbances (treated with Aluzinc).
- **Range of ATEX enclosures**, for potentially explosive atmospheres.

> Solution:

The Spacial range in steel (wall-mounting, monobloc and suitable floor-standing enclosures).

> 304L - 316L stainless steel.

Demanding industrial environment

Food and beverage, pharmaceutical, petrochemical and infrastructure industries are particularly demanding in terms of hygiene and resistance to corrosion.
With two grades of stainless steel:

- **304L stainless steel:**
  Resistance to corrosion and cleanability (often used in food production environments).
- **316L stainless steel, also known as "marine stainless steel":**
  Very high resistance to corrosion (saline or chlorinated environment).
- **Range of ATEX enclosures**, for potentially explosive atmospheres.

> Solution:

The Spacial range in stainless steel (wall-mounting, monobloc and suitable floor-standing enclosures).

> Insulating polyester and plastic materials (ABS, polycarbonate)

Severe infrastructures and industrial environments

Outdoor infrastructures and electrical installations are exposed to direct sunlight, rain, saline mist, extreme temperatures, oil splashes, chemical and corrosive agents, and are in contact with the public.

- **Universal range**, for industry.
- **Range of ATEX enclosures**, for potentially explosive atmospheres.

> Solution:

The Thalassa range (boxes, wall-mounting and floor-standing enclosures).

Selection tools

> www.schneider-electric.com

Our international site allows you to access all the Schneider Electric products in just two clicks with direct links to:

- A complete library of technical documents, catalogues, FAQs brochures, etc.
- Certificates.
- 2D & 3D drawings.
- Selection Guides from the e-catalogue.
- Product discovery sites.

You may also find illustrated overviews, news to which you can subscribe, a list of country contacts and more useful information.

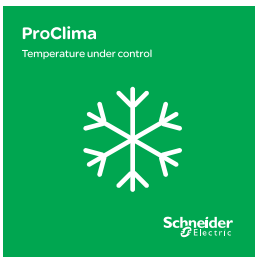
Our software suite

> Spacial.pro

Spacial.pro allows you to make switchboard proposals based on the standard Spacial offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the Bill of Material and 2D drawings for front/side views.

> ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.

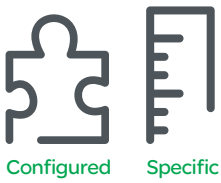


> Spacial.ref Thalassa.ref

These digital rules allow you to select the best components from the current extensive product range without the risk of any mistakes, since product and accessory selection take place automatically, saving you time and money.

The customised offer

Two customised services to cover all your needs:



Building the right enclosures for a wide variety of applications is what we do best.

At **Schneider Electric** – **Universal Enclosures** we have developed two customised services based on more than 50 years of experience in the market: a Configured offer (standard modified), and a Specific solution (custom-built enclosures) for a diverse range of industries.

Time saving

We perform machining, mounting of accessories and painting.

Improved quality

We manufacture customised solutions with our industrial tools Example: cut-outs made before painting, gasket applied after painting.

The configured offer

If needed, our standard products can also be assembled to order and adapted to your requests, ensuring that you don't have to sacrifice lead-time for a customised solution that's ready to use right out of the box.

Standard enclosure

Assembly of standard accessories and claddings, cut-outs and painting.

Configured

Modifying your standard enclosure without modifying your delivery date...
... time saving and improved quality for you!

Transport

Our flexible organisation allow us to manage all orders according to your needs, with a guaranteed delivery time.

Your configured solutions delivered ready to use!

The standard offer enhanced with two levels of service:

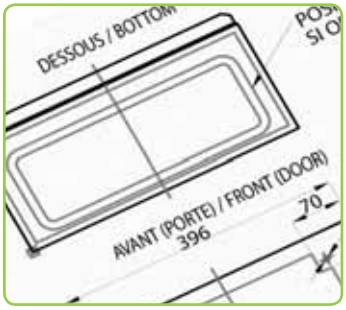
Mounted "assembled to order" offer:

> Configurations with the most common claddings and accessories in RAL 7035.

For a quick quote

Choose the enclosures and accessories from the catalogue, consult our planning sheet or contact your local representative.

Quick proposal from us



Manufacturing

Save time by making your cut-outs and assemblies based on our DXF diagrams, downloaded from our webpage.

Painting and machining

Machining operations are performed before painting to protect against corrosion. Gaskets are applied after painting to keep the standard IP level.

Adapted service:

- Cut-outs (from a list).
- Painting (from our stock colour list).
- Assemblies (for Spacial SF suitable enclosures).
- Standard dimensions.
- Standard claddings (from a list).
- Mounted standard accessories (from a list).

1

Industrial boxes

Spacial S44 - S57 - S24 - SDB Steel industrial boxes

Spacial S44: Steel industrial boxes IP 66 1/4

Spacial S57: Steel screw fixed cover boxes IP 66 1/6

Spacial S24: Steel safety boxes IP 55 1/8

Spacial SDB: Steel derivation boxes IP 55 1/12

Thalassa TBS - TBP Insulating industrial boxes

Thalassa TBP: Industrial boxes in polycarbonate (UL)
Thalassa TBS: Industrial boxes in ABS 1/20

Selection guide 1/24

Dimensions 1/26

Steel industrial boxes
Selection guide

S44	**S57**	**S24**
Page 1/4	**Page 1/6**	**Page 1/8**

Criteria		Steel industrial box		Enclosure for security applications
Outdoor use		●	●	
Harsh environment				
Degree of protection		IP 66 IK 08	IP 66 IK 10	IP 55 IK 07
Dimensions (mm)	Height	80 to 400	200 or 300	180 or 230
	Width	80 to 400	300 to 500	130 to 210
	Depth	45 to 110	200 or 300	96 or 126
Universal application		●	●	●
Coupling boxes				

Stainlees steel industrial boxes: contact us.

Steel industrial boxes
Selection guide

Universal security application				
IP 66	IP 66	IP 66	IP 66	IP 55
Page 1/4			Page 1/6	Page 1/8

External dimensions (mm)			Steel industrial box references			IK 10	Opaque door + screws
			IK 08				
Height	Width	Depth	Empty	Plate	Uprights (1)		
80	80	45	NSYSBS884	-	-	-	-
100	100	55	NSYSBS10105	-	-	-	-
130	130	60	NSYSBS13136	-	-	-	-
160	160	65	NSYSBS16166	-	-	-	-
165	120	65	NSYSBS16126	NSYSBS16126S	-	-	-
180	130	96		-	-	-	NSYSBS18139F
180	165	96		-	-	-	NSYSBS18169F
200	200	90	NSYSBS20209	NSYSBS20209S	-	-	-
230	210	126		-	-	-	NSYSBS232112F
250	250	100	NSYSBS252510	NSYSBS252510S	-	-	-
300	200	110		-	NSYSBS302011R	-	-
300	200	150		-	-	NSYSBS302015	-
300	300	100	NSYSBS303010	NSYSBS303010S	-	-	-
300	300	150		-	-	NSYSBS303015	-
400	200	110		-	NSYSBS402011R	-	-
400	300	150		-	-	NSYSBS403015	-
400	400	110	NSYSBS404011	NSYSBS404011S	-	-	-
500	200	110		-	NSYSBS502011R	-	-
500	300	110		-	NSYSBS503011R	-	-
500	300	200		-	-	NSYSBS503020	-
600	200	110		-	NSYSBS602011R	-	-
600	300	110		-	NSYSBS603011R	-	-

(1) Uprights along small sides (Width)

Specific

Our specific offer: special dimensions and cut-outs. Please contact us.

Steel industrial boxes IP 66
Introduction

IP 66 steel industrial boxes

IP 66 boxes

Technical characteristics

- Resistance to external mechanical impacts: IK 08.
- Structured finish, epoxy-polyester powder paint, RAL 7035 grey colour.
- Cover fixing by 4 screws.
- Polyurethane sealing gasket applied.
- Wall fixing: by welded lugs.
- Earthing screws on the body and cover for earth continuity.
- 3 versions:

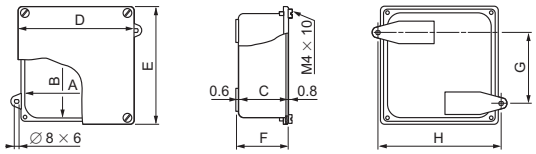
– Empty boxes, without internal fixing studs,
– Boxes with fixing studs for plate.
– Boxes with markings with a pitch of 12.5 mm for rails, on the width side.

Applications

- Applications requiring good water and dust protection.

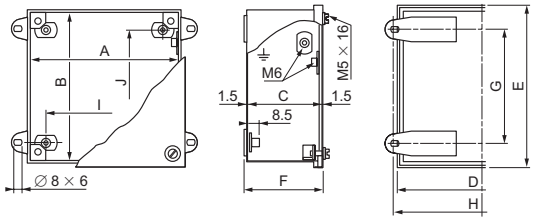
Internal dimensions (mm)			IP 66 box reference			Reference plates
Height	Width	Depth	Empty	Plate	Uprights	
80	80	45	**NSYSBS884**	-	-	-
100	100	55	**NSYSBS10105**	-	-	-
130	130	60	**NSYSBS13136**	-	-	-
160	160	65	**NSYSBS16166**	-	-	-
165	120	65	**NSYSBS16126**	**NSYSBS16126S**	-	**NSYAMPM1612SB**
200	200	90	**NSYSBS20209**	**NSYSBS20209S**	-	**NSYAMPM2020SB**
250	250	100	**NSYSBS252510**	**NSYSBS252510S**	-	**NSYAMPM2525SB**
300	200	110		-	**NSYSBS302011R**	-
300	300	100	**NSYSBS303010**	**NSYSBS303010S**	-	**NSYAMPM3030SB**
400	200	110		-	**NSYSBS402011R**	-
400	400	110	**NSYSBS404011**	**NSYSBS404011S**	-	**NSYAMPM4040SB**
500	200	110		-	**NSYSBS502011R**	-
500	300	110		-	**NSYSBS503011R**	-
600	200	110		-	**NSYSBS602011R**	-
600	300	110		-	**NSYSBS603011R**	-

Steel industrial boxes IP 66
Dimensions



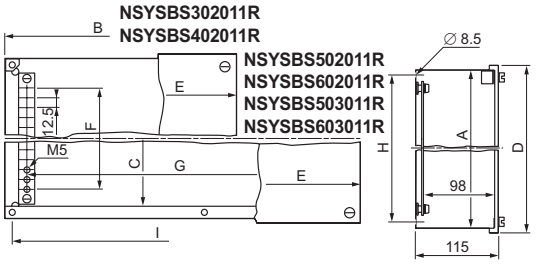
IP 66 steel industrial boxes without knock-outs

Internal dimensions (mm)			Dimensions (mm)			Fixing (mm)		Gross weight (kg)	Reference
A	B	C	D	E	F	G	H		
80	80	45	96	96	48	50	100	0.190	**NSYSBS884**
100	100	55	116	116	58	70	120	0.270	**NSYSBS10105**
130	130	60	142	142	63	100	144	0.300	**NSYSBS13136**
160	160	65	174	174	68	130	178	0.590	**NSYSBS16166**



Bare boxes and boxes with 4 plate-fixing points, IP 66

Internal dimensions (mm)			Dimensions (mm)			Box fixing (mm)		Plate fixing (mm)		Reference
A	B	C	D	E	F	G	H	I	J	
120	165	65	131	176	72	137	137	90	140	**NSYSBS16126** **NSYSBS16126S**
200	200	96	211	211	97	174	217	170	170	**NSYSBS20209** **NSYSBS20209S**
250	250	100	262	262	107	224	267	220	220	**NSYSBS252510** **NSYSBS252510S**
300	300	100	312	312	107	274	317	270	270	**NSYSBS303010** **NSYSBS303010S**
400	400	110	412	412	117	374	417	370	370	**NSYSBS404011** **NSYSBS404011S**



Boxes with uprights, IP 66

Internal dimensions (mm)			Dimensions (mm)			Uprights (mm)	Box fixing (mm)		Reference
A	B	C	D	E	F	G	H	I	
200	300	-	211	311	125	250	184	284	**NSYSBS302011R**
200	400	-	211	411	125	350	184	384	**NSYSBS402011R**
200	500	172	211	511	125	450	184	484	**NSYSBS502011R**
200	600	172	211	611	125	550	184	584	**NSYSBS602011R**
300	500	272	312	512	225	450	284	484	**NSYSBS503011R**
300	600	272	312	612	225	550	284	584	**NSYSBS603011R**

Steel screw fixed cover boxes IP 66

Introduction

Technical characteristics

- Sheet-steel enclosure.
- Degree of protection: IP 66 according to IEC 60529.
- Resistance to external mechanical impacts: IK 10.
- Structured finish, polyester powder paint, RAL 7035 grey colour.
- Fixing of the cover with 4 CHc M5 × 35 shouldered captive screws.
- The enclosures are equipped with 4 backstuds for fixing the mounting plate.
- Polyurethane sealing gasket.
- Earthing screws on the body and cover for earth continuity.

Special versions

- On request, the industrial boxes can be delivered with:

– Other finishes (zinc chromate, metallised, etc.).
– Other colours.
– Etc.

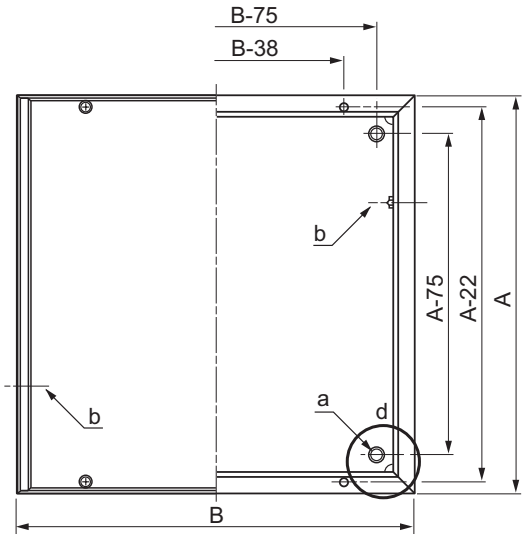
See our Customised offer.

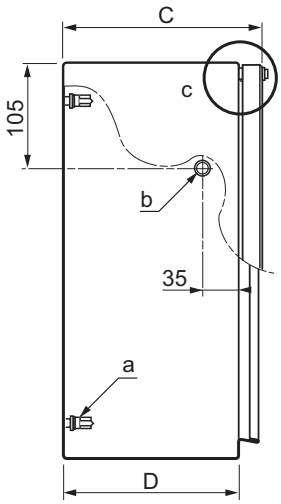
Applications

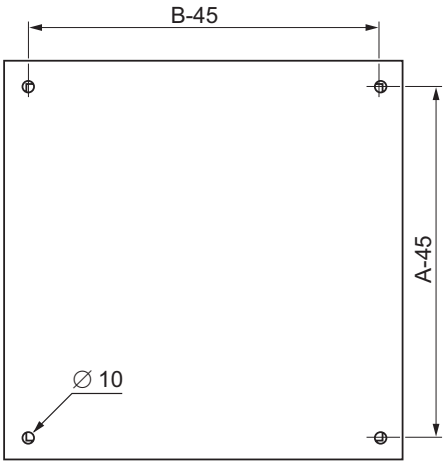
- Use in environments with a considerable risk of dust and/or liquid deposit creation.

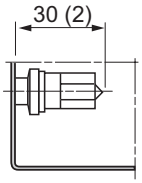
External dimensions (mm)			(mm)				Reference
Height	Width	Depth	A	B	C	D	
200	300	150	200	300	150	127	**NSYSBS302015**
300	300	150	300	300	150	127	**NSYSBS303015**
300	400	150	300	400	150	127	**NSYSBS403015**
300	500	200	300	500	200	177	**NSYSBS503020**

Dimensions

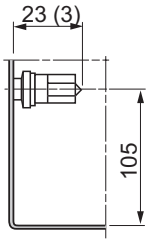




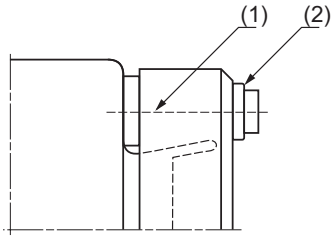




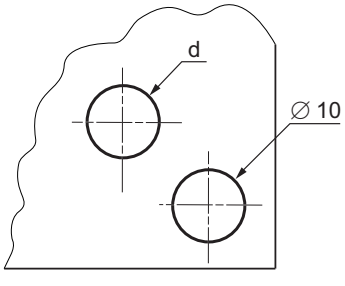
Detail a



Detail b



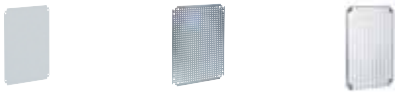
Detail c
(1) CHc M5 × 35 shouldered screw.
(2) Sealing washer.



Detail d
Fixing hole

Steel screw fixed cover boxes IP 66
Accessories

Mounting plates



Enclosure dimensions (mm)			Mounting plates		
Height	Width	Depth	Plain	Microperforated	Telequick
200	300	150	**NSYMM32**	**NSYMF32**	**NSYMR32**
300	300	150	**NSYMM33**	**NSYMF33**	**NSYMR33**
300	400	150	**NSYMM43**	**NSYMF43**	**NSYMR43**
300	500	200	**NSYMM35**	**NSYMF53**	**NSYMR53**

See common accessories page **7/2**.

Wall-fixing lugs

Description	Reference
Set of 4 steel fixing lugs	**NSYAEFPFSC**
Set of 4 stainless-steel fixing lugs	**NSYAEFPFXSC**

See dimensions page **2/20**.

This offer is completed by our range of Spacial S3DB terminal enclosures.

Specific

Our specific offer: special dimensions and cut-outs.
Please contact us.

Steel safety boxes IP 55

Technical characteristics

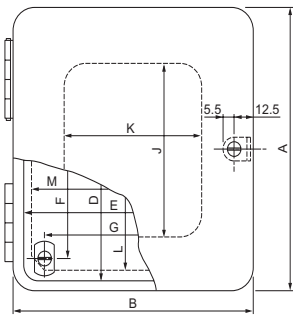
- Degree of protection IP 55 according to IEC 60529.
- Resistance to external mechanical impacts: IK 07.
- Structured finish, epoxy-polyester powder paint, RAL 7035 grey or RAL 3000 red for security applications.
- Locking by screws or by side lock with 3-mm double-bar insert. Option of installing a handle, ref. **NSYTHL1242EPLM** or **NSYTHPLM** with insert ref. **NSYTT8CRN** (to be ordered).
- Plumbable with a cap installed at the plant.
- The enclosures are equipped with 4 nuts welded to the rear. They allow the fixing of a mounting plate (as an accessory) or a personalised mounting plate.
- Polyurethane sealing gasket.
- M6 × 8 earthing screws on the body and cover for earth continuity.

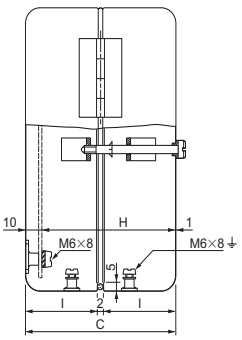
Applications

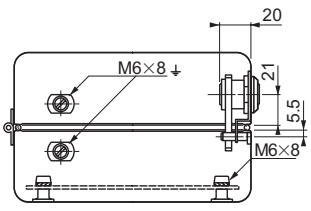
- Security and alarm systems (such as a fire alarm) that can accommodate modular plates and equipment.

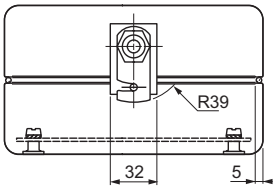
Internal dimensions (mm)			Enclosure reference locking by screws		Reference of enclosures with side 3-mm double-bar lock		
Height	Width	Depth	Plain door	Door with window	Plain door	Door with window	Door with glass window thickness 3 mm
180	130	96	**NSYSBS18139F**	**NSYSBS18139FT**	**NSYSBS18139K**	**NSYSBS18139KT**	**NSYSBS18139KTH**
180	165	96	**NSYSBS18169F**	**NSYSBS18169FT**	**NSYSBS18169K**	**NSYSBS18169KT**	**NSYSBS18169KTH**
230	210	126	**NSYSBS232112F**	**NSYSBS232112FT**	**NSYSBS232112K**	**NSYSBS232112KT**	**NSYSBS232112KTH**

Ref. enclosures	Dimensions (mm)													Weight (kg)	Ref. plates
	A	B	C	D	E	F	G	H	I	J	K	L	M		
NSYSBS18139F	182	132	107	168	118	140	90	95	52	107	77	160	110	1	**NSYAMPM1612SB**
NSYSBS18169F	182	167	107	168	153	140	125	95	52	108	97	160	145	1.2	**NSYAMPM1816SB**
NSYSBS232112F	232	212	137	218	198	190	170	125	67	157	137	210	190	2	**NSYAMPM2321SB**









Schneider Electric

Accessories

Mounting accessories

- Treated-steel mounting plates, delivered with fixings.
- Kit for modular equipment, delivered with fixings.

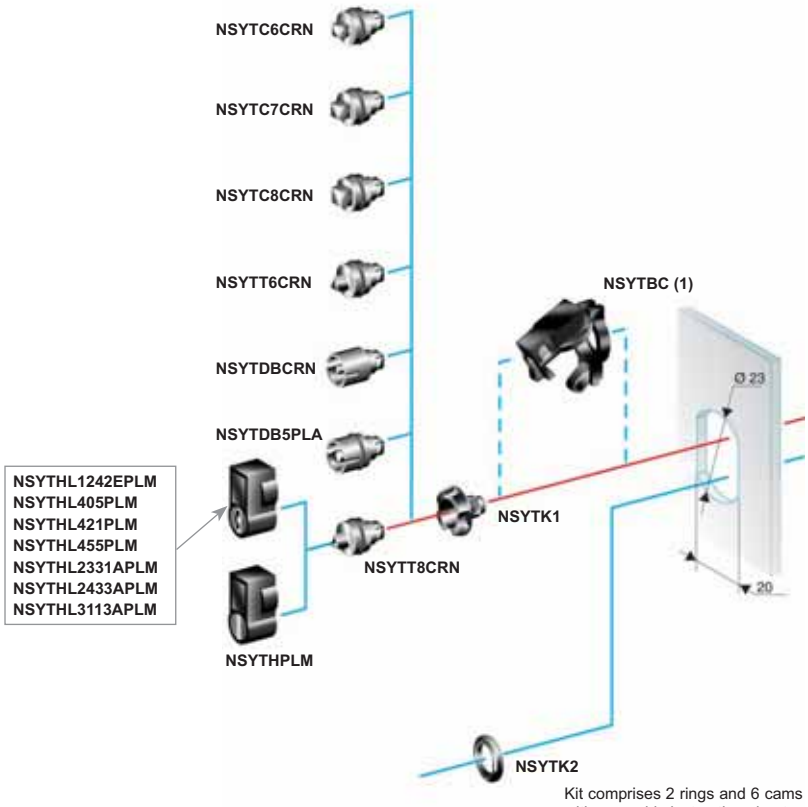
Internal dimensions (mm)			Number of modules	Modular mounting plates	Kits for equipment
Height	Width	Depth			
180	130	96	4	**NSYAMPM1612SB**	**NSYAPMC1813SB**
180	165	96	-	**NSYAMPM1816SB**	**-**
230	210	126	8	**NSYAMPM2321SB**	**NSYAPMC2321SB**

Composition accessories

- Set of 2 fixing lugs made from treated steel, with fixings (without sealing washer, degraded IP).
- Glass-breaking set (hammer with support).

Name	Reference
Set of 2 fixing lugs	**NSYAEFS24**
Glass-breaking set	**NSYAEDXS24**

Door locks



Kit comprises 2 rings and 6 cams with assembly instruction sheet for another type of cylindrical lock (2).

(1) Incompatible with locking handle.
(2) Locks not referenced, to special order only. Consult our local sales office.
Note: the locks are not adaptable on lock screw models.

Accessories

Locks

Kit

Description	Reference
Handle without lock	**NSYTHPLM**
Sealing or padlocking cap	**NSYTBC**
Replacement spare lock	**NSYTK1**
EDF/RONIS kit	**NSYTK2**

Insert shape/type

Description	Reference
Square 6 mm	**NSYTC6CRN**
Square 7 mm	**NSYTC7CRN**
Square 8 mm	**NSYTC8CRN**
Double bar 3 mm (standard)	**NSYTDBCRN**
Double bar 5 mm	**NSYTDB5PLA**
Triangular 6.5 mm CNOMO	**NSYTT6CRN**
Triangular 8 mm	**NSYTT8CRN**

Handles with push-button release (delivered with insert ref. NSYTT8CRN)

Description	Reference
Key lock 1242 E	**NSYTHL1242EPLM**
Key lock 405	**NSYTHL405PLM**
Key lock 421	**NSYTHL421PLM**
Key lock 455	**NSYTHL455PLM**
Key lock 2331 A	**NSYTHL2331APLM**
Key lock 2433 A	**NSYTHL2433APLM**
Key lock 3113 A	**NSYTHL3113APLM**

Selection tools

> www.schneider-electric.com

Our international site allows you to access all the Schneider Electric products in just two clicks with direct links to:

- A complete library of technical documents, catalogues, FAQs brochures, etc.
- Certificates.
- 2D & 3D drawings.
- Selection Guides from the e-catalogue.
- Product discovery sites.

You may also find illustrated overviews, news to which you can subscribe, a list of country contacts and more useful information.

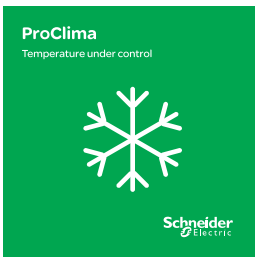
Our software suite

> Spacial.pro

Spacial.pro allows you to make switchboard proposals based on the standard Spacial offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the Bill of Material and 2D drawings for front/side views.

> ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.



> Spacial.ref Thalassa.ref

These digital rules allow you to select the best components from the current extensive product range without the risk of any mistakes, since product and accessory selection take place automatically, saving you time and money.

Steel derivation boxes IP 55
Overview

Boxes and small enclosures made of sheet-steel protected inside and outside with epoxy-polyester paint in RAL 7035 grey.

With or without metric knock-outs for tube entry.

2 versions available: with high or low cover.

Backs equipped with threaded drill holes for fixing equipment. From model 15/10 and up, there are four M4 threaded holes fitted with removable plugs for direct fixing of the mounting plate. Direct wall-fixing.

PVC or rubber sealing gasket depending on the model.

Double-bar lock with inserted key can be used as a handle lock. Other lock inserts are available.

Metallic junction boxes
IP 55 (IEC 60529)

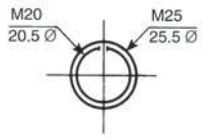
NSYDA2520M

NSYDBN1510

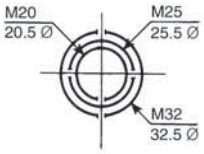
Metallic boxes made of sheet-steel protected inside and outside with textured epoxy-polyester paint in RAL 7035 grey.

The SDB series consists of 4 basic models:
- Without knock-outs: **NSYDBN** with low cover and **NSYDAN** with high cover.
- With knock-outs: **NSYDB●●●M** with low cover and **NSYDA●●●M** with high cover.
- PVC sealing gasket on sizes up to 20/15 and a rubber gasket for > 25/20.
- Back ready for threaded drill holes for fixing equipment. From size 15/10 and up, there are four M4 threaded holes fitted with removable plugs for direct fixing of the mounting plate.
- Direct wall-fixing by means of drill holes fitted with plastic plugs to ensure sealing.

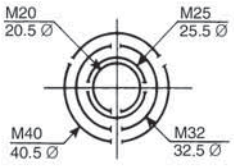
Metallic junction boxes
IP 55 (IEC 60529)



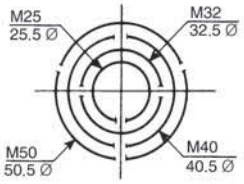
Group n° 1



Group n° 2



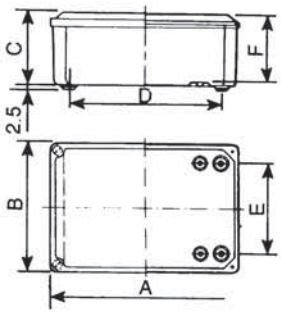
Group n° 3



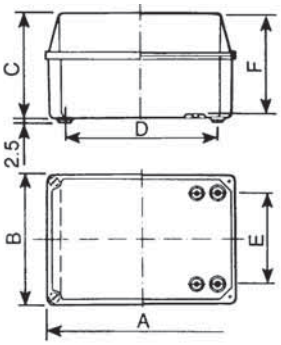
Group n° 4

Dimensions (mm)

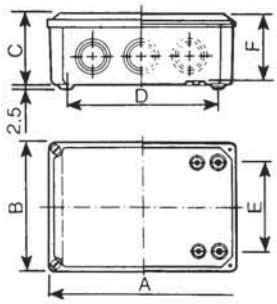
NSYDBN



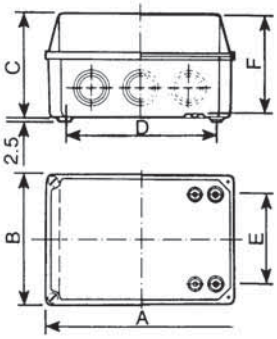
NSYDAN



NSYDB●●●M



NSYDA●●●M



Models, dimensions and references

	External dimensions (mm)			Models without knock-outs	Models with knock-outs, n° of drill holes, knock-outs and group			Dimensions (mm)			Plain mounting plate	Weight (kg)
	Height (A)	Width (B)	Depth (C)	Reference	Reference	Height (A)	Width (B)	D	E	F		
Low cover models	85	85	49	**NSYDBN88**	**NSYDB88M**	1 n° 1	1 n° 1	58	58	-	-	0.18
	105	105	49	**NSYDBN1010**	**NSYDB1010M**	2 n° 1	1 n° 1	76	76	-	-	0.25
	155	105	61	**NSYDBN1510**	**NSYDB1510M**	3 n° 1	1 n° 2	124	74	56	**NSYPMD1510**	0.38
	206	156	83	**NSYDBN2015**	**NSYDB2015M**	3 n° 3	2 n° 3	172	122	78	**NSYPMD2015**	1
	256	206	93	**NSYDBN2520**	**NSYDB2520M**	3 n° 4	2 n° 4	220	170	88	**NSYPMD2520**	1.5
	307	257	116	**NSYDBN3025**	**NSYDB3025M**	2 n° 3, 2 n° 4	3 n° 4	268	218	110	**NSYPMD3025**	3.3
	357	307	136	**NSYDBN3530**	**NSYDB3530M**	2 n° 3, 3 n° 4	2 n° 3, 2 n° 4	318	268	130	**NSYPMD3530**	4.8
High cover models	155	105	88	**NSYDAN1510**	**NSYDA1510M**	3 n° 2	1 n° 2	124	74	83	**NSYPMD1510**	0.45
	206	156	122	**NSYDAN2015**	**NSYDA2015M**	3 n° 3	2 n° 3	172	122	121	**NSYPMD2015**	1.2
	256	206	140	**NSYDAN2520**	**NSYDA2520M**	3 n° 4	2 n° 4	220	170	131	**NSYPMD2520**	1.9

Small metallic enclosures
IP 55 (IEC 60529)

NSYDBN3025D

NSYDAN3025D

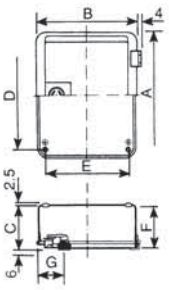
Metallic enclosures made of sheet-steel protected inside and outside with textured epoxy-polyester paint in RAL 7035 grey.

- The Spacial SDB series with hinges consists of 2 models **NSYSDBN●●●D** low cover and **NSYDAN●●●D** high cover.
- Enclosures fitted with sealing gasket and M4 threaded holes fitted with removable plugs for fixing the mounting plate and/or equipment in general.
- Lock with double-bar insert operated with key (standard supply).
  Fixing this key to the insert will convert it into a handle lock.
  See other lock possibilities in the insert table.

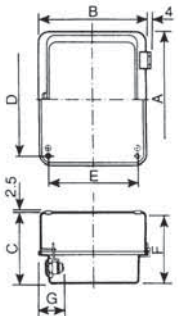
Small metallic enclosures
IP 55 (IEC 60529)

Dimensions

NSYDBN...D



NSYDAN...D



Models. Dimensions and references

	External dimensions (mm)			Models without knock-outs	Dimensions (mm)				Plain mounting plate	Weight (kg)
	Height (A)	Width (B)	Depth (C)	Reference	D	E	F	G		
Low cover models	206	156	83	**NSYDBN2015D**	172	122	78	55	**NSYPMD2015**	1
	256	206	93	**NSYDBN2520D**	220	170	88	55	**NSYPMD2520**	1.5
	307	257	116	**NSYDBN3025D**	268	218	110	55	**NSYPMD3025**	3.3
	357	307	136	**NSYDBN3530D**	318	268	130	55	**NSYPMD3530**	4.8
High cover models	206	156	122	**NSYDAN2015D**	172	122	121	45	**NSYPMD2015**	1.2
	256	206	140	**NSYDAN2520D**	220	170	131	45	**NSYPMD2520**	1.9
	307	257	174	**NSYDAN3025D**	268	218	168	45	**NSYPMD3025**	4
	357	307	210	**NSYDAN3530D**	318	268	204	45	**NSYPMD3530**	5.8

Conversions of standard lock into normalised solutions

Type and size		Operated with a key		Reference
Square insert	□ 6 mm	LC-7		**NSYTC6CRN**
	□ 7 mm	LC-7		**NSYTC7CRN**
	□ 8 mm	LC-8		**NSYTC8CRN**
Triangular insert	▲ 6 mm	LT-8		**NSYTT6CRN**
	▲ 7 mm	LT-8		**NSYTT7CRN**
	▲ 8 mm	LT-8		**NSYTT8CRN**
405 key-type lock				**NSYCL405CRN**

Insulating industrial boxes
Selection guide

ABS	**Polycarbonate**	**Polyester**
Page 1/24	**Page 1/24**	**Page 6/6**

Criteria \ Materials	ABS	Polycarbonate	Polyester loaded with fibreglass
Outdoor use with exposure to UV		•	•
Aggressive environment	•	•	• (2)
Protection rating	IP 66 IK 07	IP 66 IK 08	IP 65 IK 10
Fire resistance: glow wire IEC 60695-2-11.	650 °C	960 °C	960 °C
External dimensions (mm)	**H** 74 to 341 **W** 74 to 291 **D** 54 to 168	**H** 74 to 341 **W** 74 to 291 **D** 54 to 168	**H** 180 to 540 **W** 270 to 720 **D** 180 to 230
Universal application	•	•	•
Electronic application			•
Coupling boxes	• (1)	• (1)	•

(1) See accessories on pages **1/32** to **1/41**.
(2) See Thalassa PLS section.

Specific

For our customized offer, please consult us

Insulating industrial boxes
Selection table

Universal, electronic and junction applications

Page 1/24 | Pages 1/25

Dimensions (mm)								ABS boxes IP 66-IK 07	PC UL boxes IP 66-IK 08	Boxes with buttons
External			Internal							
Height	Width	Depth	Height	Width	Depth	Body	Lid			
74	74	54	65	65	47	37	10	•	•	•
89	89	54	80	80	47	37	10	•	•	
116	74	62	105	65	55	45	10	•	•	•
116	74	94	105	65	85	45	40	•		
116	116	62	105	105	55	45	10	•	•	
116	116	133	105	105	125	45	80	•		
138	93	72	125	80	65	45	20	•	•	
164	121	87	150	105	80	60	20	•	•	
192	121	87	175	105	80	60	20	•	•	
192	121	105	175	105	100	60	40	•	•	
192	164	87	175	150	80	60	20	•	•	
192	164	105	175	150	100	60	40	•	•	
241	194	87	225	175	80	60	20	•	•	
241	194	107	225	175	100	60	40	•	•	
241	194	107	225	175	100	80	20	•	•	
241	194	127	225	175	120	80	40	•	•	
291	241	88	275	225	80	60	20	•	•	
291	241	128	275	225	120	60	60	•	•	
291	241	128	275	225	120	100	20	•	•	
291	241	168	275	225	160	100	60	•	•	
341	291	128	325	275	120	100	20	•	•	
341	291	168	325	275	160	100	60	•	•	

Power distribution and infrastructures

See Thalassa PLS section

External dimensions (mm)			PLS boxes IP 65 - IK 10	
Height	Width	Depth	Opaque covers	Transparent covers
180	270	180	•	•
270	270	180	•	•
270	270	230	•	•
270	360	180	•	•
270	360	230	•	•
270	540	180	•	•
270	540	230	•	•
380	360	180	•	•
380	540	180	•	•
380	540	230	•	•
380	720	230	•	•
540	540	180	•	•
540	540	230	•	•
540	720	230	•	•

Your industrial boxes IP 66, IK 07 and IK 08, ideal in any conditions!

Easy to install
3 methods of fixing the box to its support

Easy to use
Only one tool is required: a flat screwdriver

Sealed
IP 66 for all the ranges

Smart
Fixing studs on the cover

Robustness
Up to IK 08

Safe
Type II protection against electric shocks

Multifunction
Wide range of options for cable entries and internal equipment

Modular
Simple and logical range of widths, heights and depths

Customisation service

Complementing our standard solutions, Thalassa industrial boxes can be adapted and transformed to your specific needs:

- For easy and direct use in your industrial process.
- To reduce your production times and reduce logistics constraints.
- To blend in with the aesthetics and ergonomics of your equipment.
- To have the guarantee of quality customisation.

Customisation offer

- Accessory installation.
- Machining: cut-outs, drill holes.
- Marking.
- Colours.
- Packaging alternatives.

Specific

Adaptability

Good flame resistance:
ABS: 650 °C.
PC (UL): 960 °C, UL94V0.

Safety

Protection against electric shocks: class II.

Equipment

The various installation studs all have the same diameter. Only one type of screw is used to fix all the accessories: batch of 100 self-tapping screws, ref. **NSYAMFSTB**.

Performance

- Sealing:
– IP 66 guaranteed by a polyurethane seal.
– NEMA 4.4X (NEMA 250).
- Mechanical strength:
– ABS: IK 07 (2J).
– Polycarbonate: IK 08 (5J).

Well designed

Fixing studs in the cover for accommodating equipment.
Corners for centring the cover on the body.

Light and resistant

Boxes weighing only some dozens of grams can withstand impacts of several kilograms.

Aesthetics

Rounded design intended to maximise robustness and sealing.

Practical

Cardboard packaging reusable once the box is equipped.

Choice

- 22 models from 74 × 74 × 54 to 341 × 291 × 168 mm in ABS or polycarbonate (PC) with low or high, opaque or transparent covers.
- Multiple installation accessories.

Standards

IEC 62208 Certified TÜV (report available on our websites).

Installation

Various options for fixing the box, outside the sealed volume, through the rear of the box or using external lugs.

Environment

Respect for eco-design rules (Product environmental profile).
Halogen-free plastic materials.

Modularity

Logical and simple range of width, height and depth dimensions, with the particularity of allowing the boxes to be coupled.

Approval

SEMKO, DEMKO, TÜV and UL.

Thermoplastic industrial boxes
Introduction

General features

- Large range of dimensions (H, W, D).
- High or low, opaque or transparent cover.
- Boxes that can be coupled (exactly the same dimensions) with kit ref. **13934AB**.
- Locks from box size of 116 × 116 × 62 mm:
– Cover locking by 4 plastic captive screws with coarse thread outside the sealed area.
– Plumbable lock.
- Locks from box size of 138 × 93 × 72 mm:
– The standard screws (flat screwdriver) can be replaced with other standardised screws (page **1/38**).
- The 4 “legs” of the cover ensure its robustness and perfect support during customisation operations.
- Adaptable hinges on all the 20- and 40-mm covers (page **1/37**).

Materials

- ABS boxes:
– IK 07 (2J) according to IEC 62262.
– Glow wire resistance: 650 °C according to IEC 60695-2-11.
– Usage temperature: –25 °C...+60 °C.
– Installation temperature: –15 °C...+40 °C.
- Polycarbonate boxes:
– IK 08 (5J) according to IEC 62262.
– Glow wire resistance: 960 °C.
– Usage temperature: –25 °C...+80 °C.
– Installation temperature: –15 °C...+60 °C.
– Certified according to UL 508A.

Fixing the box

- Outside the sealed sensitive volume by the 4 chimneys in the corners from box size of 138 × 93 × 72 mm.
- Through the rear of the box by 2 or 4 elongated holes to be perforated.
- With fixing lugs from box size of 116 × 116 × 62 mm (ref. **NSYAEFTB**).

Equipment installation

- Studs for fixing the equipment in the body and the cover of the box by means of a ∅ 4-mm self-tapping screw (ref. **NSYAMFSTB**, screw ∅ 4 × 10 mm with Pozidriv and slotted head).
- Option of installing rails, plates (page **1/40**) or other types of supports (card, etc.).
- Spacers and stand-offs to be installed on the studs, for adjusting the height of the equipment.

Technical features

- IP 66 according to IEC 60529.
- NEMA 4.4X according to Nema 250.
- Class II according to IEC 61140.
- Colour:
– Body: RAL 7035 grey.
– Cover: RAL 7035 grey or tinted transparent.
- Insulating, halogen-free plastic materials.
- Resistance to chemical and atmospheric agents: see technical appendices.

Thermal dissipation
- Use a suitable calculation method according to IEC 60890.
- Anti-condensation valves available as an accessory, prevent the build-up of moisture inside the box.

Thermoplastic industrial boxes
Certifications

Certifications

- IEC 62208 certified by TÜV.
- SEMKO, DEMKO.
- UL: polycarbonate range.
- Product Environmental Profile.

Choose the material according to the environment

- ABS for conventional applications (IK 07) with the usual constraints.
- Polycarbonate for enhanced impact resistance and for outdoor applications or applications directly exposed to UV.
- Polycarbonate certified UL.

Materials	ABS	Polycarbonate
IP	66	66
IK	07	08
Glow wire resistance	650 °C	960 °C
Standard	IEC 62208	UL 508A / IEC 62208
Usage temperature (ºC)	– 25 ... + 60 °C	– 25 ... + 80 °C
UV	+	+ + +
Chemical	+	+ + +
Halogen	None	Very low
Self-extinguishing	–	UL 94 V0

Specific

Customisation:
The boxes can be customised on request.
Choose the material according to the environment.

Thermoplastic industrial boxes

ABS or polycarbonate boxes with low cover

- IP 66 - NEMA 4.4X.
- IK 07 (ABS) - IK 08 (PC).
- RAL 7035 grey.
- Boxes 54 to 128 mm deep with 10- to 20-mm covers.
- Opaque or transparent cover.
- Hinges: as accessories and only for the 20-mm covers.

Overall external dimensions (mm)			Overall internal dimensions (mm)			Body (mm)	Cover (mm)	Minor pack.	Cover screw	ABS boxes IP 66 - IK 07		PC-UL boxes IP 66 - IK 08	
										Cover		Cover	
Height	Width	Depth	Height	Width	Depth					Opaque	Transparent	Opaque	Transparent
74	74	54	65	65	47	37	10	5	Metal	**NSYTBS775**	-	**NSYTBP775**	-
89	89	54	80	80	47	37	10	5	Metal	**NSYTBS885**	-	**NSYTBP885**	-
116	74	62	105	65	55	45	10	5	Metal	**NSYTBS1176**	-	**NSYTBP1176**	-
116	116	62	105	105	55	45	10	5	Plastic	**NSYTBS11116**	-	**NSYTBP11116**	-
138	93	72	125	80	65	45	20	2	Plastic	**NSYTBS1397**	**NSYTBS1397T**	**NSYTBP1397**	**NSYTBP1397T**
164	121	87	150	105	80	60	20	2	Plastic	**NSYTBS16128**	**NSYTBS16128T**	**NSYTBP16128**	**NSYTBP16128T**
192	121	87	175	105	80	60	20	2	Plastic	**NSYTBS19128**	**NSYTBS19128T**	**NSYTBP19128**	**NSYTBP19128T**
192	164	87	175	150	80	60	20	1	Plastic	**NSYTBS19168**	**NSYTBS19168T**	**NSYTBP19168**	**NSYTBP19168T**
241	194	87	225	175	80	60	20	1	Plastic	**NSYTBS24198**	**NSYTBS24198T**	**NSYTBP24198**	**NSYTBP24198T**
241	194	107	225	175	100	80	20	1	Plastic	**NSYTBS241910**	**NSYTBS241910T**	**NSYTBP241910**	**NSYTBP241910T**
291	241	88	275	225	80	60	20	1	Plastic	**NSYTBS29248**	**NSYTBS29248T**	**NSYTBP29248**	**NSYTBP29248T**
291	241	128	275	225	120	100	20	1	Plastic	**NSYTBS292412**	**NSYTBS292412T**	**NSYTBP292412**	**NSYTBP292412T**
341	291	128	325	275	120	100	20	1	Plastic	**NSYTBS342912**	**NSYTBS342912T**	**NSYTBP342912**	**NSYTBP342912T**

ABS or polycarbonate boxes with high cover

- IP 66 - NEMA 4.4X.
- IK 07 (ABS) - IK 08 (PC).
- RAL 7035 grey.
- Boxes 94 to 168 mm deep with 40- to 80-mm covers.
- Opaque or transparent cover.
- Hinges: as accessories and only for the 40-mm covers.

Overall external dimensions (mm)			Overall internal dimensions (mm)			Body (mm)	Cover (mm)	Minor pack.	Cover screw	ABS boxes IP 66 - IK 07		PC-UL boxes IP 66 - IK 08	
										Cover		Cover	
Height	Width	Depth	Height	Width	Depth					Opaque	Transparent	Opaque	Transparent
116	74	94	105	65	85	45	40	3	Metal	**NSYTBS1179H**	-	-	-
116	116	133	105	105	125	45	80	2	Plastic	**NSYTBS111113H**	-	-	-
192	121	105	175	105	100	60	40	2	Plastic	**NSYTBS191210H**	**NSYTBS191210HT**	**NSYTBP191210H**	**NSYTBP191210HT**
192	164	105	175	150	100	60	40	1	Plastic	**NSYTBS191610H**	**NSYTBS191610HT**	**NSYTBP191610H**	**NSYTBP191610HT**
241	194	107	225	175	100	60	40	1	Plastic	**NSYTBS241910H**	**NSYTBS241910HT**	**NSYTBP241910H**	**NSYTBP241910HT**
241	194	127	225	175	120	80	40	1	Plastic	**NSYTBS241912H**	**NSYTBS241912HT**	**NSYTBP241912H**	**NSYTBP241912HT**
291	241	128	275	225	120	60	60	1	Plastic	**NSYTBS292412H**	**NSYTBS292412HT**	**NSYTBP292412H**	**NSYTBP292412HT**
291	241	168	275	225	160	100	60	1	Plastic	**NSYTBS292416H**	**NSYTBS292416HT**	**NSYTBP292416H**	**NSYTBP292416HT**
341	291	168	325	275	160	100	60	1	Plastic	**NSYTBS342916H**	**NSYTBS342916HT**	**NSYTBP342916H**	**NSYTBP342916HT**

Thermoplastic industrial boxes

NSYTBS775B1Y (1)

NSYTBS1176B2

NSYTBS1176B3

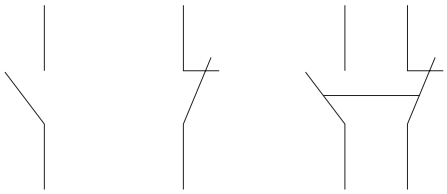
Boxes equipped with IP 54 ABS buttons

Overall external dimensions (mm)			Minor pack.	Reference
Height	Width	Depth		
74	74	83	1	**NSYTBS775B1Y** (1)
116	74	75	1	**NSYTBS1176B2**
116	74	75	1	**NSYTBS1176B3**

(1) Ref. **NSYTBS775B1Y** houses an emergency switching off palm button with mechanical locking according to standards IEC 60364-5-53 and 60947-5-5.

- Emergency switching off function with a red, ∅ 40 mm, "turn to unlock" palm button.
- Start / Stop function with 2 push buttons.
- Up / Down / Stop function with 3 push buttons.
- Technical features of the switches:

– "NC" switch with positive opening manoeuvre according to IEC 60947-5-1 appendix K.
– Mechanical durability of the emergency switch: 0.1 million cycles.
– Mechanical durability of the "NC" and "NO" switches: 5 million cycles.
– Protection against short circuits: 10 A.



N/O **N/C** **C/O**

Function	Type			
	"NO"	"NC"	"C / O"	Type of push
Emergency switching off	1	1	-	Latching, red
Start/stop				
Start	1	-	-	Flush, green
Stop	-	1	-	Projecting, red
Up / down / stop				
Up	-	-	1	Flush, black
Down	-	-	1	Flush, white
Stop	-	1	-	Projecting, red

ABS button boxes, to be equipped

Overall internal dimensions (mm)					Overall external dimensions (mm)				Minor pack.	Grill
H.	W.	D.	Body	Cover	H.	W.	D.			
65	65	45	35	10	74	74	54	1 hole	5	**NSYTBS775C1**
65	65	45	35	10	74	74	54	1 hole	5	**NSYTBS775C1Y** (1)
105	65	55	45	10	116	74	62	2 holes	5	**NSYTBS1176C2**
105	65	55	45	10	116	74	62	3 holes	5	**NSYTBS1176C3**

(1) Yellow "emergency switching off" box.

- IK 07.
- RAL 7035 grey and RAL 1021 yellow, "emergency switching off".
- Diameter of the button holes: 22.5 mm.
- Flush-mounting cable entries for ISO cable gland (page **1/35**).
- 4 entries with 20-mm diameter on the 1-button box.
- 6 entries with 20-mm diameter on the 2 and 3-button boxes.

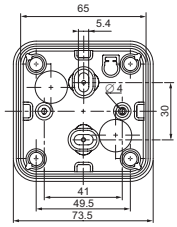
Practical

- Ready-to-use boxes.

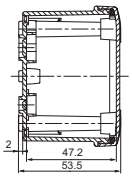
Thermoplastic industrial boxes
Dimensions

Box of 74 × 74 × 54 mm (external dimensions) NSYTB...775

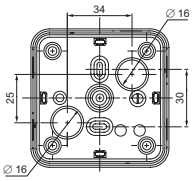
Interior



Side

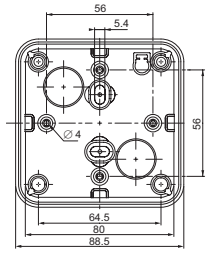


Rear



Box of 89 × 89 × 54 mm (external dimensions) NSYTB...885

Interior



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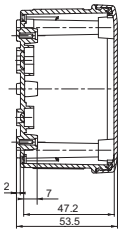
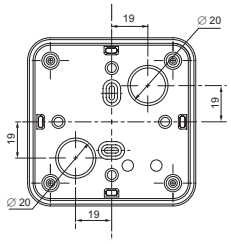
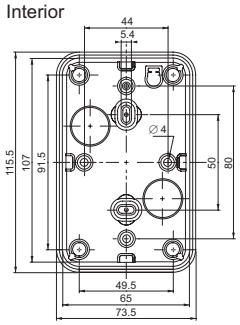


Rear



Box of 116 × 74 × 62 or 94 mm (external dimensions) NSYTB...1176 or NSYTB...1179

Interior



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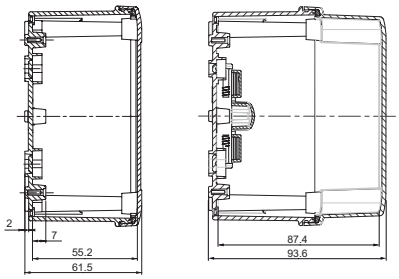
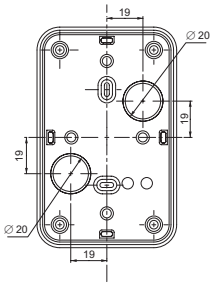
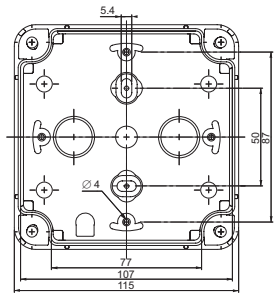


Rear



Box of 116 × 116 × 62 or 133 mm (external dimensions) NSYTB...11116 or NSYTB...111113

Interior



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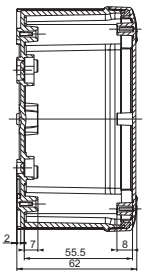
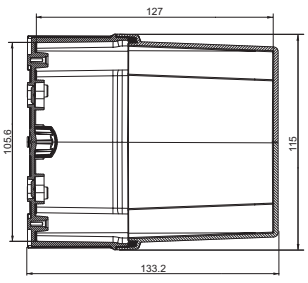
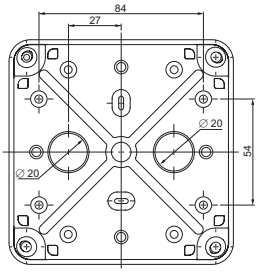
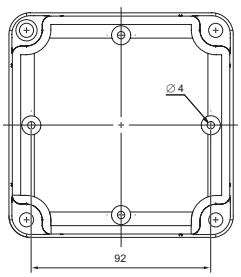




Rear

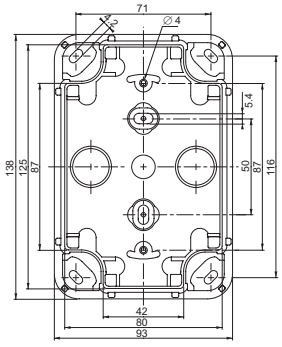


Cover

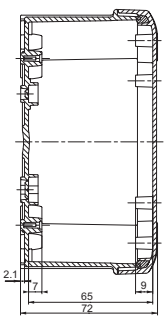


Box of 138 × 93 × 72 mm (external dimensions) NSYTB...1397

Interior



Side



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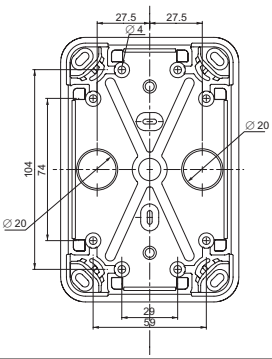
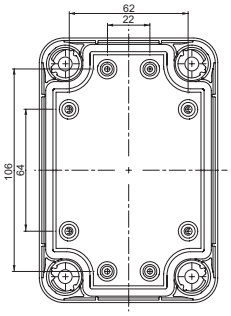


Cover

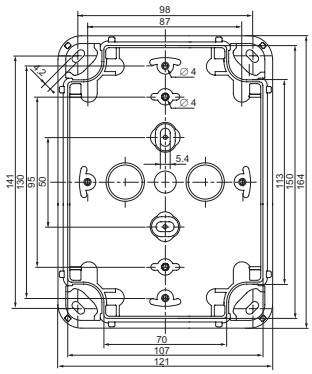


Schneider Electric

Thermoplastic industrial boxes
Dimensions

Box of 164 × 121 × 87 mm (external dimensions) NSYTB...16128

Interior



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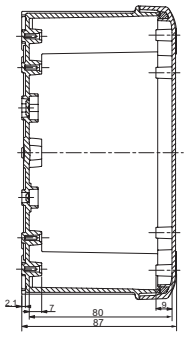
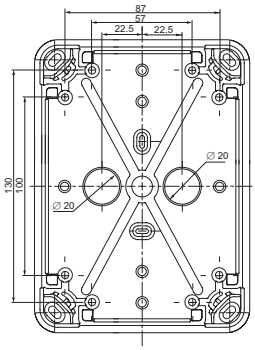
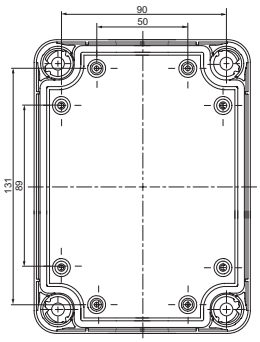


Rear

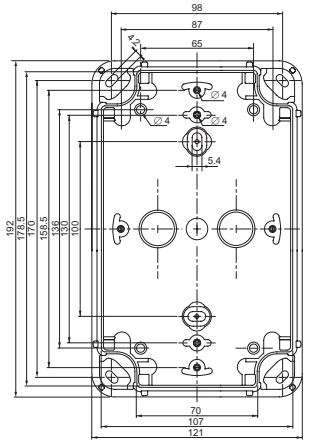


Cover

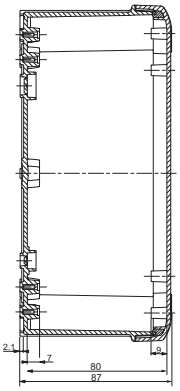


Box of 192 × 121 × 87 or 105 mm (external dimensions) NSYTB...19128 or NSYTB...191210

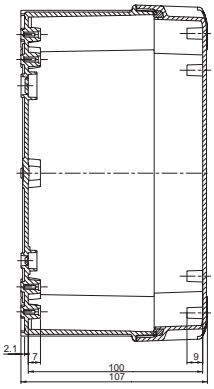
Interior



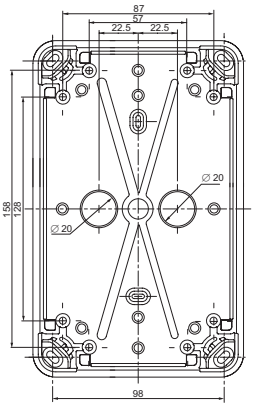
Side
Height 80 mm
(60 + 20)

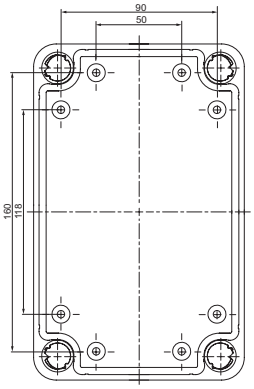


Rear
Height 100 mm
(60 + 40)

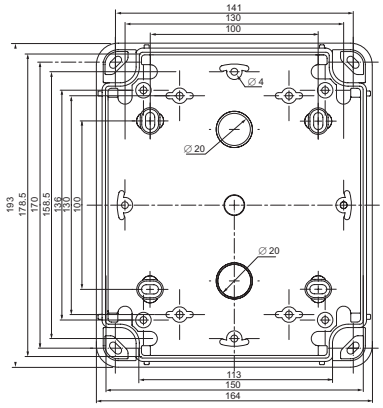


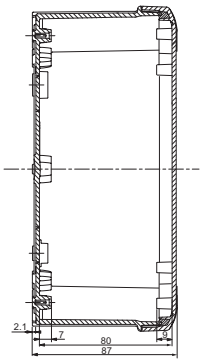
Cover



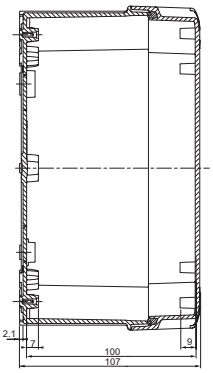


Box of 192 × 164 × 87 or 105 mm (external dimensions) NSYTB...19168 or NSYTB...191610

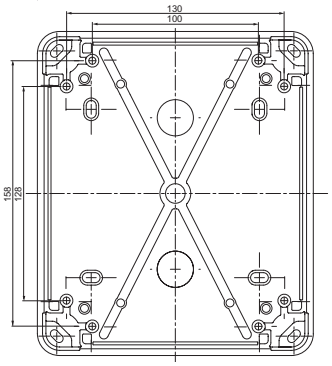


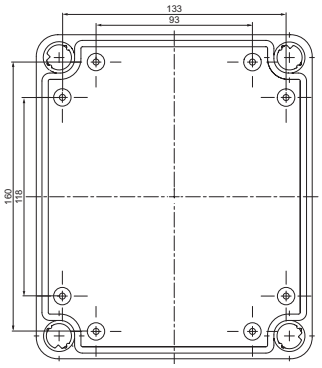


Height 80 mm
(60 + 20)



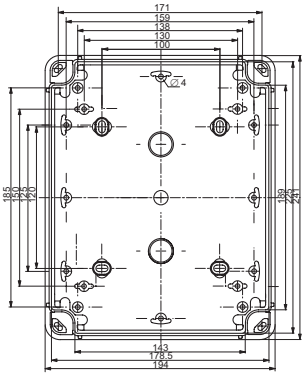
Height 100 mm
(60 + 40)



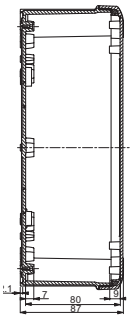


Thermoplastic industrial boxes
Dimensions

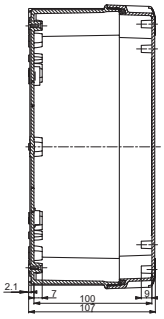
Box of 241 × 194 × 87, 107 or 127 mm (external dimensions) NSYTB...24198, NSYTB...241910 or NSYTB...241912



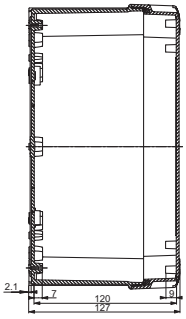
Height 80 mm
(60 + 20)

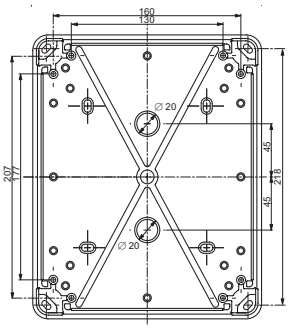


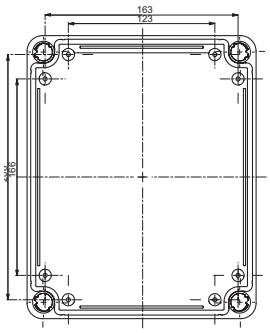
Height 100 mm
(60 + 40)



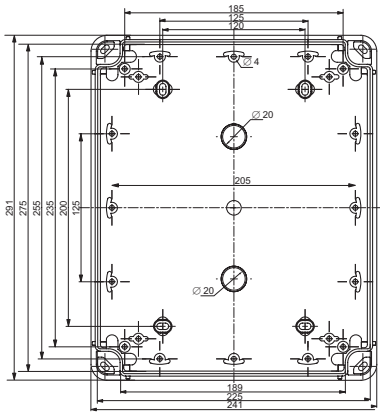
Height 120 mm
(80 + 40)



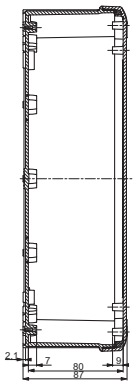




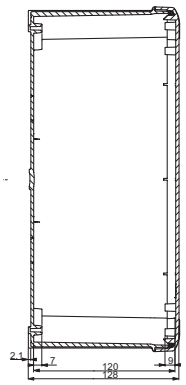
Box of 291 × 241 × 88, 128 or 168 mm (external dimensions) NSYTB...29248, NSYTB...292412 or NSYTB...292416



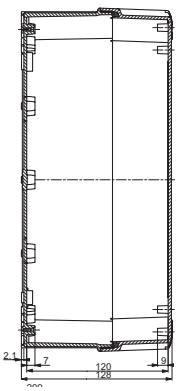
Height 80 mm
(60 + 20)



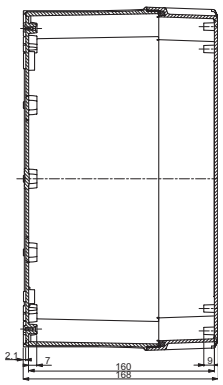
Height 120 mm
(100 + 20)

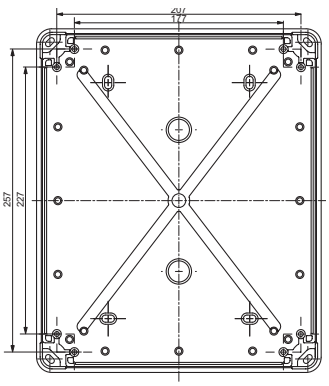


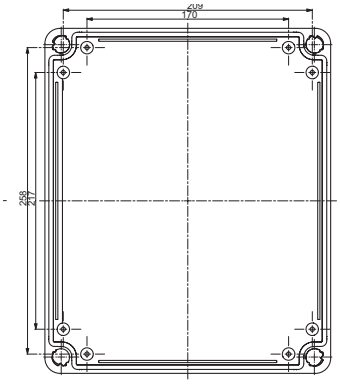
Height 120 mm
(60 + 60)



Height 160 mm
(100 + 60)

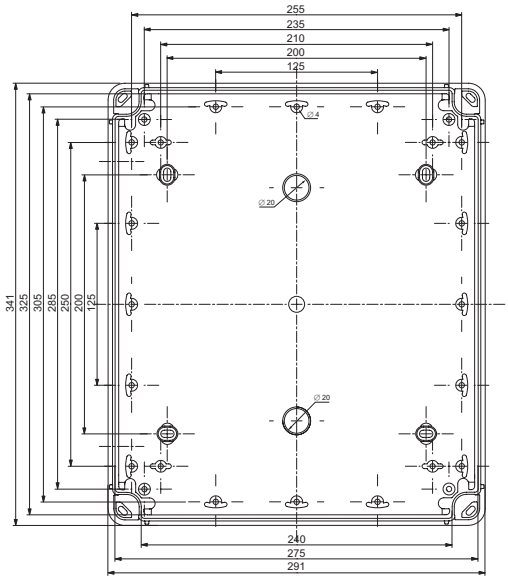




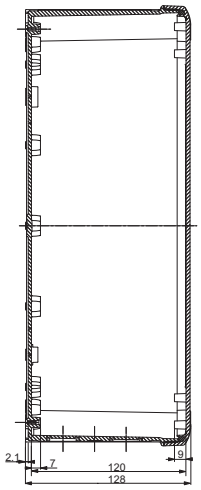


Thermoplastic industrial boxes
Dimensions

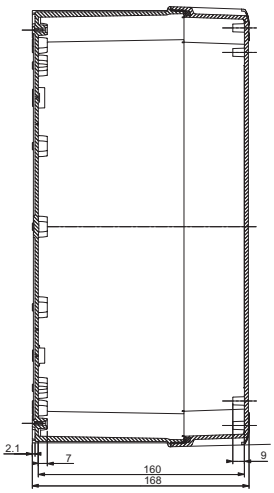
Box of 341 × 291 × 128 or 168 mm (external dimensions) NSYTB...342912 or NSYTB...342916

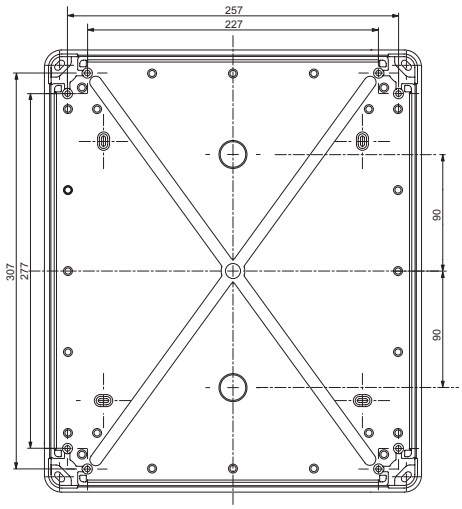


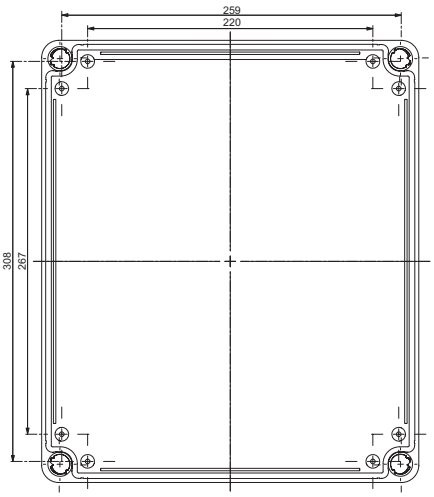
Height 120 mm
(100 + 20)



Height 160 mm
(100 + 60)







Thermoplastic industrial boxes
Dimensions summary table

For box dimensions 125 × 80 × 65 to 325 × 275 × 160 (internal dimensions)

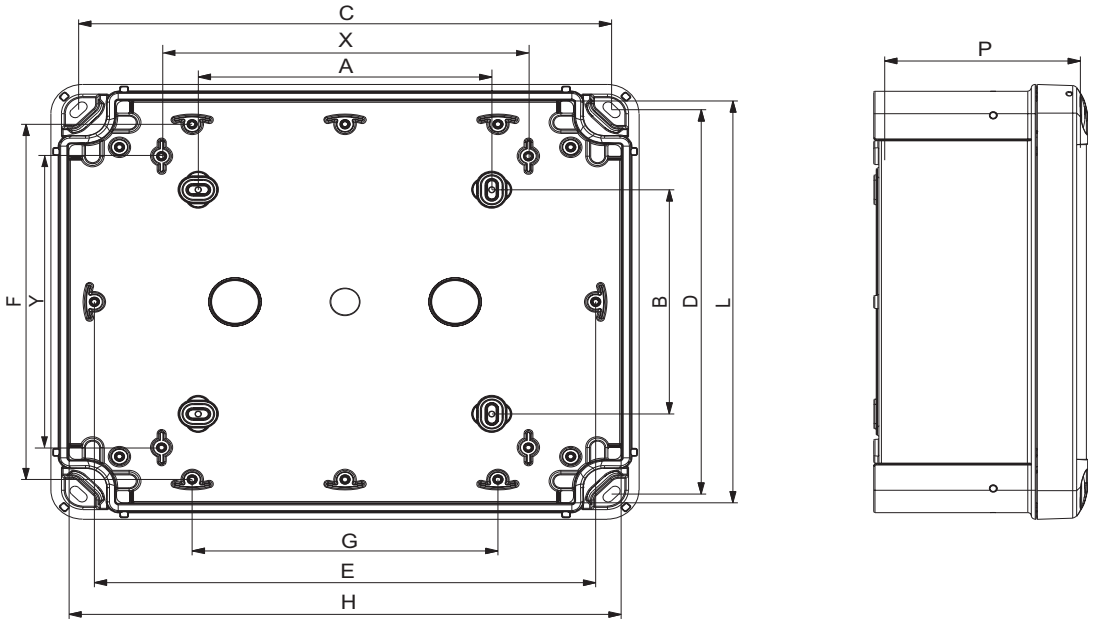
Internal dimensions (mm)			Fixing of the box (mm) (marking on the outside)				Fixing of accessories (mm) (marking on the inside)					Box reference base with and without transparent cover*	
H	L	P	A	B	C	D	E	F	G	X	Y		
65	65	47	30	-	-	-	-	41	-	-	-	**NSYTBS775**	**NSYTBP775**
80	80	47	30	-	-	-	56	56	-	-	-	**NSYTBS885**	**NSYTBP885**
105	65	55	50	-	-	-	80	44	-	-	-	**NSYTBS1176**	**NSYTBP1176**
105	65	85	50	-	-	-	80	44	-	-	-	**NSYTBS1179H**	**-**
105	105	55	50	-	-	-	87	87	-	-	-	**NSYTBS11116**	**NSYTBP11116**
105	105	125	50	-	-	-	87	87	-	-	-	**NSYTBS111113H**	**-**
125	80	65	50	-	116	71	87	-	-	-	-	**NSYTBS1397**	**NSYTBP1397**
150	105	80	50	-	141	98	130	87	-	95	-	**NSYTBS16128**	**NSYTBP16128**
175	105	80	100	-	170	98	158.5	87	-	136	-	**NSYTBS19128**	**NSYTBP19128**
175	105	100	100	-	170	98	158.5	87	-	136	-	**NSYTBS191210H**	**NSYTBP191210H**
175	150	80	100	100	170	141	158.5	130	-	136	65	**NSYTBS19168**	**NSYTBP19168**
175	150	100	100	100	170	141	158.5	130	-	136	65	**NSYTBS191610H**	**NSYTBP191610H**
225	175	80	120	100	218	171.5	205	158.5	125	150	130	**NSYTBS24198**	**NSYTBP24198**
225	175	100	120	100	218	171.5	205	158.5	125	150	130	**NSYTBS241910H**	**NSYTBP241910H**
225	175	100	120	100	218	171.5	205	158.5	125	150	130	**NSYTBS241910**	**NSYTBP241910**
225	175	120	120	100	218	171.5	205	158.5	125	150	130	**NSYTBS241912H**	**NSYTBP241912H**
275	225	80	200	120	268.5	218.5	255	205	125	221	161	**NSYTBS29248**	**NSYTBP29248**
275	225	120	200	120	268.5	218.5	255	205	125	221	161	**NSYTBS292412H**	**NSYTBP292412H**
275	225	120	200	120	268.5	218.5	255	205	125	221	161	**NSYTBS292412**	**NSYTBP292412**
275	225	160	200	120	268.5	218.5	255	205	125	221	161	**NSYTBS292416H**	**NSYTBP292416H**
325	275	120	200	200	319	269	305	255	125	250	210	**NSYTBS342912**	**NSYTBP342912**
325	275	160	200	200	319	269	305	255	125	250	210	**NSYTBS342916H**	**NSYTBP342916H**

*Identical features for the boxes with transparent covers. Add a T at the end of the reference.

H: Height

L: Width

P: Depth



Thermoplastic industrial boxes
Selection guide

Universal boxes with IP 66

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Overall external dimensions (mm)			Overall internal dimensions (mm)			Body (mm)	Cover (mm)	Material			
								ABS IP 66 IK 07		PC-UL IP 66 IK 08	
Height	Width	Depth	Height	Width	Depth			Opaque cover	Transparent cover	Opaque cover	Transparent cover
74	74	54	65	65	47	37	10	**NSYTBS775**	-	**NSYTBP775**	-
89	89	54	80	80	47	37	10	**NSYTBS885**	-	**NSYTBP885**	-
116	74	62	105	65	55	45	10	**NSYTBS1176**	-	**NSYTBP1176**	-
116	74	94	105	65	85	45	40	**NSYTBS1179H**	-	-	-
116	116	62	105	105	55	45	10	**NSYTBS11116**	-	**NSYTBP11116**	-
116	116	133	105	105	125	45	80	**NSYTBS111113H**	-	-	-
138	93	72	125	80	65	45	20	**NSYTBS1397**	**NSYTBS1397T**	**NSYTBP1397**	**NSYTBP1397T**
164	121	87	150	105	80	60	20	**NSYTBS16128**	**NSYTBS16128T**	**NSYTBP16128**	**NSYTBP16128T**
192	121	87	175	105	80	60	20	**NSYTBS19128**	**NSYTBS19128T**	**NSYTBP19128**	**NSYTBP19128T**
192	121	105	175	105	100	60	40	**NSYTBS191210H**	**NSYTBS191210HT**	**NSYTBP191210H**	**NSYTBP191210HT**
192	164	87	175	150	80	60	20	**NSYTBS19168**	**NSYTBS19168T**	**NSYTBP19168**	**NSYTBP19168T**
192	164	105	175	150	100	60	40	**NSYTBS191610H**	**NSYTBS191610HT**	**NSYTBP191610H**	**NSYTBP191610HT**
241	194	87	225	175	80	60	20	**NSYTBS24198**	**NSYTBS24198T**	**NSYTBP24198**	**NSYTBP24198T**
241	194	107	225	175	100	80	20	**NSYTBS241910**	**NSYTBS241910T**	**NSYTBP241910**	**NSYTBP241910T**
241	194	107	225	175	100	60	40	**NSYTBS241910H**	**NSYTBS241910HT**	**NSYTBP241910H**	**NSYTBP241910HT**
241	194	127	225	175	120	80	40	**NSYTBS241912H**	**NSYTBS241912HT**	**NSYTBP241912H**	**NSYTBP241912HT**
291	241	88	275	225	80	60	20	**NSYTBS29248**	**NSYTBS29248T**	**NSYTBP29248**	**NSYTBP29248T**
291	241	128	275	225	120	100	20	**NSYTBS292412**	**NSYTBS292412T**	**NSYTBP292412**	**NSYTBP292412T**
291	241	128	275	225	120	60	60	**NSYTBS292412H**	**NSYTBS292412HT**	**NSYTBP292412H**	**NSYTBP292412HT**
291	241	168	275	225	160	100	60	**NSYTBS292416H**	**NSYTBS292416HT**	**NSYTBP292416H**	**NSYTBP292416HT**
341	291	128	325	275	120	100	20	**NSYTBS342912**	**NSYTBS342912T**	**NSYTBP342912**	**NSYTBP342912T**
341	291	168	325	275	160	100	60	**NSYTBS342916H**	**NSYTBS342916HT**	**NSYTBP342916H**	**NSYTBP342916HT**

ABS boxes for buttons, to be equipped

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External dimensions (mm)			Number of holes	Cover	Ref.
Height	Width	Depth			
74	74	54	1	Grey	**NSYTBS775C1**
74	74	54	1	Yellow	**NSYTBS775C1Y**
116	74	62	2	Grey	**NSYTBS1176C2**
116	74	62	3	Grey	**NSYTBS1176C3**

Equipped button boxes, in ABS with IP 54

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External dimensions (mm)				
Height	Width	Depth		Reference
74	74	83	Emergency switching off	**NSYTBS775B1Y**
116	74	75	Start/stop	**NSYTBS1176B2**
116	74	75	Up / down / stop	**NSYTBS1176B3**

Thermoplastic industrial boxes
Accessory selection guide

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Overall external dimensions (mm)			Overall internal dimensions (mm)			Set of 2 hinges	Set of 4 fixing lugs	Galvanised-steel plate	Insulating plate	Terminal-block support bar
Height	Width	Depth	Height	Width	Depth					
74	74	54	65	65	47	-	-	-	-	-
89	89	54	80	80	47	-	-	-	-	-
116	74	62	105	65	55	-	-	-	-	-
116	116	62	105	105	55	-	**NSYAEFTB**	-	-	-
138	93	72	125	80	65	**NSYAEDH20TB**	**NSYAEFTB**	-	-	-
164	121	87	150	105	80	**NSYAEDH20TB**	**NSYAEFTB**	-	-	-
192	121	87	175	105	80	**NSYAEDH20TB**	**NSYAEFTB**	-	-	**IMT34000**
192	121	105	175	105	100	**NSYAEDH40TB**	**NSYAEFTB**	-	-	**IMT34000**
192	164	87	175	150	80	**NSYAEDH20TB**	**NSYAEFTB**	**NSYAMPM1916TB**	**NSYAMPA1916TB**	**IMT34000**
192	164	105	175	150	100	**NSYAEDH40TB**	**NSYAEFTB**	**NSYAMPM1916TB**	**NSYAMPA1916TB**	**IMT34000**
241	194	87	225	175	80	**NSYAEDH20TB**	**NSYAEFTB**	**NSYAMPM2419TB**	**NSYAMPA2419TB**	**IMT34000** or **IMT34001**
241	194	107	225	175	100	(1) **NSYAEDH20TB** or **NSYAEDH40TB**	**NSYAEFTB**	**NSYAMPM2419TB**	**NSYAMPA2419TB**	**IMT34000** or **IMT34001**
241	194	127	225	175	120	**NSYAEDH40TB**	**NSYAEFTB**	**NSYAMPM2419TB**	**NSYAMPA2419TB**	**IMT34000** or **IMT34001**
291	241	88	275	225	80	**NSYAEDH20TB**	**NSYAEFTB**	**NSYAMPM2924TB**	**NSYAMPA2924TB**	**IMT34001** or **IMT34002**
291	241	128	275	225	120	-	**NSYAEFTB**	**NSYAMPM2924TB**	**NSYAMPA2924TB**	**IMT34001** or **IMT34002**
291	241	128	275	225	120	(1) **NSYAEDH20TB** or -	**NSYAEFTB**	**NSYAMPM2924TB**	**NSYAMPA2924TB**	**IMT34001** or **IMT34002**
291	241	168	275	225	160	-	**NSYAEFTB**	**NSYAMPM2924TB**	**NSYAMPA2924TB**	**IMT34001** or **IMT34002**
341	291	128	325	275	120	**NSYAEDH20TB**	**NSYAEFTB**	**NSYAMPM3429TB**	**NSYAMPA3429TB**	**IMT34002**
341	291	168	325	275	160	-	**NSYAEFTB**	**NSYAMPM3429TB**	**NSYAMPA3429TB**	**IMT34002**

(1) Several cover depths for the same external dimensions.

Anti-corrosion valve and coupling kit

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IP66 ventilation and coupling accessories	Ref.
Valve, 16 litres/h, Ø 12	**NSYCAG12LPH1**
Valve, 120 litres/h, Ø 12	**NSYCAG12LPH2**
Coupling kit, Ø 32	**13934**

Fixings

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Stand-offs and spacers	Ref.
Set of four 15-mm spacers	**NSYAMFEP154TB**
Set of four 20-mm spacers	**NSYAMFEP204TB**
Set of four 30-mm spacers	**NSYAMFEP304TB**
Set of four 15-mm self-tapping stand-offs	**NSYAMFET154TB**
Set of four 20-mm self-tapping stand-offs	**NSYAMFET204TB**
Set of four 30-mm self-tapping stand-offs	**NSYAMFET304TB**
Batch of 50 M4 screws for stand-offs and spacers	**NSYAMFESTB**

Screws for accessories	Ref.
Pack of 100 4-mm Pozidrive and slotted self-tapping screws	**NSYAMFSTB**

Cable glands and quick entries

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	M12	M16	M20	M25	M32	M40
IP 68 cable glands (1)	**ISM71501**	**ISM71502**	**ISM71503**	**ISM71504**	**ISM71505**	**ISM71506**
IP 67 quick entries (2)	**IMT36179**	**IMT36180**	**IMT36181**	**IMT36182**	**IMT36183**	**IMT36184**

(1) Other dimensions (see page **1/35**).
(2) Other dimensions (see page **1/34**).

Terminal blocks

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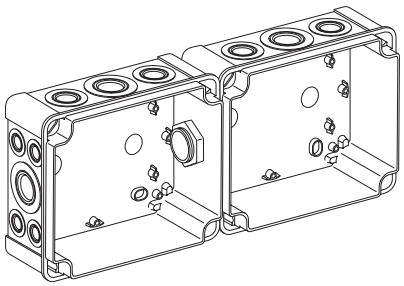
Terminal blocks	Ref.	Ref.	Ref.
4-hole terminal blocks	Black (live)	Blue (neutral)	Green (earth)
2 X 10^2 + 2 X 16^2	**IMT34003**	**IMT34005**	**IMT34007**
3 X 16^2 + 1 X 25^2	**IMT34004**	**IMT34006**	**IMT34008**

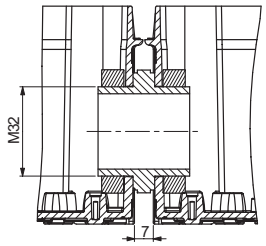
Composition accessories
Coupling accessories

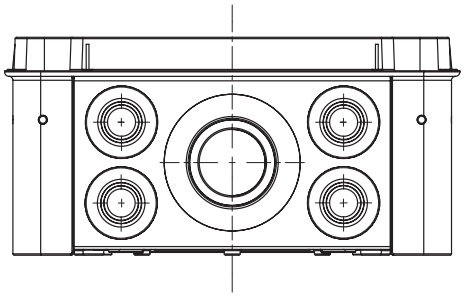
Coupling kit

- The coupling kit allows you to join several boxes with dimensions from 138 × 93 mm, while keeping IP 66.
- The kit is installed by drilling a hole with ∅ 32 mm in the boxes to be coupled.
- The kit consists of 2 linking parts, nuts and seals.

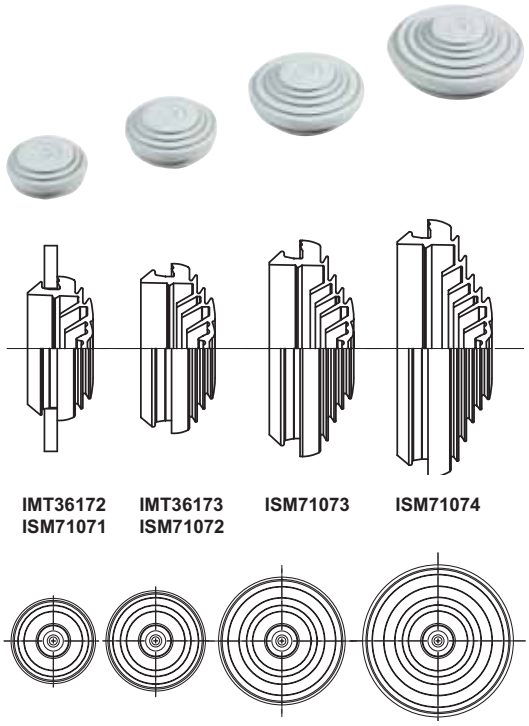
Description	Minor pack.	Reference
Coupling kit	1	**13934**







Composition accessories
Cable-entry accessories



Mixed membrane entries for IP 55 direct cable entries

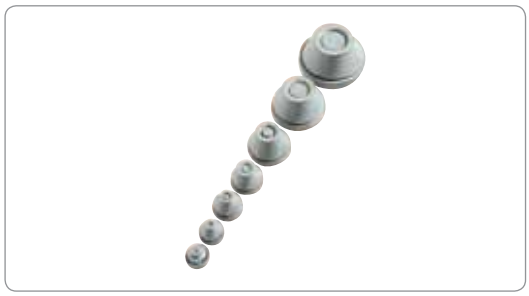
Common accessories for the Thalassa and Spacial offers

- Membrane entries with multiple membranes.
- IP 55.
- RAL 7035.
- Patented concentric cutting. A simple screwdriver is enough. Enables ultra-quick connection with the choice of several cable diameters for the same membrane entry.
- Material: SBS.
- Minor packaging of 10 pieces.
- Warning: The IP becomes 55.
- Suitable for walls from 2 to 3.2 mm.

Ø (mm)		Minor pack.	References and colours	
Drill hole	Cable / conduit		RAL 9010 white	RAL 7035 light grey
23	4 - 20	10	**IMT36172**	**ISM71071**
29	4 - 25	10	**IMT36173**	**ISM71072**
36	4 - 32	10	-	**ISM71073**
44	4 - 40	10	-	**ISM71074**

Installation of IP 55 entries

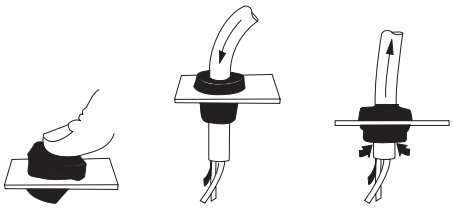
- Insertion of rigid cables:
– Strip at least 100 mm.
– Push the wires through the membrane.
- Insertion of flexible cables:
- Pierce partially and soften the membrane with a 4 to 5.5-mm screwdriver.
– Pass the cable through the membrane.
- Insertion of conduits:
– Peel the necessary step: 16, 20, 25, 32 or 40 mm.
– Push the conduit.



IP 67 quick cable entries

- IP 67.
- Material: EPDM plastic.
- Suitable for walls from 1 to 4 mm (0.5 to 2 mm for ref. **IMT36179**).
- Quick installation with no tools.
- Installation direction: the conical part is inside the box.

ISO	Ø of drill hole	Cable Ø (mm)	Minor pack.	Reference
M12	12.5	3 - 5	50	**IMT36179**
M16	16	5 - 7	50	**IMT36180**
M20	20.3	7 - 10	50	**IMT36181**
M25	25.3	10 - 14	50	**IMT36182**
M32	32.4	14 - 20	50	**IMT36183**
M40	40.7	20 - 26	25	**IMT36184**
M50	50.7	26 - 35	25	**IMT36185**



Application

- Push the cable entry into the hole. The conical part must be inserted into the box.
- Prepare and loosen the cable entry with a screwdriver. Pass the cable through the cable entry.
- Pull the cable back slightly to fix it in place. The installation is complete.

Composition accessories
Cable-entry accessories

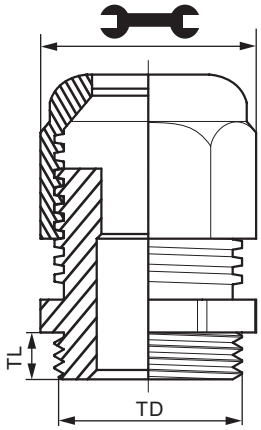
Cable-gland, disc and plug selection table

Ø	1-cable cable gland			Multi-cable disc		Gasket	Blanking plug	Transport plug
	Ref.	Ø min / max (mm)	drill \ (2)	Ref.	Number / Ø (mm)			
M12	**ISM71501**	3 / 6.5	12.2 (0 + 0.2)	-	-	**IMT36151**	**IMT36161**	-
M16	**ISM71502**	4 / 8	16.2 (0 + 0.2)	**IMT36157**	2 × Ø 4	**IMT36152**	**IMT36162**	**IMT36167**
M20	**ISM71503**	6 / 12	20.2 (0 + 0.2)	**IMT36158**	3 × Ø 4	**IMT36153**	**IMT36163**	**IMT36168**
M20 (1)	**IMT36150**	6 / 12	20.2 (0 + 0.2)	**IMT36158**	3 × Ø 4	**IMT36153**	**IMT36163**	**IMT36168**
M25	**ISM71504**	11 / 17	25.2 (0 + 0.2)	**IMT36159**	4 × Ø 5	**IMT36154**	**IMT36164**	**IMT36169**
M32	**ISM71505**	15 / 21	32.2 (0 + 0.3)	**IMT36160**	6 × Ø 5	**IMT36155**	**IMT36165**	**IMT36170**
M40	**ISM71506**	19 / 28	40.5 (0 + 0.3)	-	-	**IMT36156**	**IMT36166**	**IMT36171**

(1) Cable-gland with high resistance to fire.
(2) In brackets: tolerance.

ISO cable-gland

Ø	Reference	TD	TL		Thread
M12	**ISM71501**	12	6	15	1.5
M16	**ISM71502**	16	8	19	1.5
M20	**ISM71503 - IMT36150**	20	10	24	1.5
M25	**ISM71504**	25	8	29	1.5
M32	**ISM71505**	32	10	36	1.5
M40	**ISM71506**	40	10	46	1.5



- IP 68, 5 bars.
- According to standard IEC 62208.
- RAL 7035 grey.
- Material: PA6, neoprene gasket.
- Usage temperature: – 30 ... + 80 °C up to + 150 °C intermittently.
- The cable-glands are supplied with nuts.
- The IP is guaranteed with no gasket between the cable-gland and the thermoplastic box. A gasket available as an accessory guarantees the seal in the event of installation on a steel enclosure.
- The cable-gland (ref. **IMT36150**) is especially recommended for security circuits (glow wire resistance: 960 °C).
- Pack of 20 (M12 to M20), 10 (M25 and M32), 5 (M40).

Multi-cable disc

Cable-gland gasket

- Batch of 100 (M12 to M25), 50 (M32), 25 (M40).

Multi-cable disc

- It is possible to pass several cables through a single cable-gland using the multi-cable bushing.

Blanking plug

Blanking plug

- It is screwed into the cable-gland's place.
- Pack of 20 plugs (M12 to M15), 10 plugs (M32), 5 plugs (M40).

Transport plug

Transport plug

- It is installed to block the cable-gland during transport or during maintenance operations.
- Pack of 20 plugs (M16 to M25), pack of 10 (M32), pack of 5 (M40).

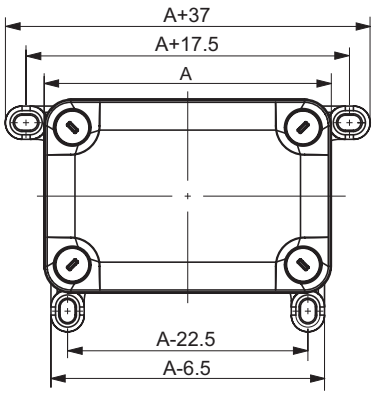
Composition accessories
Fixing accessories

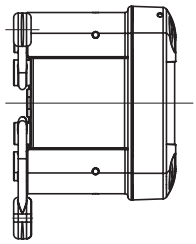
Set of four fixing lugs

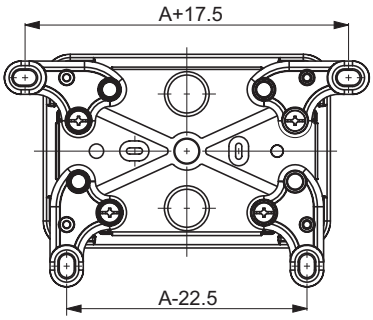
- They maintain IP 66.
- Plastic fixing lugs for installation on boxes with dimensions from 116 × 116 mm.
- Option of vertical or horizontal installation.
- Kit made up of 4 legs + screws.
- Installation by a single screw at the last moment, with the box closed and equipped.
- Loading capacity on the body: 30 kg/m², on the cover: 10 kg/m².
- See compatibility with the boxes in the table for quick selection of Thalassa accessories on page **1/32**.

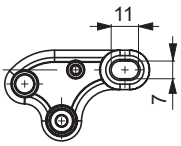
Description	Minor pack.	Reference
Set of 4 fixing lugs	1	**NSYAEFTB**

Fixing lugs (internal dimensions)









Composition accessories
Cover accessories

Set of 2 hinges

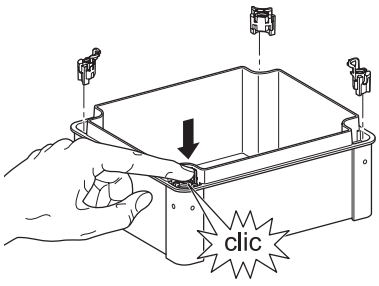
- These hinges maintain IP 66.
- The hinges can be adapted to all covers with a height of 20 and 40 mm with dimensions from 138 × 93 mm.
- The hinge allows the lid to open fully to 200°.
- Maximum admissible load on the hinged cover 10 kg / m^2.
- The hinges (2 per set) are delivered with the fixings and instructions required for installation.
- See compatibility with the boxes in the quick selection table on page **1/32**.

Name	Minor pack.	Height of the lid (mm)	
		20	40
Set of 2 hinges	1	NSYAEDH20TB	NSYAEDH40TB

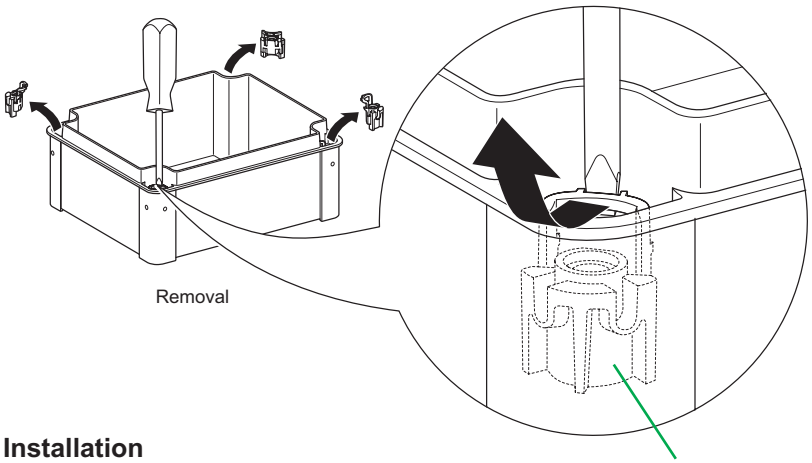
Practical

- The hinge allows an opening angle > 200°.
- The hinge does not require any machining and is installed easily even with the box already equipped.

Use of cover adapter clips



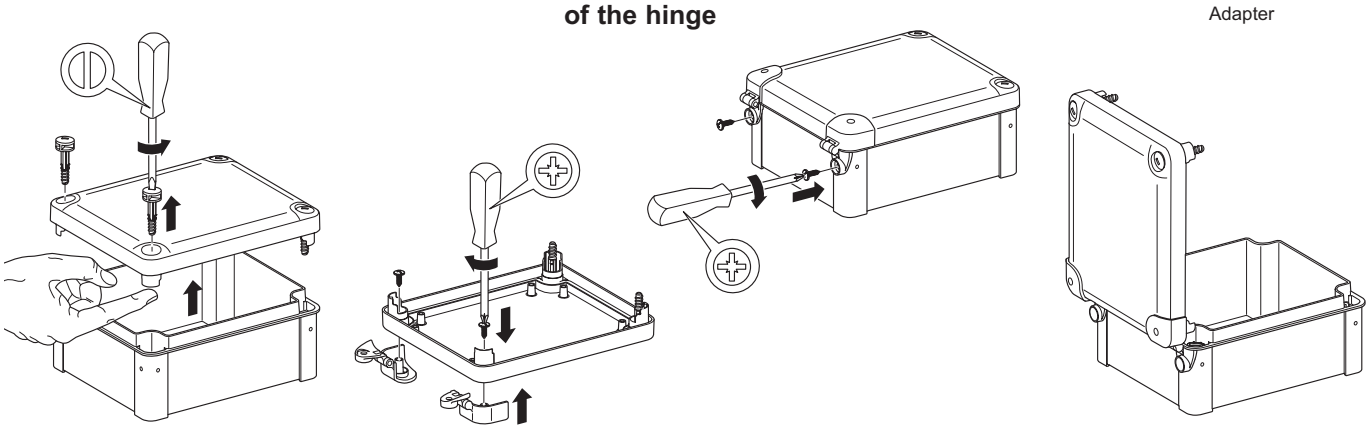
Mounting



Removal

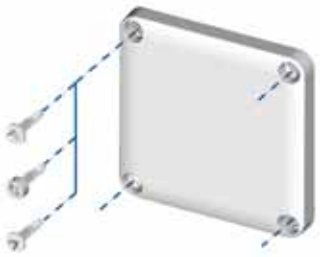
Adapter

Installation of the hinge



Composition accessories
Cover accessories

Triangle Double bar



Set of 4 shape screws

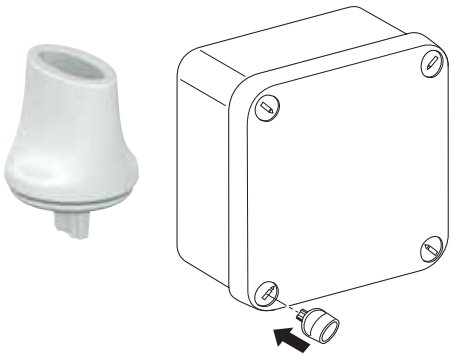
- The Thalassa boxes are delivered as standard with slotted-head screws for flat screwdrivers from 4 to 5.5 mm.
- With box sizes from 138 × 93 × 72 mm, these screws can be replaced for screws with different standardised heads, to comply with most cases.
- After removing the standard screw, simply position the new screw by pressing on it.
- The adapter clips (intermediate parts for tightening the cover on the body of the box) are the same as those for the standard screws. They are not delivered with the shape screws (see drawing on page **1/37**).

Smart

- A single key for opening the boxes as well as the other enclosures of your installation.

Description		Minor pack.	Height of the lid (mm)		
			20	40	60
Triangle	6.5 mm	1	**NSYAEDST620TB** (1)	-	-
	8 mm	1	**NSYAEDST820TB**	-	-
Double bar	3 mm	1	**NSYAEDSB320TB**	-	-
	5 mm	1	**NSYAEDSB520TB**	-	-
Spare standard plastic screw		1	**NSYAEDS20TB**	**NSYAEDS40TB**	**NSYAEDS60TB**

(1) CNOMO.



Pack of 4 handles

- The handle (or thumbwheel) allows the screws to be handled without any tools. It is ideally associated with a box equipped with hinges.
- It snaps onto the head of the standard plastic screw.

Description	Minor pack.	Reference
Pack of 4 handles	1	**NSYAEDKTB**

Mounting accessories
Installation accessories

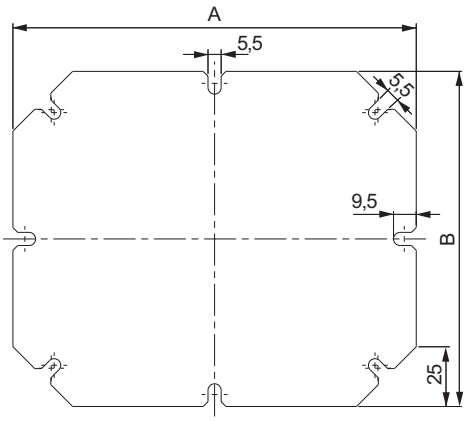
Galvanised-steel plate.

Insulating polyester plate reinforced with fibreglass, halogen-free: glow wire resistance 750 °C.

Mounting plates

- Mounting plates made from galvanised-steel (thickness: 1.5 mm) and an insulating material (polyester thickness: 2.5 mm) to adapt to all usage scenarios. Plates supplied without screws.
- Fixing by means of ∅ 4-mm self-tapping screws, Pozidrive and slotted head, ref. **NSYAMFSTB**.
- To raise the plate, use the stand-offs ref. **NSYAMFET154TB**, **NSYAMFET204TB**, **NSYAMFET304TB** and the screw **NSYAMFESTB**.
- To stack several mounting plates, use the spacers, ref. **NSYAMFEP154TB**, **NSYAMFEP204TB**, **NSYAMFEP304TB** and the screw **NSYAMFESTB**.

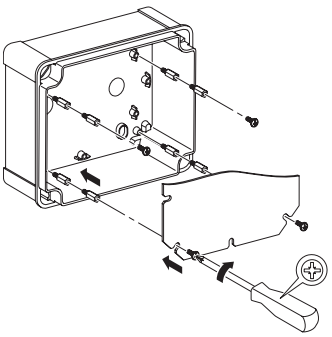
Box (mm)		Mounting plate				Minor pack.
		Steel	Insulating	Dimensions (mm)		
Height	Width			A	B	
192	164	**NSYAMPM1916TB**	**NSYAMPA1916TB**	168.5	140	1
241	194	**NSYAMPM2419TB**	**NSYAMPA2419TB**	215	168.5	1
291	241	**NSYAMPM2924TB**	**NSYAMPA2924TB**	265	215	1
341	291	**NSYAMPM3429TB**	**NSYAMPA3429TB**	315	265	1
Pack of 100 screws ∅ 4 × 10 mm		**NSYAMFSTB**	**NSYAMFSTB**	-		1

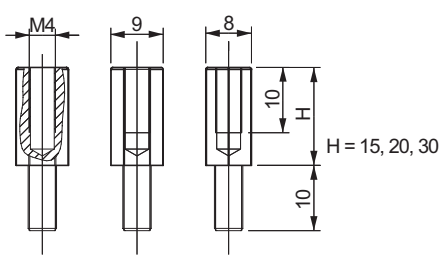


Stand-offs and spacers

- Steel stand-offs consisting of a ∅ 4-mm self-tapping thread at one end (for direct screwing into the rivets of the box) and an M4 tapping on the other end, for direct installation of a card with an M4 screw, ref. **NSYAMFESTB**, or of a spacer.
- Steel spacer for installation on the stand-offs. M4 thread and tapping.

Height (mm)	Set of four M4 self-tapping stand-offs	Set of four M4 spacers	Minor pack.
15	**NSYAMFET154TB**	**NSYAMFEP154TB**	1
20	**NSYAMFET204TB**	**NSYAMFEP204TB**	1
30	**NSYAMFET304TB**	**NSYAMFEP304TB**	1





Mounting accessories
Installation accessories

Screw for stand-offs and spacers

- M4 × 10 mm screw for fixing cards on the spacers and stand-offs.
- Batch of 50 screws.

Smart

- The plate always at the right level.
- A single ∅ 4-mm screw for fixing any element.

Description	Minor pack.	Reference
Batch of 50 ISO screws, Ø 4 x 100, for M4 spacer and stand-offs	1	**NSYAMFESTB**

Box with
15 × 5-mm rail

Box with two
35 × 7.5-mm rails

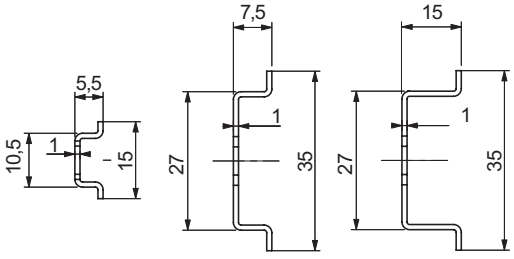
Rails

Smart

- A 15 × 5-mm rail is provided for the compact terminal blocks.
- To raise the rail, use stand-offs ref. **NSYAMFET154TB**, **NSYAMFET204TB**, **NSYAMFET304TB** and the screw **NSYAMFESTB**.

Rails

- Symmetric DIN rails (15 × 5 mm, 35 × 7.5 mm, 35 × 15 mm). Supplied without screws (except for the 15 × 5 mm rails).
- Fixing of the rails with ∅ 4-mm self-tapping screws, (not included), Pozidrive and slotted head, ref. **NSYAMFSTB**.



15 × 5 35 × 7.5 35 × 15

15 × 5 mm

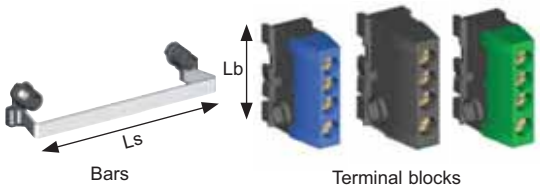
35 × 7.5 mm

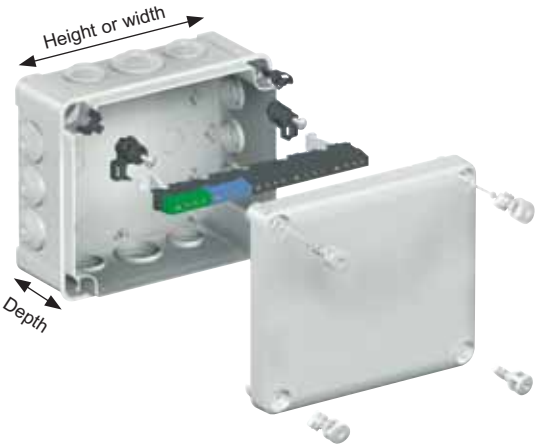
35 × 15 mm

For boxes with height or width

(mm)	Ref.	Minor pack.	Ref.	Minor pack.	Ref.	Minor pack.
105	**NSYAMRD11155TB**	10	**NSYAMRD11357TB**	10	**-**	-
150	**NSYAMRD16155TB**	10	**NSYAMRD16357TB**	10	**-**	-
175	**NSYAMRD19155TB**	10	**NSYAMRD19357TB**	10	**-**	-
225	**NSYAMRD24155TB**	10	**NSYAMRD24357TB**	10	**NSYAMRD243515TB**	10
275	**NSYAMRD29155TB**	10	**NSYAMRD29357TB**	10	**NSYAMRD293515TB**	10
325	**NSYAMRD34155TB**	10	**NSYAMRD34357TB**	10	**NSYAMRD343515TB**	10

Cable management accessories
Terminal blocks





IP 2X terminal blocks

- The terminal-block support bar is particularly well suited to the thermoplastic boxes.
- Boxes with sizes from 192 × 116 mm can accommodate a terminal-block support bar of 12 × 2 mm.
- The screwing terminal blocks are easily clipped onto this bar.
- Terminal-block connection capacity: see the selection table below.

Description	Height or width	Min. depth	Minor pack.	Ref.
Terminal-block support bar	192	87	1	**IMT34000**
	241	87	1	**IMT34001**
	291	128	1	**IMT34002**

Description	Terminal-block length Lb (mm)	Black (live)	Blue (neutral)	Green (earth)
4-hole terminal blocks 2 x 10^2 + 2 x 16^2	30	**NSYAPT22NTB**	**NSYAPT22BTB**	**NSYAPT22GTB**
4-hole terminal blocks 3 x 16^2 + 1 x 25^2	36	**NSYAPT31NTB**	**NSYAPT31BTB**	**NSYAPT31GTB**
Minor pack.		10	5	5

Selection table

- Number of terminal blocks per support.

	Terminal blocks 2 x 10^2 + 2 x 16^2 4 holes	Terminal blocks 3 x 16^2 + 1 x 25^2 4 holes	Support length Ls (mm)
Support for 192 mm	4	4	140
Support for 241 mm	6	5	185
Support for 291 mm	8	6	235

Earth terminal block

Description	Minor pack.	Reference
Earth terminal block	10	**IMT34009**

- The earth terminal snap fits into boxes with dimensions of less than 116 × 116 mm.
- Maximum connection capacity: 2 × 2.5^2.

Thermal management
Natural ventilation

Sealed anti-condensation valve

- Controls the pressure to avoid condensation following an internal temperature increase.
- Maintains IP 68.
- Material: PA6-V2, acrylic co-polymer membrane, water and oil repellent.
- Usage temperature: –40...+105 °C.

Drill ∅	Permeability (1)	Pressure difference (2)	Minor pack.	Reference
M12	16 litres/h	ΔP < 1 bar	10	**NSYCAG12LPH1**
M12	120 litres/h	ΔP < 0.1 bar	10	**NSYCAG12LPH2**

(1) Air flow under ΔP = 0.7 bar.
(2) Condition for IP 68.

Applications

- Protection of equipment for luminaires, industrial control, transportation, pumps, etc.

2

Steel wall-mounting enclosures

Spacial S3D Steel wall-mounting enclosures 2/2

Dimensions 2/12

Selection guide 2/14

Accessories 2/18

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Spacial S3DB Terminal enclosures 2/38

Spacial S3DBFL Terminal enclosures with FL21 cut-out 2/40

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Spacial S3DEX for potentially explosive atmospheres (ATEX) 2/52

Spacial S3HF Electromagnetic protected enclosures 2/56

Spacial S3CM Human-machine dialogue 2/58

The steel enclosure developed to help you save time

Useful life

Quality of the welding and the coating.

Component security

- Water and dust tightness and impact resistance.
- EMC and ATEX offer.

Easy handling

- Reusable, eco-friendly packaging.
- No sharp corners.

Increased choice

- Large range of universal dimensions.
- Application offer with special dimensions.

Easy equipping

- Four 10-mm shouldered welded studs.
- Broad range of mounting plates.
- Broad range of cable-gland plates.
- Wire guides welded to the door from the height of 400 mm.

Easy maintenance

- Removable hinges.
- 1 lock command from the height of 600 mm.

Added value to your work

- Quality and aesthetics.

Personnel safety

- Earthing studs welded to the body and door.
- 3-point lock from the height of 600 mm.

Specific

Optimisation of your time: with our customisation services which provide the enclosure in your colours and with your cut-outs.
Please consult us.

Broad range of accessories

Composition

1. Wall fixing
2. Floor-standing
3. Roof
4. Viewing
   Earthing

Cable installation and management

5. Installation
6. Cable entries
7. Cable management
8. Thermal management

Configured

Save time by having your accessories mounted in the factory!
To find out more about our Configured offer, please contact us.

Universal offer
Introduction

The universal offer

S3D S3X PLM

We offer products that adapt to all environments.

• **Non-clean indoor industrial environment:**
Our solution: our Spacial Steel ranges.

• **Demanding indoor industrial environment:**
Our solution: our Spacial Stainless-Steel ranges.

• **Infrastructure and outdoor industrial environment:**
Our solution: our Thalassa Insulating Material ranges.

Our solutions are available as boxes, wall-mounting, floor-standing and suitable enclosures.

steel

Spacial S3D: the steel enclosure with the greatest range of available dimensions on the market!

A complete offer of 54 dimensions from 300 × 200 × 150 to 1400 × 1000 × 300:

- With plain door, without plain mounting plate.
- With plain door and plain mounting plate.
- With transparent door, without plain mounting plate.
- Protection degree of IP 66 for the single-door enclosure (IP 55 for enclosures with two doors).
- Resistance to mechanical impacts: IK 10 plain door and IK 08 glazed door.
- Compliance with enclosure standard EN 62208 and IEC 62208.
- A broad range of accessories to conform to all your applications.
- Range completed by the dimensions of the application steel enclosures.

Discover our other ranges:
Spacial S3X page **5/8**.
Thalassa PLM page **6/16**.

Spacial S3D universal enclosure

Enclosure with plain door Enclosure with glazed door

Page **2/8**

For difficult atmospheres

Spacial S3DEX ATEX steel enclosure

- 10 references with plain door.
- Certified by the LCIE with nº LCIE02ATEX0037U and codicil nº LCIE 02ATEX0037U/01.
- IP 66. Versions in stainless-steel and polyester also available.

Page **2/52**

Spacial S3HF EMC steel enclosure

- Manufactured from special ALUZINC 150 sheet.
- Good reflection of electro-magnetic waves.
- IP 55.

Page **2/56**

Customised Spacial steel enclosure offer
Introduction

Tailor-made enclosures with a range of efficient services

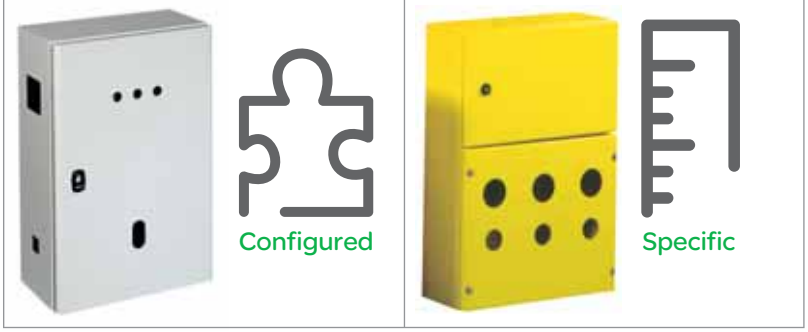
- Save time and devote yourself to cabling; we will perform your cut-outs and install your accessories.
- On request, the Spacial S3D enclosures can be delivered with:

– Other colours.
– Other dimensions.
– Pre-installed accessories.
– Machining.
– Addition/removal of components.
– Other finishes (beckryzinc, zinc chromate, metallisation, etc.).

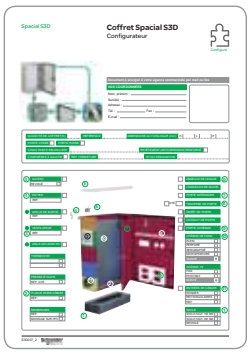
Our advantages:
- Cut-out quality. Painting after the cut-outs have been made guarantees enhanced protection against corrosion.
- Industrial quality, maintaining the protection degree: the polyurethane gasket is applied after painting.
- Easy. A single order, a single delivery. We optimise your management and receipt of the equipment.

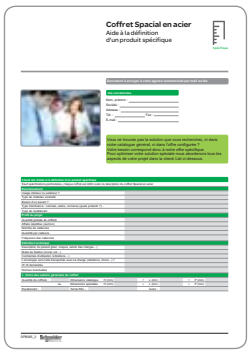
Discover our customised service:
- Configured offer: a service offer based on our standard offer.
- Specific offer: a service offer based on co-development with the customer.

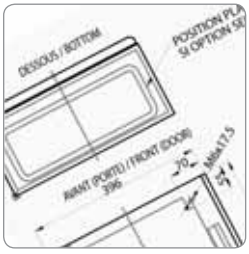
Enclosure in your dimensions with the solutions



Discover our communication tools for defining the products in our customised offer







Download our DXF diagrams from our websites.

Spacial steel enclosure application offer
Introduction

Spacial S3DB

- 10 dimensions with a depth of 150 mm and plain door.
- Ready to be equipped with a ladder mounting plate and a symmetrical DIN rail (to be ordered separately).
- IP 66.

Spacial S3DB

Page **2/38**

Spacial S57

Page **1/6**

Spacial S3DM

- 8 dimensions with a depth of 150 mm and glazed door.
- Ready for being equipped with a modular mounting plate (to be ordered separately).
- 10 references of mounting plates with 24 to 240 modules.
- Earth connection installed.
- Top and bottom cable-gland plates.
- IP 66.

Spacial S3DM

Page **2/42**

Spacial S3CM

- 8 dimensions for the control enclosures.
- 1 keyboard box.
- 1 system of arms and fixed or rotating joints, support and lighting accessories.
- IP 54.

Spacial S3CM

Page **2/58**

Spacial steel enclosure application offer
Introduction

Enclosure equipped with Spacial VDM 19" uprights

- 5 enclosures with fixed rack from 5 to 17 U.
- 5 enclosures with swing rack from 4 to 16 U.
- Ten 2-body enclosures, depths 400 and 500 mm.
- IP 66.

Spacial VDM

Page **2/44**

For difficult atmospheres

>

Thalassa PLM polyester enclosure

Page **6/16**

Spacial S3DEX ATEX steel enclosure

Page **2/52**

Introduction

Single-door enclosure.

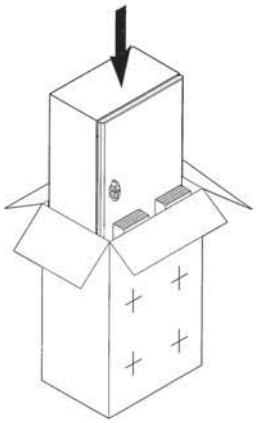
Double-door enclosure.

Enclosure with galvanised plain mounting plate.

Enclosure with glazed door.

Welded studs for the earth connection.

Cable-gland plate with marking.



Delivered in a reusable cardboard box with assembly instructions enclosed and wall-mounting template on the cardboard.

Double-bar lock.

The Spacial S3D steel enclosure universal offer.

Three steel enclosure definitions are available:

- Enclosure with plain door.
- Enclosure with plain door delivered with a galvanised plain mounting plate, not installed.
- Enclosure with glazed door, 4-mm-thick Securit® glass.

Structured finish, epoxy-polyester powder, RAL 7035 grey colour.
- Selection guide, page **2/14**.

Technical description:

Enclosure body:
- Single-piece body (cross-shaped structure). Gutter-shaped front profile with double fold. Flat rear.
- 4 (or 6**) M8 x 25 shouldered backstuds for installing mounting plates and step slides, leaving a space of 10 mm behind them.
- M6 × 16 earthing screws for equipotential connection between the door and the body of the enclosure.
- Cable-gland plate with marking for easy drilling and to guarantee the maximum access surface; delivered with the enclosure. This plate is flush with the body of the enclosure (detail and other options on page **2/26**).
- Direct wall-mounting (4 ∅ 10 holes for the sealing plugs guaranteeing the IP) or with the help of fixing lugs installed from the outside (to be ordered separately, see page **2/24**).

Enclosure door:
- Wall-mounting enclosure supplied with 3-mm double-bar lock as standard.
- Polyurethane door gasket.
- M6 × 16 earthing screws for equipotential connection between the door and the body of the enclosure.
- Easily removable and reversible, with 20-mm return with double thickness granting excellent rigidity, opening to 120°, equipped with 2 or 3 invisible hinges*.
- Door opening to 180° with optional hinges (page **2/32**).
- For heights from 600 mm, three locking points with linkage, with a single control point. Simple reversal of linkage. Maximum load: 50 kg/m^2.
- A handle is delivered which provides 2 functions:
– Operating key.
– Tool for loosening the stud protection caps. This handle can be solidly attached to the locking system by means of a captive element.
- Perforated rails on the door, with drill holes with a diameter of 4.2 mm in steps of 25 mm:
– 2 vertical rails from the height of 400 mm,
– 2 vertical rails and 2 horizontal rails from the width of 800 mm.

* From the height of 800 mm.
** Widths of 1000 and 1200 mm.

Standards

Compliance with enclosure standards IEC 62208, UL, CUL, BV, DNV, GL, ATEX (modified enclosure).
The Spacial S3D wall-mounting enclosures are compliant with the RoHS directive.

Certifications

Certification table, page **9/2**.

Our certificates can be downloaded from our website.

Our empty enclosures are marked CE according to the Low-Voltage Directive (LVD). It is the responsibility of the final equipment manufacturer to respect the regulations in force.

Technical characteristics

Protection degree:

- IP 66 for the single-door enclosures and IP 55 for the double-door enclosures, according to IEC 60529.
- Nema Type 4, 4X for the single-door enclosures and Nema Type 12, 12K, 13 for the double-door enclosures according to NEMA 250 standard.

Resistance to external mechanical impacts:

- IK 10 for the plain-door enclosures, according to IEC 62262.
- IK 08 for the glazed-door enclosures.

Mechanical characteristics

Fixing of mounting accessories

- 4 (or 6**) M8 × 25 shouldered backstuds for installing mounting plates and step slides, leaving a space of 10 mm behind them.

** 6 studs for widths 1000 and 1200.

Personnel protection

Earth connection: Spacial S3D steel enclosures are equipped with M6 × 16 earth studs welded in the body and the door for equipotential connection. Earth braid to be ordered separately (see page **7/139**).

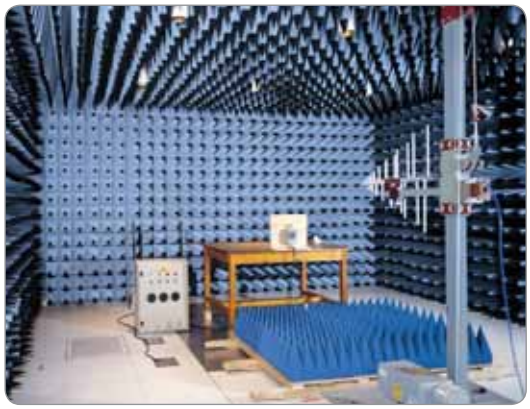
Closing the enclosure: the enclosures are equipped from the height of 600 mm with three locking points with linkage, with a single control point, preventing the enclosures from being left ajar. Locks and inserts, page **2/30**.

Coating properties

Colour: RAL 7035 grey; finish: structured.
Coating thickness: 60 µm.
Fire class: M0.
Resistance to corrosion: compliance with standard IEC 62208 for outdoor installation: 288 h of humid heat and 336 h of salt mist.
Note: the Spacial S3D is specially designed for indoor installations. For outdoor installations, it is advisable to install a canopy or consult us.
Nuclear decontamination: RAL 7035 and AFNOR A550 tests available on demand.

For further information, see the Technical Annexes on page **9/1**.

Protection of the installation



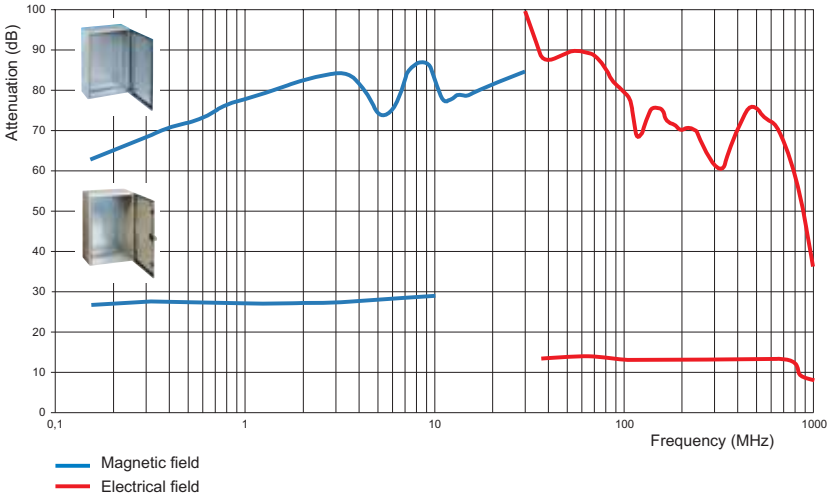
EMC protection

Standard Spacial S3D enclosures are tested against electromagnetic disruptions. Since the enclosure is tested empty, it is advisable to rerun the tests with the enclosure completely equipped in its final configuration.

Earth braids to be ordered separately, see page **7/139**.

Another solution and information on electromagnetic compatibility: Spacial S3HF enclosure, page **2/56**.

Attenuation curve of the Spacial S3D compared with the Spacial S3HF



Vibration constraints

Specific construction of the Spacial S3D - Single-piece body (cross-shaped structure). The rear is flat without added parts - this allows it to comply with certain vibration constraints.
The tests were conducted according to the "rules for ships" by "Det Norske Veritas".
Enclosures labelled "DNV" have undergone these tests and obtained classification "A".
Since the enclosure is tested empty, it is advisable to rerun the tests with the enclosure completely equipped in its final configuration.

Frequency: 3 - 13.2 Hz
Amplitude: 1 mm/sec below 22 Hz
Frequency: 3 - 100 Hz
Acceleration: 0.7 g above 30 Hz

ATEX compliance

The Spacial S3D enclosure (with adaptation) is certified ATEX by the LCIE.
Spacial S3DEX enclosure, page **2/52**.
Compliance with RoHS standard.

Installation examples

Spacial S3D enclosure installed on machines

Enclosure for supplying motors and sensor connection box.

Management of machine's communication network functions.

Spacial S3DB terminal enclosure in application

Local function enclosure.

Fieldbus enclosure.

Decentralised control enclosure.

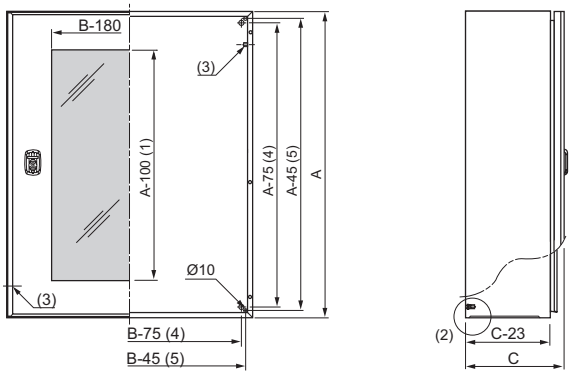
Dimensions

A: Enclosure height
B: Enclosure width
C: Enclosure depth

Enclosure (mm)		Cable-gland plate					
Width	Depth	Dimensions (mm)	Type	N°	J	K	L
200 - 250	150 - 250	140 × 80	A	1	57	115	55
300 - 400	150	245 × 80	B	1	57	220	55
300	200	245 × 130	C	1	80	220	105
400	200 - 250	345 × 130	D	1	80	320	105
500	200 - 250	445 × 130	E	1	80	420	105
600	200 - 250	545 × 130	F	1	80	520	105
600	300 - 400	495 × 220	G	1	126*	470	195
800	250 - 300 - 400	345 × 130	D	2	95	320	105
1000 - 1200	300 - 400	445 × 130	E	2	95	420	105

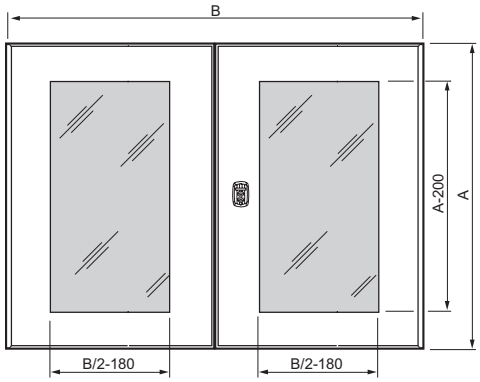
* Except enclosure 1000 × 600 × 400 mm, J = 140 mm.

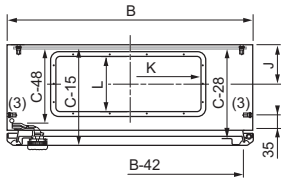
1-door enclosure

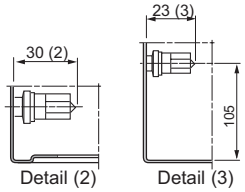


(1) A-200 from the height of 800 mm.
(2) 4 or 6 (widths 1000 - 1200 mm) M8 × 25 mm backstuds.
(3) 2 M6 × 17.5 mm earthing studs.
(4) Stud centre-to-centre distance.
(5) Centre-to-centre distance of the holes for direct fixing.

2-door enclosure







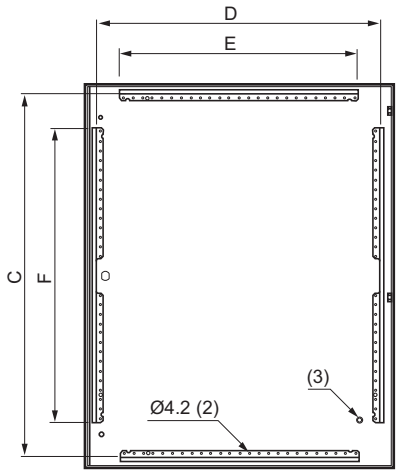
The DXF diagrams can be downloaded from our websites.

Dimensions

Perforated rails on plain door (1)

Enclosure (*) (mm)		Perforated rails on the door (mm)				Perforated rails on the double door (mm)				Perforated rails on the internal door (mm)			
		Vertical		Horizontal		Vertical		Horizontal		Vertical		Horizontal	
Height	Width	F	D	E	C	F	D	E	C	F	D	E	C
400	300	320	237	-	-	-	-	-	-	-	-	-	-
400	400	320	337	-	-	-	-	-	-	-	-	-	-
400	600	320	537	-	-	-	-	-	-	-	-	-	-
500	300	370	237	-	-	-	-	-	-	-	-	-	-
500	400	370	337	-	-	-	-	-	-	-	-	-	-
500	500	370	437	-	-	-	-	-	-	-	-	-	-
600	400	370	337	-	-	-	-	-	-	-	-	-	-
600	500	370	437	-	-	-	-	-	-	-	-	-	-
600	600	370	537	-	-	-	-	-	-	-	-	-	-
600	800	370	737	-	-	-	-	-	-	-	-	-	-
700	500	470	437	-	-	-	-	-	-	-	-	-	-
800	600	570	537	-	-	-	-	-	-	-	-	-	-
800	800	570	737	620	749	-	-	-	-	-	-	-	-
800	1000	570	937	820	749	570	437	320	749	620	437	320	749
800	1200	-	-	-	-	570	537	420	749	620	537	420	749
1000	600	770	537	420	949	-	-	-	-	-	-	-	-
1000	800	770	737	620	949	-	-	-	-	-	-	-	-
1000	1000	770	937	820	949	770	437	320	949	820	437	320	949
1000	1200	-	-	-	-	770	537	420	949	820	537	420	949
1200	600	970	537	420	1149	-	-	-	-	-	-	-	-
1200	800	970	737	620	1149	-	-	-	-	-	-	-	-
1200	1000	970	937	820	1149	970	437	320	1149	1020	437	320	1149
1200	1200	-	-	-	-	970	537	420	1149	1020	537	420	1149
1400	1000	-	-	-	-	970	437	320	1349	1020	437	320	1349

(*) The doors of enclosures with dimensions of less than 800 × 600 mm do not have horizontal cable guides.



(1) The glazed doors are equipped with a vertical cable guide, on the hinge side.
(2) Perforations in steps of 25 mm.
(3) 1 M6 × 17.5 mm earthing stud.

Wall-mounting steel enclosures
Selection guide

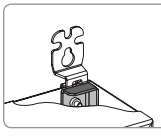
Specifications						Spacial S3D				
Dimensions (1)			Nº of doors	IP	Weight (kg)*	Plain door		Glazed door	Plain mounting plate	Silkscreened mounting plate (2)
						With mounting plate	Without mounting plate	Without mounting plate		
H	W	D				Page 2/8			Page 7/2	
300	200	150	1	66	3.02	NSYS3D3215P	NSYS3D3215		NSYMM32	
300	250	150	1	66	3.48	NSYS3D32515P	NSYS3D32515	NSYS3D32515T	NSYMM3025	
300	300	150	1	66	3.90	NSYS3D3315P	NSYS3D3315	NSYS3D3315T	NSYMM33	
300	300	200	1	66	4.50	NSYS3D3320P	NSYS3D3320	NSYS3D3320T	NSYMM33	
300	400	150	1	66	4.82	NSYS3D3415P	NSYS3D3415	NSYS3D3415T	NSYMM43	NSYMS43
300	400	200	1	66	5.60	NSYS3D3420P	NSYS3D3420	NSYS3D3420T	NSYMM43	NSYMS43
400	300	150	1	66	4.90	NSYS3D4315P	NSYS3D4315	NSYS3D4315T	NSYMM43	NSYMS43
400	300	200	1	66	5.00	NSYS3D4320P	NSYS3D4320	NSYS3D4320T	NSYMM43	NSYMS43
400	400	200	1	66	6.50	NSYS3D4420P	NSYS3D4420	NSYS3D4420T	NSYMM44	NSYMS44
400	600	200	1	66	10.50	NSYS3D4620P	NSYS3D4620	NSYS3D4620T	NSYMM64	NSYMS64
400	600	250	1	66	12.00	NSYS3D4625P	NSYS3D4625	NSYS3D4625T	NSYMM64	NSYMS64
500	300	200	1	66	7.50	NSYS3D5320P	NSYS3D5320	NSYS3D5320T	NSYMM53	NSYMS53
500	400	200	1	66	9.30	NSYS3D5420P	NSYS3D5420	NSYS3D5420T	NSYMM54	NSYMS54
500	400	250	1	66	10.20	NSYS3D5425P	NSYS3D5425	NSYS3D5425T	NSYMM54	NSYMS54
500	500	200	1	66	11.18	NSYS3D5520P	NSYS3D5520	NSYS3D5520T	NSYMM55	NSYMS55
500	500	250	1	66	12.06	NSYS3D5525P	NSYS3D5525	NSYS3D5525T	NSYMM55	NSYMS55
600	400	200	1	66	11.00	NSYS3D6420P	NSYS3D6420	NSYS3D6420T	NSYMM64	NSYMS64
600	400	250	1	66	12.00	NSYS3D6425P	NSYS3D6425	NSYS3D6425T	NSYMM64	NSYMS64
600	500	250	1	66	16.20	NSYS3D6525P	NSYS3D6525	NSYS3D6525T	NSYMM65	
600	600	200	1	66	14.00	NSYS3D6620P	NSYS3D6620	NSYS3D6620T	NSYMM66	NSYMS66
600	600	250	1	66	15.00	NSYS3D6625P	NSYS3D6625	NSYS3D6625T	NSYMM66	NSYMS66
600	600	300	1	66	17.00	NSYS3D6630P	NSYS3D6630	NSYS3D6630T	NSYMM66	NSYMS66
600	600	400	1	66	19.00	NSYS3D6640P	NSYS3D6640	NSYS3D6640T	NSYMM66	NSYMS66
600	800	300	1	66	25.50	NSYS3D6830P	NSYS3D6830	NSYS3D6830T	NSYMM86	NSYMS86
700	500	250	1	66	15.00	NSYS3D7525P	NSYS3D7525	NSYS3D7525T	NSYMM75	NSYMS75
800	600	200	1	66	21.00	NSYS3D8620P	NSYS3D8620	NSYS3D8620T	NSYMM86	NSYMS86
800	600	250	1	66	23.00	NSYS3D8625P	NSYS3D8625	NSYS3D8625T	NSYMM86	NSYMS86
800	600	300	1	66	25.00	NSYS3D8630P	NSYS3D8630	NSYS3D8630T	NSYMM86	NSYMS86
800	600	400	1	66	29.00	NSYS3D8640P	NSYS3D8640	NSYS3D8640T	NSYMM86	NSYMS86
800	800	250	1	66	30.00	NSYS3D8825P	NSYS3D8825	NSYS3D8825T	NSYMM88	
800	800	300	1	66	32.00	NSYS3D8830P	NSYS3D8830	NSYS3D8830T	NSYMM88	
800	1000	300	1	66	38.00	NSYS3D81030P	NSYS3D81030		NSYMM108	
800	1000	300	2	55	43.50	NSYS3D81030DP	NSYS3D81030D		NSYMM108	
800	1200	300	2	55	46.00	NSYS3D81230DP	NSYS3D81230D		NSYMM128	
1000	600	250	1	66	28.00	NSYS3D10625P	NSYS3D10625	NSYS3D10625T	NSYMM106	
1000	600	300	1	66	30.60	NSYS3D10630P	NSYS3D10630	NSYS3D10630T	NSYMM106	
1000	600	400	1	66	33.00	NSYS3D10640P	NSYS3D10640	NSYS3D10640T	NSYMM106	
1000	800	250	1	66	35.00	NSYS3D10825P	NSYS3D10825	NSYS3D10825T	NSYMM108	
1000	800	300	1	66	38.00	NSYS3D10830P	NSYS3D10830	NSYS3D10830T	NSYMM108	
1000	800	400	1	66	42.00	NSYS3D10840P	NSYS3D10840	NSYS3D10840T	NSYMM108	
1000	1000	300	1	66	46.00	NSYS3D101030P	NSYS3D101030	NSYS3D101030T	NSYMM1010	
1000	1000	300	2	55	46.00	NSYS3D101030DP	NSYS3D101030D	NSYS3D101030DT	NSYMM1010	
1000	1200	300	2	55	53.00	NSYS3D101230DP	NSYS3D101230D		NSYMM1210	
1000	1200	400	2	55	60.00	NSYS3D101240DP	NSYS3D101240D		NSYMM1210	
1200	600	300	1	66	37.00	NSYS3D12630P	NSYS3D12630	NSYS3D12630T	NSYMM126	
1200	600	400	1	66	42.00	NSYS3D12640P	NSYS3D12640	NSYS3D12640T	NSYMM126	
1200	800	300	1	66	45.00	NSYS3D12830P	NSYS3D12830	NSYS3D12830T	NSYMM128	
1200	800	400	1	66	49.00	NSYS3D12840P	NSYS3D12840	NSYS3D12840T	NSYMM128	
1200	1000	300	1	66	53.00	NSYS3D121030P	NSYS3D121030	NSYS3D121030T	NSYMM1210	
1200	1000	300	2	55	54.00	NSYS3D121030DP	NSYS3D121030D	NSYS3D121030DT	NSYMM1210	
1200	1000	400	2	55	61.00	NSYS3D121040DP	NSYS3D121040D		NSYMM1210	
1200	1200	300	2	55	64.00	NSYS3D121230DP	NSYS3D121230D		NSYMM1212	
1200	1200	400	2	55	90.00	NSYS3D121240DP	NSYS3D121240D		NSYMM1212	
1400	1000	300	2	55	80.00	NSYS3D141030DP	NSYS3D141030D		NSYMM1410	

(1) For other dimensions, see our aplication offer.
(2) In inverted use, the marking is inverted.

*Enclosure without mounting plate.

Wall-fixing brackets

Steel: **NSYAEFPFSC**
Stainless steel: **NSYAEFPFXSC**



Reinforcement for heavy loads

NSYAEFAHLBSC

Cable gland

Page **7/104**

Schneider Electric

Mounting plate						Electricity distribution			
						Modular mounting plate			
Micro-perforated mounting plate	Telequick mounting plate	Bakelite mounting plate	DIN rail chassis	Type	Aluminium vertical rails (3)	Modular mounting plate	N° of modules	Plain front panel	Plain mounting plate
Page 7/3	Page 7/4	Page 7/5	Page 7/6		Page 7/8	Page 7/70		Page 7/71	
NSYMF32	NSYMR32	NSYMB32			NSYMDVR3				
	NSYMR3025	NSYMB3025			NSYMDVR3				
NSYMF33	NSYMR33	NSYMB33	NSYMD33	B	NSYMDVR3				
NSYMF33	NSYMR33	NSYMB33	NSYMD33	B	NSYMDVR3				
NSYMF43	NSYMR34	NSYMB43			NSYMDVR3				
NSYMF43	NSYMR34	NSYMB43			NSYMDVR3				
NSYMF43	NSYMR43	NSYMB43	NSYMD43	B	NSYMDVR4	NSYDLM24	24	NSYCTL300DLM	NSYPMP300DLM
NSYMF43	NSYMR43	NSYMB43	NSYMD43	B	NSYMDVR4	NSYDLM24	24	NSYCTL300DLM	NSYPMP300DLM
NSYMF44	NSYMR44				NSYMDVR4				
NSYMF64	NSYMR46	NSYMB64			NSYMDVR4				
NSYMF64	NSYMR46	NSYMB64			NSYMDVR4				
NSYMF53	NSYMR53				NSYMDVR5				
NSYMF54	NSYMR54	NSYMB54	NSYMD54	B	NSYMDVR5	NSYDLM48	48	NSYCTL400DLM	NSYPMP400DLM
NSYMF54	NSYMR54	NSYMB54	NSYMD54	B	NSYMDVR5	NSYDLM48	48	NSYCTL400DLM	NSYPMP400DLM
NSYMF55	NSYMR55				NSYMDVR5				
NSYMF55	NSYMR55				NSYMDVR5				
NSYMF64	NSYMR64	NSYMB64	NSYMD64	B	NSYMDVR6	NSYDLM48P	48	NSYCTL400DLM	NSYPMP400DLM
NSYMF64	NSYMR64	NSYMB64	NSYMD64	B	NSYMDVR6	NSYDLM48P	48	NSYCTL400DLM	NSYPMP400DLM
NSYMF65	NSYMR65	NSYMB65			NSYMDVR6				
NSYMF66	NSYMR66		NSYMD66	A	NSYMDVR6	NSYDLM84	84	NSYCTL600DLM	NSYPMP600DLM
NSYMF66	NSYMR66		NSYMD66	A	NSYMDVR6	NSYDLM84	84	NSYCTL600DLM	NSYPMP600DLM
NSYMF66	NSYMR66		NSYMD66	A	NSYMDVR6	NSYDLM84	84	NSYCTL600DLM	NSYPMP600DLM
NSYMF66	NSYMR66		NSYMD66	A	NSYMDVR6	NSYDLM84	84	NSYCTL600DLM	NSYPMP600DLM
NSYMF86	NSYMR68	NSYMB86	NSYMD86**	A	NSYMDVR6				
NSYMF75	NSYMR75	NSYMB75	NSYMD75	B	NSYMDVR7	NSYDLM66	66	NSYCTL500DLM	NSYPMP500DLM
NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8	NSYDLM84P	84*	NSYCTL600DLM	NSYPMP600DLM
NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8	NSYDLM112	112*	NSYCTL600DLM	NSYPMP600DLM
NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8	NSYDLM112	112*	NSYCTL600DLM	NSYPMP600DLM
NSYMF86	NSYMR86	NSYMB86	NSYMD86	A	NSYMDVR8	NSYDLM112	112*	NSYCTL600DLM	NSYPMP600DLM
NSYMF88	NSYMR88				NSYMDVR8				
NSYMF88	NSYMR88				NSYMDVR8				
NSYMF108	NSYMR810	NSYMB108			NSYMDVR8				
NSYMF108	NSYMR810	NSYMB108			NSYMDVR8				
NSYMF128	2 × NSYMR86+	2 × NSYMB86+	2 × NSYMB86+	A	NSYMDVR8				
NSYMF106	NSYMR106	NSYMB106			NSYMDVR10	NSYDLM168	168**	NSYCTL600DLM	NSYPMP600DLM
NSYMF106	NSYMR106	NSYMB106			NSYMDVR10	NSYDLM168	168**	NSYCTL600DLM	NSYPMP600DLM
NSYMF106	NSYMR106	NSYMB106			NSYMDVR10	NSYDLM168	168**	NSYCTL600DLM	NSYPMP600DLM
NSYMF108	NSYMR108	NSYMB108	NSYMD108	A	NSYMDVR10	NSYDLM240	240	NSYCTL800DLM	NSYPMP800DLM
NSYMF108	NSYMR108	NSYMB108	NSYMD108	A	NSYMDVR10	NSYDLM240	240	NSYCTL800DLM	NSYPMP800DLM
NSYMF108	NSYMR108	NSYMB108	NSYMD108	A	NSYMDVR10	NSYDLM240	240	NSYCTL800DLM	NSYPMP800DLM
NSYMF1010	NSYMR1010				NSYMDVR10				
NSYMF1010	NSYMR1010				NSYMDVR10				
NSYMF1210	NSYMR1012	NSYMB1210			NSYMDVR10				
NSYMF1210	NSYMR1012	NSYMB1210			NSYMDVR10				
NSYMF126					NSYMDVR12				
NSYMF126					NSYMDVR12				
NSYMF128	NSYMR128		NSYMD128	A	NSYMDVR12				
NSYMF128	NSYMR128		NSYMD128	A	NSYMDVR12				
NSYMF1210	NSYMR1210	NSYMB1210			NSYMDVR12				
NSYMF1210	NSYMR1210	NSYMB1210			NSYMDVR12				
NSYMF1210	NSYMR1210	NSYMB1210			NSYMDVR12				
2 × NSYMF126+	2 × NSYMR126+				NSYMDVR12				
2 × NSYMF126+	2 × NSYMR126+				NSYMDVR12				
	NSYMR1410								

+ Order **NSYCRNGSDR** for double mounting of the mounting plates.

(3) Order nuts ref. **NSYAMCSF**. Steel siderail ref. **NSYMDVR12**.

* Possible assembling to ref. NSYDLM84P or NSYDLM112.
** Possible assembling to ref. NSYDLM168 or NSYDLM240.

Other cable entries
Page **7/102**

Clip-on nuts
Page **7/27**

Self-tapping screw
ref. **NSYS13M5HS**
Page **7/67**

Wall-mounting steel enclosures
Selection guide

Dimensions (4)			Electronics and networks				Cable-entry accessories				
			19" racks				Cable-gland plates				
			Fixed	Number of U	Swing	Number of U	Entry type	Standard steel	Steel with knock-outs	Aluminium	Steel with cut-out for membrane
H	W	D	Page 2/50				Page 2/26	Page 2/27	Page 2/28	Page 2/27	Page 2/29
300	200	150					A	NSYTLA	NSYTLAK	NSYTLAU	
300	250	150					A	NSYTLA	NSYTLAK	NSYTLAU	
300	300	150					B	NSYTLB	NSYTLBK	NSYTLBU	
300	300	200					C	NSYTLC	NSYTLCK	NSYTLCU	NSYTLCFL
300	400	150					B	NSYTLB	NSYTLBK	NSYTLBU	
300	400	200					D	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
400	300	150					B	NSYTLB	NSYTLBK	NSYTLBU	
400	300	200					C	NSYTLC	NSYTLCK	NSYTLCU	NSYTLCFL
400	400	200					D	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
400	600	200	NSYVDM8UF	8	NSYVDM7UP	7	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
400	600	250	NSYVDM8UF	8	NSYVDM7UP	7	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
500	300	200					C	NSYTLC	NSYTLCK	NSYTLCU	NSYTLCFL
500	400	200					D	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
500	400	250					D	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
500	500	200					E	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
500	500	250					E	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
600	400	200					D	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
600	400	250					D	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
600	500	250					E	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
600	600	200	NSYVDM12UF	12	NSYVDM11UP	11	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
600	600	250	NSYVDM12UF	12	NSYVDM11UP	11	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
600	600	300	NSYVDM12UF	12	NSYVDM11UP	11	G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
600	600	400	NSYVDM12UF	12	NSYVDM11UP	11	G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
600	800	300					D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
700	500	250					E	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
800	600	200	NSYVDM17UF	17	NSYVDM16UP	16	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
800	600	250	NSYVDM17UF	17	NSYVDM16UP	16	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
800	600	300	NSYVDM17UF	17	NSYVDM16UP	16	G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
800	600	400	NSYVDM17UF	17	NSYVDM16UP	16	G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
800	800	250					D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
800	800	300					D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
800	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
800	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
800	1200	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1000	600	250	NSYVDM21UF	21	NSYVDM20UP	20	F	NSYTLF	NSYTLFK	NSYTLFU	NSYTLFFL
1000	600	300	NSYVDM21UF	21	NSYVDM20UP	20	G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
1000	600	400	NSYVDM21UF	21	NSYVDM20UP	20	G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
1000	800	250			NSYVDM20U8P	20	D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
1000	800	300			NSYVDM20U8P	20	D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
1000	800	400			NSYVDM20U8P	20	D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
1000	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1000	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1000	1200	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1000	1200	400					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1200	600	300					G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
1200	600	400					G	NSYTLG	NSYTLGK	NSYTLGU	NSYTLG2FL
1200	800	300			NSYVDM25U8P	25	D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
1200	800	400			NSYVDM25U8P	25	D*	NSYTLD	NSYTLDK	NSYTLDU	NSYTLDFL
1200	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1200	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1200	1000	400					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1200	1200	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1200	1200	400					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL
1400	1000	300					E*	NSYTLE	NSYTLEK	NSYTLEU	NSYTLEFL

(4) For other dimensions, see our application offer, page **2/36**

*2 plates.

Earthing strip
ref. **NSYEDCOC**
Page **7/29**

Schneider Electric

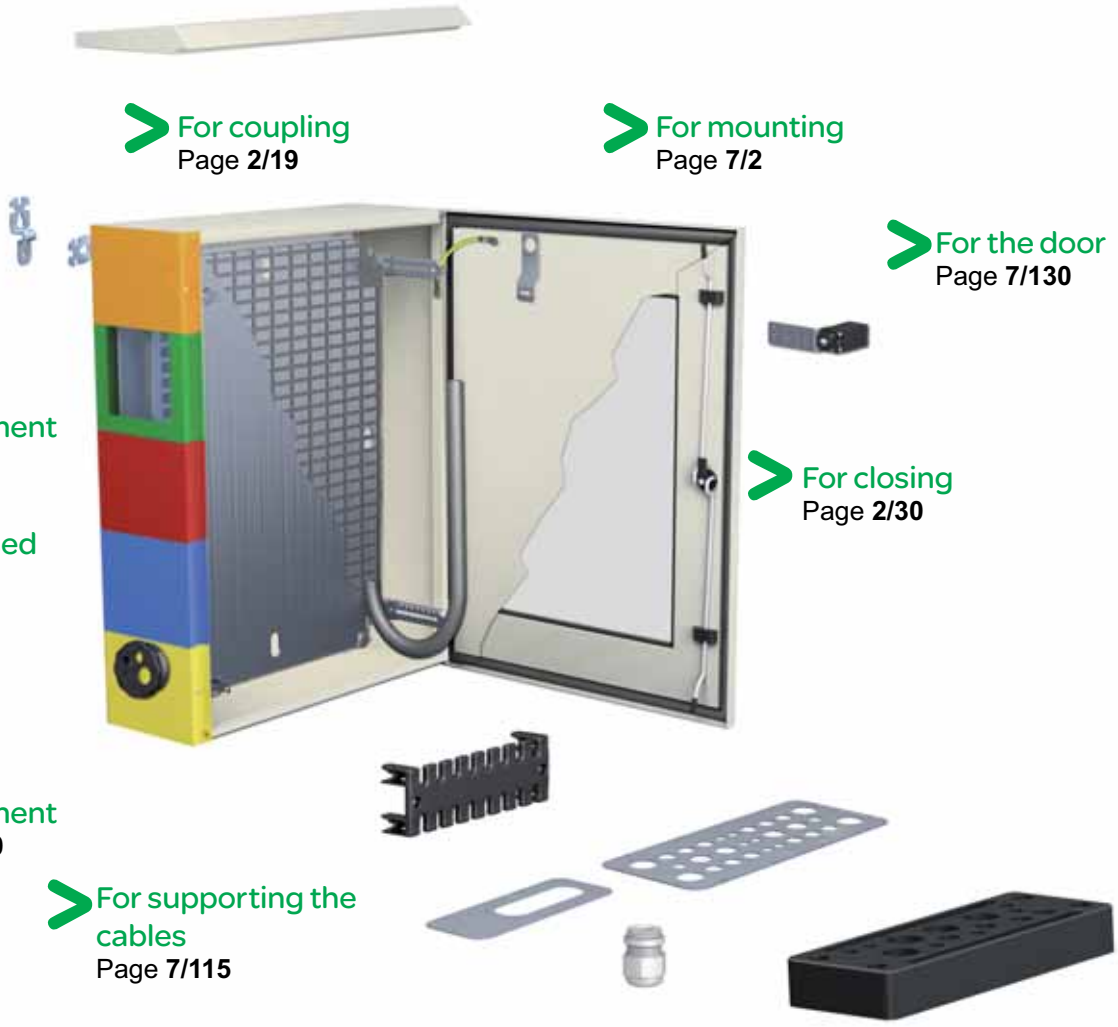
	Composition accessories											
	Internal door (5)	Step slides	Canopy	Fixing on post	Lateral plinth**		Plain front plinth (6)**		Support pillar adaptation plate	Support pillar	Door cross-rails
					100 mm	200 mm	100 mm	200 mm			
	Page 2/34	Page 7/7	Page 2/21	Page 2/25	Page 2/23				Page 2/22		Page 7/115
			NSYTJ2015								
			NSYTJ2515								
			NSYTJ3015	NSYSFPSC30					NSYAEFP315S3D	NSYCOCN80	
		NSYSDCR200	NSYTJ3020	NSYSFPSC30					NSYAEFP32S3D	NSYCOCN80	
			NSYTJ4015	NSYSFPSC40					NSYAEFP315S3D	NSYCOCN80	
		NSYSDCR200	NSYTJ4020	NSYSFPSC40					NSYAEFP42S3D	NSYCOCN80	
	NSYPIN43		NSYTJ3015	NSYSFPSC30					NSYAEFP315S3D	NSYCOCN80	
	NSYPIN43	NSYSDCR200	NSYTJ3020	NSYSFPSC30					NSYAEFP32S3D	NSYCOCN80	
		NSYSDCR200	NSYTJ4020	NSYSFPSC40					NSYAEFP42S3D	NSYCOCN80	NSYTFPCRN4
		NSYSDCR200	NSYTJ6020	NSYSFPSC60							NSYTFPCRN6
		NSYSDCR250	NSYTJ6025	NSYSFPSC60							NSYTFPCRN6
		NSYSDCR200	NSYTJ3020	NSYSFPSC30					NSYAEFP32S3D	NSYCOCN80	
	NSYPIN54	NSYSDCR200	NSYTJ4020	NSYSFPSC40					NSYAEFP42S3D	NSYCOCN80	NSYTFPCRN4
	NSYPIN54	NSYSDCR250	NSYTJ4025	NSYSFPSC40					NSYAEFP42S3D	NSYCOCN80	NSYTFPCRN4
		NSYSDCR200	NSYTJ5020	NSYSFPSC50							NSYTFPCRN5
		NSYSDCR250	NSYTJ5025	NSYSFPSC50							NSYTFPCRN5
	NSYPIN64	NSYSDCR200	NSYTJ4020	NSYSFPSC40					NSYAEFP42S3D	NSYCOCN80	NSYTFPCRN4
	NSYPIN64	NSYSDCR250	NSYTJ4025	NSYSFPSC40					NSYAEFP42S3D	NSYCOCN80	NSYTFPCRN4
		NSYSDCR250	NSYTJ5025	NSYSFPSC50							
		NSYSDCR200	NSYTJ6020	NSYSFPSC60							NSYTFPCRN6
		NSYSDCR250	NSYTJ6025	NSYSFPSC60							NSYTFPCRN6
		NSYSDCR300	NSYTJ6030	NSYSFPSC60	NSYSPS3100SD	NSYSPS3200SD	NSYSPF6100	NSYSPF6200			NSYTFPCRN6
		NSYSDCR400	NSYTJ6040	NSYSFPSC60	NSYSPS4100SD	NSYSPS4200SD	NSYSPF6100	NSYSPF6200			NSYTFPCRN6
		NSYSDCR300	NSYTJ8030	NSYSFPSC80	NSYSPS3100SD	NSYSPS3200SD	NSYSPF8100	NSYSPF8200			NSYTFPCRN8
	NSYPIN75	NSYSDCR250	NSYTJ5025	NSYSFPSC50							NSYTFPCRN5
	NSYPIN86	NSYSDCR200	NSYTJ6020	NSYSFPSC60							NSYTFPCRN6
	NSYPIN86	NSYSDCR250	NSYTJ6025	NSYSFPSC60							NSYTFPCRN6
	NSYPIN86	NSYSDCR300	NSYTJ6030	NSYSFPSC60	NSYSPS3100SD	NSYSPS3200SD	NSYSPF6100	NSYSPF6200			NSYTFPCRN6
	NSYPIN86	NSYSDCR400	NSYTJ6040	NSYSFPSC60	NSYSPS4100SD	NSYSPS4200SD	NSYSPF6100	NSYSPF6200			NSYTFPCRN6
		NSYSDCR250	NSYTJ8025	NSYSFPSC80							NSYTFPCRN8
		NSYSDCR300	NSYTJ8030	NSYSFPSC80	NSYSPS3100SD	NSYSPS3200SD	NSYSPF8100	NSYSPF8200			NSYTFPCRN8
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			NSYTFPCRN10
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			
		NSYSDCR300*	NSYTJ12030								
	NSYPIN106	NSYSDCR250	NSYTJ6025								NSYTFPCRN6
	NSYPIN106	NSYSDCR300	NSYTJ6030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF6100	NSYSPF6200			NSYTFPCRN6
	NSYPIN106	NSYSDCR400	NSYTJ6040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF6100	NSYSPF6200			NSYTFPCRN6
	NSYPIN108	NSYSDCR250	NSYTJ8025								NSYTFPCRN8
	NSYPIN108	NSYSDCR300	NSYTJ8030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF8100	NSYSPF8200			NSYTFPCRN8
	NSYPIN108	NSYSDCR400	NSYTJ8040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF8100	NSYSPF8200			NSYTFPCRN8
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			NSYTFPCRN10
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			
		NSYSDCR300*	NSYTJ12030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF12100	NSYSPF12200			
		NSYSDCR400*	NSYTJ12040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF12100	NSYSPF12200			
	NSYPIN126	NSYSDCR300	NSYTJ6030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF6100	NSYSPF6200			
	NSYPIN126	NSYSDCR400	NSYTJ6040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF6100	NSYSPF6200			
	NSYPIN128	NSYSDCR300	NSYTJ8030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF8100	NSYSPF8200			NSYTFPCRN8
	NSYPIN128	NSYSDCR400	NSYTJ8040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF8100	NSYSPF8200			NSYTFPCRN8
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			NSYTFPCRN10
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			
		NSYSDCR400	NSYTJ10040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF10100	NSYSPF10200			
		NSYSDCR300*	NSYTJ12030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF12100	NSYSPF12200			
		NSYSDCR400*	NSYTJ12040		NSYSPS4100SD	NSYSPS4200SD	NSYSPF12100	NSYSPF12200			
		NSYSDCR300	NSYTJ10030		NSYSPS3100SD	NSYSPS3200SD	NSYSPF10100	NSYSPF10200			

(5) To adjust the depth of the internal door, please order the step slides.
(6) Also available in ventilated version with cable gland for widths of 600 and 800, see page **3/44**.

*For the double mounting plates, order also ref. **NSYSDRSDCR300** (D300) or **NSYSDRSDCR400** (D400).

To install the plinth to a wall-mounting enclosure, order ref. **NSYAPFWM.

Accessories



For the roof
Page **2/21**

For fixing
Page **2/24**

For coupling
Page **2/19**

For mounting
Page **7/2**

For the door
Page **7/130**

Thermal management
Page **8/14**

Customised offer
Page **0/17**

For closing
Page **2/30**

For cable management
Page **7/120**

For supporting the cables
Page **7/115**

For cable entries
(Cable-gland plate)
Page **2/26**

For cable entries
(Membranes, cable glands)
Page **7/101**

See also the accessories

Mounting plate
page **7/2**

Modular Chassis
page **7/70**

19" enclosure
page **2/50**

DIN rail and fixings
page **7/50**

Composition accessories
Coupling accessories

Installation example.

Coupling of Spacial steel enclosures

Available in 2 versions:
- Coupling version without cable entry.
- Version with coupling frame allowing the entry of cables.
- Separation of 17 mm between 2 coupled enclosures, allowing full opening of the doors.

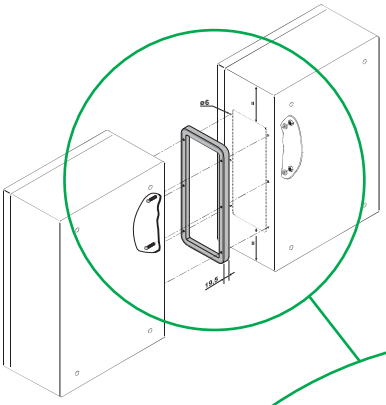
Kit for fixing 2 joined enclosures
- Kit made up of 4 spacers and their fixings.

Coupling frame
- Allows lateral coupling of 2 enclosures.
- Frame made from polyester charged with fibreglass, self-extinguishing.
- A built-in sealing gasket guarantees the protection degree of IP 66.
- Mounting by screws, included.
- Dimensions: 435 × 185 mm and 635 × 185 mm.

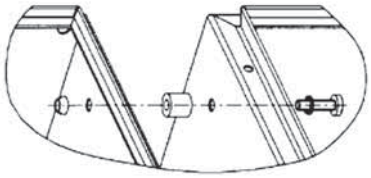
These frames allow the door to open to 120°.

Description	Reference
Batch of 4 coupling spacers	**NSYAEUBUSC**
Coupling frame, 435 × 185 mm	**NSYAEUBU41SC**
Coupling frame, 635 × 185 mm	**NSYAEUBU61SC**

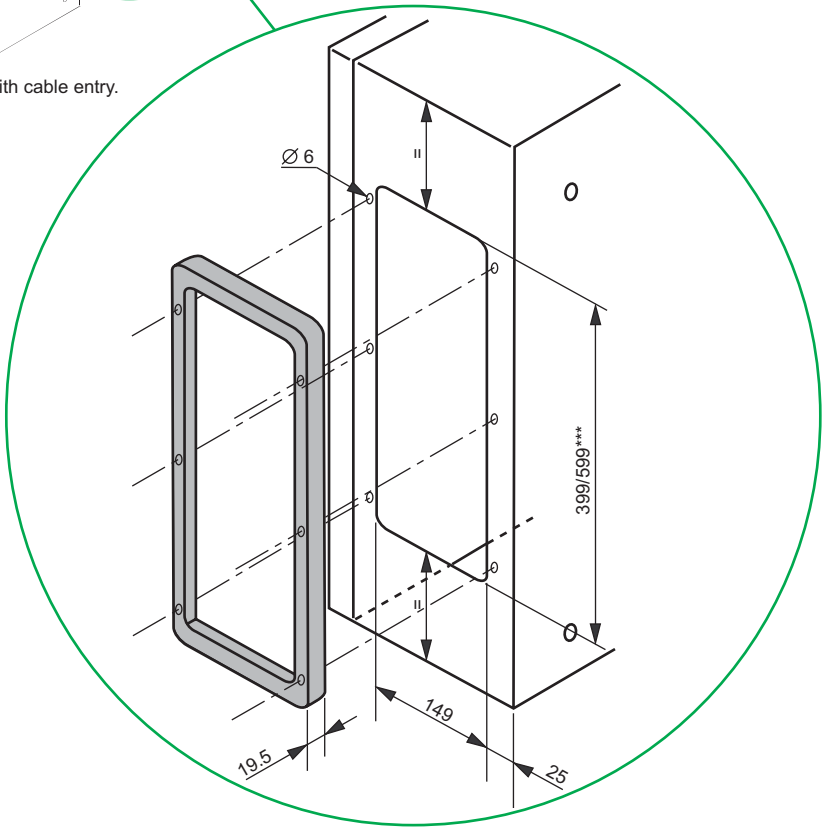
Version without cable entry.



Version with cable entry.

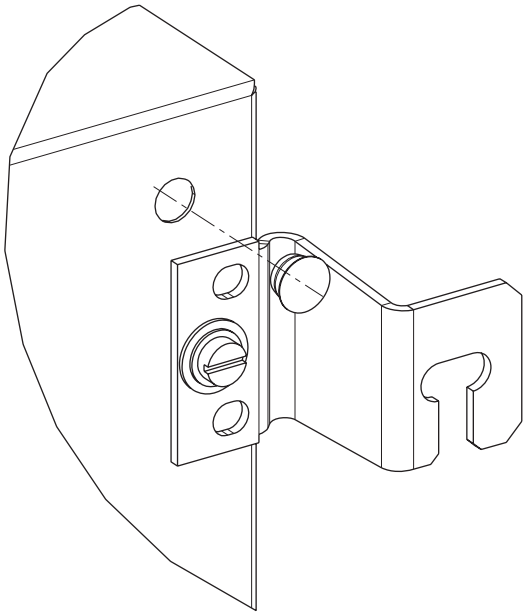


Version without cable entry.



Version with cable entry.

Composition accessories
Fixing accessories



Wall-fixing lugs with wall-enclosure separation

- Batch of 4 wall-fixing lugs.
- Separation of 40 mm from the wall at the rear of the enclosure.
- Need to drill a hole to prevent rotation.
- Steel material.
- Maximum load: 100 kg.

Reference
NSYAEFPF40SC

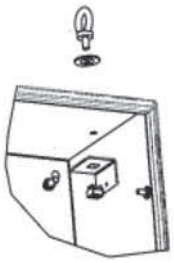
You will find the weights of the Spacial S3D enclosures without mounting plate in the selection guide on page **2/14**.

Composition accessories
Hoisting accessories

Eyebolts

Set of two M8 eyebolts.
- Material: zinc-coated moulded steel.
- They are fixed directly to the body of the floor-standing enclosure.
- Maximum load to be installed: 210 kg per enclosure when slinging at 60°.
- Cannot be installed with the canopy in place.
- Reinforcing brackets attached to the rings,
- These brackets also act as a drilling template.
- Have your cut-outs made by our configured service, page **0/8**.
- Paint touch-up pen, page **7/144**.

Description	Reference
Batch of 2 M8 eyebolts	**NSYAELYTCRG8**

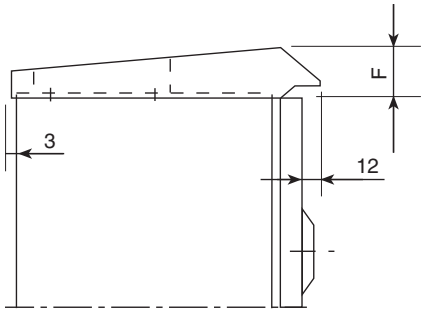


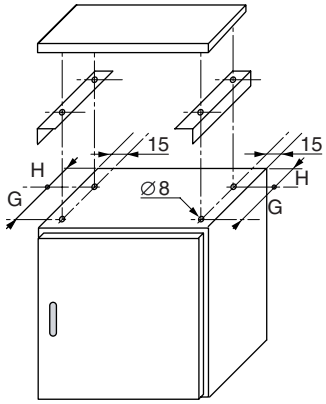
Protection canopy

Direct fixing to the body of the enclosure by 4 M6 screws.
- Material: sheet steel made from painted galvanised steel, structured finish, epoxy-polyester powder, RAL 7035 grey colour.
- Delivered with the fixings required for installation.
- To be used for all outdoor installations.
- Have your cut-outs made by our configured service, page **0/8**.
- Paint touch-up pen, page **7/144**.

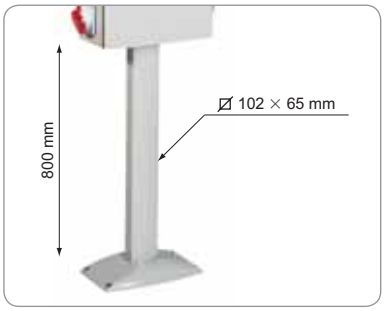
Enclosures (mm)			
Depth	**F**	**G**	**H**
150	36	75	23
200	36	130	23
250	42	150	48
300	42	200	48
400	42	300	48

Dimensions and cut-outs.





Composition accessories
Fixing accessories

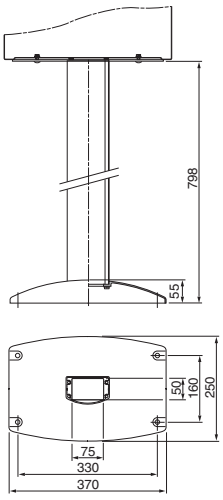


Support pillar

The support pillar is fixed directly to the bottom face of the Spacial steel enclosure by means of an adapter plate. The latter, to be ordered in addition to the pillar, replaces the cable-gland plate.

- Overall height of the support foot: 800 mm.
- Material: extruded aluminium, structured finish, polyester powder, RAL 7035 grey colour.
- Mounting possible on all enclosures with dimensions up to 600 × 400 × 250 mm (except 200 × 200 × 150 and 250 × 200 × 150 enclosures).

Description	Reference
Support pillar HT 800	**NSYCOCN80**



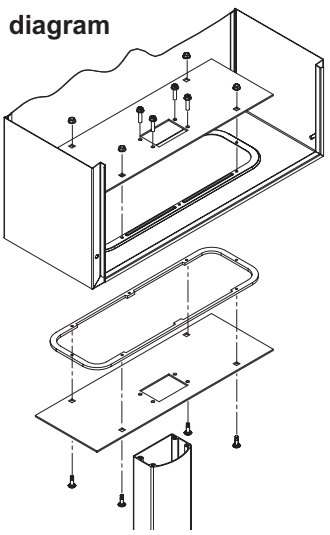
Support pillar adaptation plate

Plate for fixing the support pillar on the enclosure.
This plate replaces the cable-gland plate delivered with the enclosure.

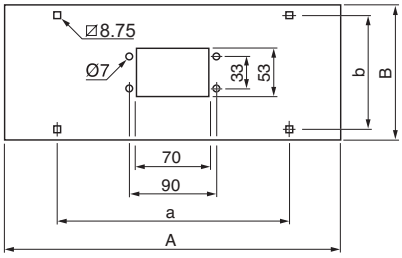
- Material: steel, structured finish, polyester powder, RAL 7035 grey colour.

Enclosure width (mm)	Enclosure depth (mm)	A	B	a	b	Reference
300-400	150	280	110	140	67	**NSYAEFP315S3D**
300	200	280	160	140	117	**NSYAEFP32S3D**
400	200-250	380	160	240	117	**NSYAEFP42S3D**

Mounting diagram



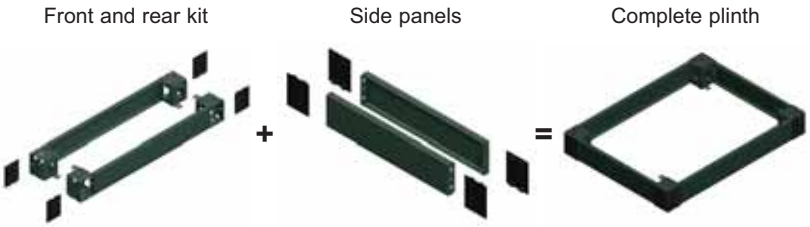
Dimensions



Composition accessories
Fixing accessories

Plinth kit

The complete plinth consists of two elements: on the one hand, the front and rear kit, determined by the width of the enclosure and, on the other hand, the side panels determined by the depth of the enclosure.



Plinth side panels for Spacial steel enclosure

They are fixed to the corners of the plinth by two fixing screws.
- Material: folded sheet steel.
- Finishes: epoxy-polyester resin paint, RAL 7022 grey colour.
- Protection degree: IP 30 for the complete plinth.
- Resistance to external mechanical impacts: IK10.
- Models with heights: 100 and 200 mm.
- For enclosure depths 300 and 400 mm:

– Height 100 mm: 2 side panels, 4 corner covers and fixing elements.
– Height 200 mm: 4 side panels (height of 100 mm, 2 for each side), 4 corner covers and fixing elements.

Nominal dimensions (mm)	Reference	
Depth	100 mm	200 mm
300	**NSYSPS3100SD**	**NSYSPS3200SD**
400	**NSYSPS4100SD**	**NSYSPS4200SD**

Order ref. **NSYAPFWM** when mounting the wall-mounting enclosure on a plinth.

Front and rear plinth

Accessory shared with the Spacial SM floor-standing enclosure.
Numerous options available: plain, ventilated, with cable gland.
See page **3/44**.

Nominal dimensions (mm)	Reference	
Depth	100 mm	200 mm
600	**NSYSPF6100**	**NSYSPF6200**
800	**NSYSPF8100**	**NSYSPF8200**
1000	**NSYSPF10100**	**NSYSPF10200**
1200	**NSYSPF12100**	**NSYSPF12200**

See also the accessories

Accessories for cable entries page **2/26**

Cable-support accessories page **7/116**

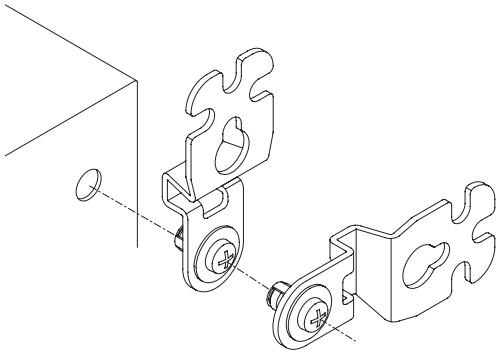
Cable-management accessories page **7/101**

Composition accessories
Fixing accessories

Wall-fixing lugs

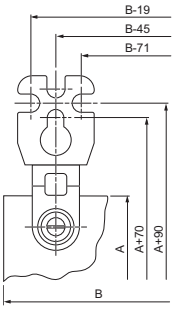
Set of 4 wall-fixing lugs
- Mounted directly on the rear of the enclosure, either in horizontal or vertical position.
- Two types of position, steel and 304 stainless-steel, for a wall-enclosure separation of 10 mm.
- Acceptable load:
– Horizontal lug: 180 kg.
– Vertical lug: 350 kg.
- Supplied with fixing screws and pre-mounted sealing gaskets.

Description	Reference
Set of 4 steel fixing lugs	**NSYAEFPFSC**
Set of 4 stainless-steel fixing lugs	**NSYAEFPFXSC**



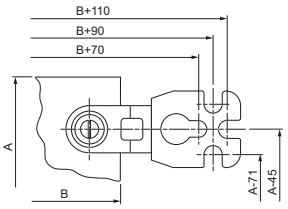
Installation from the outside.

Fixing centre-to-centre distance with lugs (M8 screw)

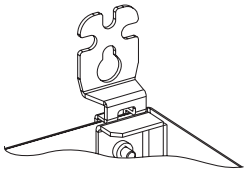


Vertical position.

A: Enclosure height
B: Enclosure width



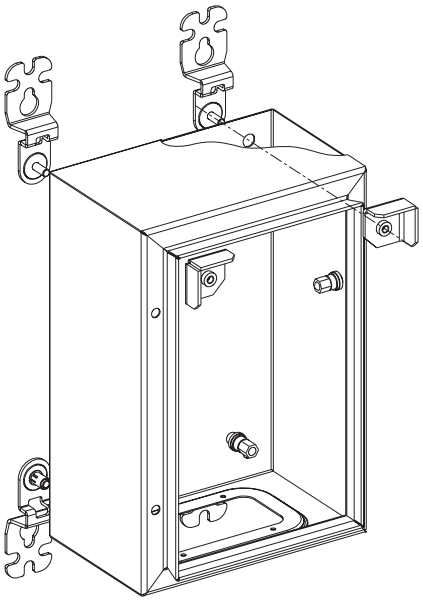
Horizontal position.



Kit for heavy loads

Kit made up of 2 steel reinforcement pieces.
- Maximum load, 400 kg.
- To be mounted before installing the mounting plate in top position with the standard lugs (to be ordered separately).

Description	Reference
Kit for heavy loads	**NSYAEFAHLBSC**

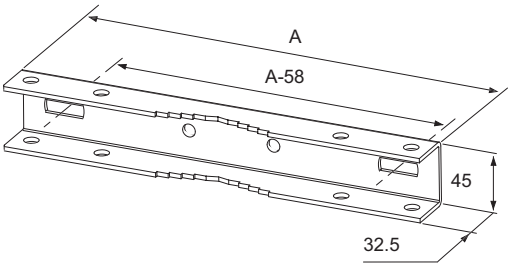


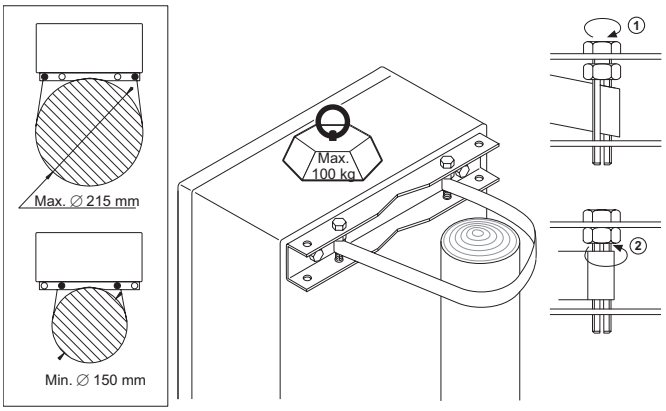
Composition accessories
Fixing accessories

Post-fixing device for Spacial steel enclosure

For indoor installations on posts with a maximum circumference of 675 mm (minimum diameter 150 mm and maximum diameter 215 mm).
- Material: galvanised steel.
- Rail fixed to the inserts in the rear of the enclosure with 8-mm screws.
- Maximum load: 100 kg.
- They allow the mounting of protection canopies.
- For steel enclosures with widths of 300, 400, 500, 600 and 800 mm.

Description	A (mm)	Reference
Post-fixing for enclosure with W 300 mm	295	**NSYSFPSC30**
Post-fixing for enclosure with W 400 mm	395	**NSYSFPSC40**
Post-fixing for enclosure with W 500 mm	495	**NSYSFPSC50**
Post-fixing for enclosure with W 600 mm	595	**NSYSFPSC60**
Post-fixing for enclosure with W 800 mm	795	**NSYSFPSC80**





Machining of your enclosure before painting with our customisation service.

Specific

Composition accessories
Cable-entry accessories

- The cable-gland plates are delivered with a separate gasket to facilitate machining and paint dusting.
- The plates are installed across the thickness of the enclosure body.
- Fixing by screws.

For wall-mounting enclosures		Type	Plate dimensions (mm)		Cable-gland plate references			
Width (mm)	Depth (mm)		W	D	In standard steel page 2/27	Knock-out in steel page 2/28	Steel with cut-outs for membranes (1) page 2/29	Aluminium page 2/27
200	150	A	140	80	**NSYTLA**	**NSYTLAK**	-	**NSYTLAU**
300-400	150	B	245	80	**NSYTLB**	**NSYTLBK**	-	**NSYTLBU**
300	200	C	245	130	**NSYTLC**	**NSYTLCK**	**NSYTLCFL**	**NSYTLCU**
400	200-250	D	345	130	**NSYTLD**	**NSYTLDK**	**NSYTLDFL**	**NSYTLDU**
500	200-250	E	445	130	**NSYTLE**	**NSYTLEK**	**NSYTLEFL**	**NSYTLEU**
600	200-250	F	545	130	**NSYTLF**	**NSYTLFK**	**NSYTLFFL** **NSYTLF2FL** (2)	**NSYTLFU**
600	300-400	G	495	220	**NSYTLG**	**NSYTLGK**	**NSYTLG2FL** (2) (3)	**NSYTLGU**
800	250-300-400	D*	345	130	2 × **NSYTLD**	2 × **NSYTLDK**	2 × **NSYTLDFL**	2 × **NSYTLDU**
1000-1200	300-400	E*	445	130	2 × **NSYTLE**	2 × **NSYTLEK**	2 × **NSYTLEFL**	2 × **NSYTLEU**

* Enclosure with 2 cable-gland plates.
(1) 1 single cut-out.
(2) With 2 FL cut-outs.
(3) With 4 FL cut-outs, ref. **NSYTLG4FL**.

Specific

Do you require your cable-gland plate to have a different position on your wall-mounting enclosure? Please consult our specific offer, page 0/10.

Composition accessories
Cable-entry accessories

Standard cable-gland plate

Plate delivered as standard with the Spacial S3D universal enclosure.
Material: steel, 1.5 mm thick.
- Surface with markings in steps of 25 mm, to facilitate drilling.
- Fixing by 4, 6, 8, 10 or 12 screws, according to the model.

Aluminium cable-gland plate

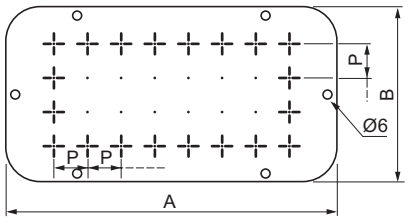
Material: brushed-finish aluminium with a thickness of 3 mm.
- Fixing by 4, 6, 8, 10 or 12 screws, according to the model.
- Suitable for non-magnetic applications.

Dimensions

Aluminium or standard cable-gland plates

Dimensions (mm)		N° of Ø 6 holes	N° of markings*	References	
A	B			Standard	Aluminium
140	80	4	8	**NSYTLA**	**NSYTLAU**
245	80	4	16	**NSYTLB**	**NSYTLBU**
245	130	6	32	**NSYTLC**	**NSYTLCU**
345	130	8	48	**NSYTLD**	**NSYTLDU**
445	130	9	64	**NSYTLE**	**NSYTLEU**
545	130	10	80	**NSYTLF**	**NSYTLFU**
495	220	12	126	**NSYTLG**	**NSYTLGU**

* Steel plate only.



P = 25 mm

See also the accessories

Cable gland page **7/104**

Cable-entry membranes page **7/105**

Quick cable entries page **7/106**

Composition accessories
Cable-entry accessories

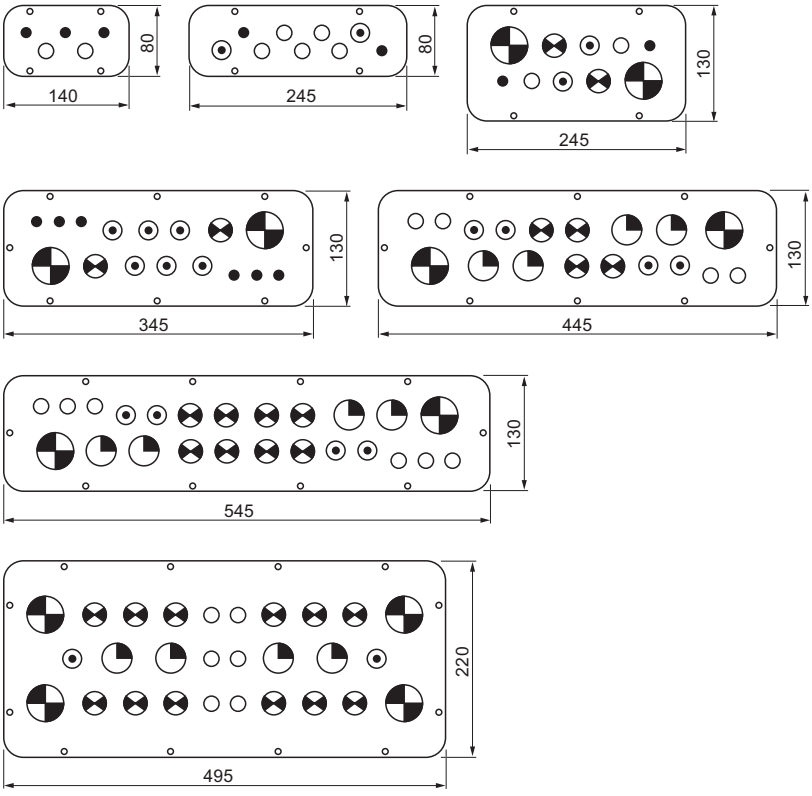
ISO knock-out cable-gland plates

With ISO knock-out holes.
- Material: steel, structured finish, polyester powder, RAL 7035 grey colour.
- Fixing by 6, 8, 10 or 12 screws, according to the model.
- Mounting instead of the Spacial S3D plate.

Example

Cable-support and earth-connection accessories, page **7/139**.
Cable glands, see page **7/104**.

Knock-out cable-gland plates



Symbol	Ø (mm)	M	NSYTLAK	NSYTLBK	NSYTLCK	NSYTLDK	NSYTLEK	NSYTLFK	NSYTLGK
	12.5	12	3	2	2	6	-	-	-
	16.5	16	2	5	2	-	4	6	6
	20.5	20	-	2	2	6	4	4	2
	25.5	25	-	-	2	2	4	8	12
	32.5	32	-	-	-	-	4	4	4
	40.5	40	-	-	2	2	2	2	4

Do you need another entry definition? Please consult our specific service.

Specific

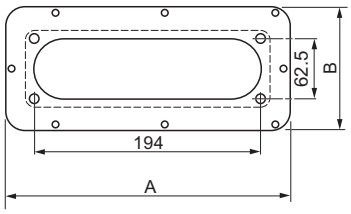
Composition accessories
Cable-entry accessories

Knock-out cable-gland plates for cable-gland membranes

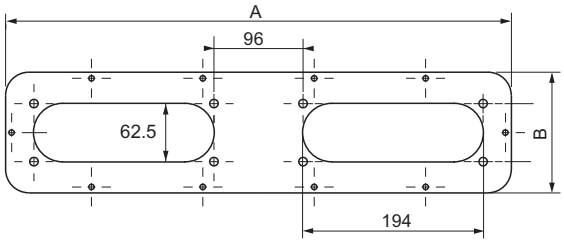
Material: steel, structured finish, structured RAL 7035.
- Fixing by 4, 6, 8, 10 or 12 screws, according to the model.
- Mounting instead of the Spacial S3D plate.
- Cut-outs for installation of membranes type FL 21, page **7/105**.

For wall-mounting enclosures		Type	Dimensions (mm)	
Width (mm)	Depth (mm)		Width (mm)	Depth (mm)
300	200	C	245	130
400	200-250	D	345	130
500	200-250	E	445	130
600	200-250	F	545	130
600	300-400	G	495	220

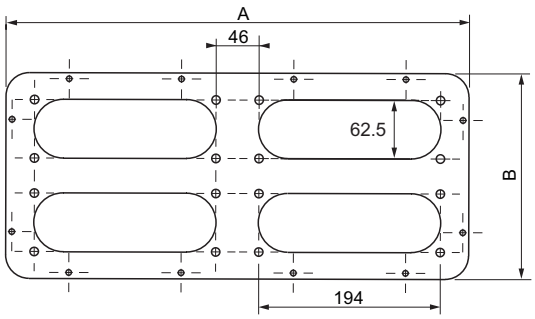
Dimensions of the cut-out



Reference
NSYTLCFL
NSYTLDFL
NSYTLEFL
NSYTLFFL



Reference
NSYTLF2FL
NSYTLG2FL



Reference
NSYTLG4FL

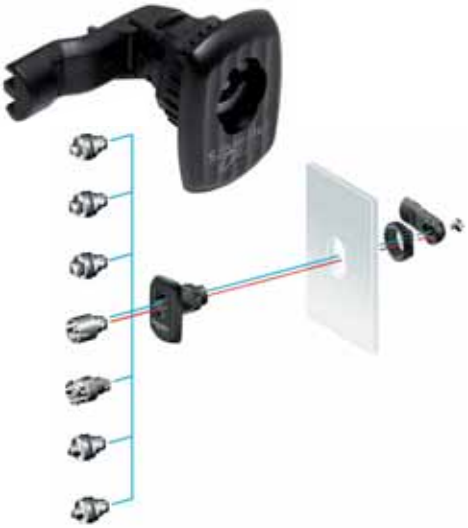
Specific

Do you want the cut-out made directly on the body of your enclosure? Please consult our specific service.

Composition accessories
Locking accessories

Locks and inserts

Operating handle delivered with the enclosure.
- It can be attached to the locking system by means of a fixing element.
- It can also be used to loosen the caps protecting the studs when painting.



Standard locks

Spacial S3D wall-mounting enclosures are supplied with a 3-mm double-bar lock as standard.
- Spare lock: order ref. **NSYAEDLS3DRL** (escutcheon + cam + washer).
- Large range of standardised inserts covering all the most common needs.
- Installation and removal with a single screw.

Description	Reference of form insert*
6-mm square	**NSYAEDLS6S3D**
7-mm square	**NSYAEDLS7S3D**
8-mm square	**NSYAEDLS8S3D**
3-mm double bar	**NSYAEDLB3S3D**
5-mm double bar	**NSYAEDLB5S3D**
CNOMO 6.5-mm triangular	**NSYAEDLT6S3D**
8-mm triangular	**NSYAEDLT8S3D**

* Delivered with 1 plastic key.

Standard handles with keys

Attractive and ergonomic bi-material handle.
- Large range of barrels covering all the most common needs.
- Standard cam (see diagram above).
- The installation of the standard handle does not require the escutcheon to be removed.

Description	Reference of handle with keys*
1242	**NSYAEDL1242S3D**
405	**NSYAEDL405S3D**
421	**NSYAEDL421S3D**
455	**NSYAEDL455S3D**
2331A	**NSYAEDL2331S3D**
2433A	**NSYAEDL2433S3D**
3113A	**NSYAEDL3113S3D**

* Delivered with 2 keys.

Composition accessories
Locking accessories

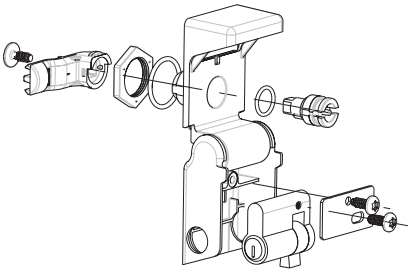
Double lock

- Easy mounting instead of the standard lock.
- Material: zamack.

Delivered with 3-mm double-bar metal key.

Description	Reference
DIN half-cylinder (1)	**NSYAEDLDINS3D**
Padlockable 405 (2)	**NSYAEDLPADS3D**

(1) Delivered without barrel. Please consult us.
(2) Diameter 8 mm.



Other locks with keys

Easy mounting instead of the standard lock.
- Metal cam supplied.

EDF lock	Reference
EDF 900	**NSYAEDLEDF9S3D**
EDF 1300	**NSYAEDLEDF13S3D**
EDF 1400	**NSYAEDLEDF14S3D**

Composition accessories
Locking accessories

"Push-close" locking system

The Spacial S3D enclosures can be transformed into push-close enclosures.
- The push-close enclosure is used in various applications and fully meets the security demands of the market.
- Locking system with a 6.5-mm push-close system in accordance with CNOMO standards.
- This system allows the door to be closed and locked by simply pushing it.
- System made up of a lock and a closure plate.
- IP 55 water and dust tightness.
- It is only installed on enclosures with 1 locking point (H < 600 mm).
- Other dimensions: contact us.

Description	Reference
Push-close lock for Spacial S3D enclosure	**NSYAEDLPSS3D**

See also the accessories

Door retainer page **7/133**

Door switch page **7/134**

Viewing accessories on the door page **7/135**

Earth braids page **7/139**

Composition accessories
Door accessories

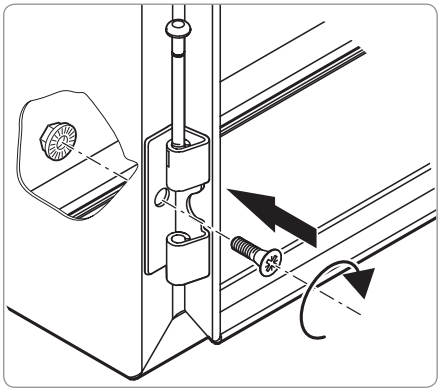
180º hinge.

120º hinge.

Door hinges

Two models:
- For opening the door with an angle of 180º.
- Spare standard hinges (120º).
- Captive pin, indexed by a spring.
- Batch of 1 hinge, delivered with fixings.
- Material: zamack body for ref. **NSYAEDH180S3D**, treated sheet-steel body for ref. **NSYAEDH120S3D**, aluminium pin.
- For the 180º hinge, the maximum admissible load on the door is 20 kg / m^2.
- For the 120º hinge, the maximum admissible load on the door is 50 kg / m^2.

Description	Reference
180° hinge for S3D enclosure	**NSYAEDH180S3D**
Standard 120° hinge for S3D	**NSYAEDH120S3D**



2

See also the accessories

Cable management on the door page **7/115**

Document pocket page **7/130**

Inner door page **2/34**

Composition accessories
Door accessories

Inner door

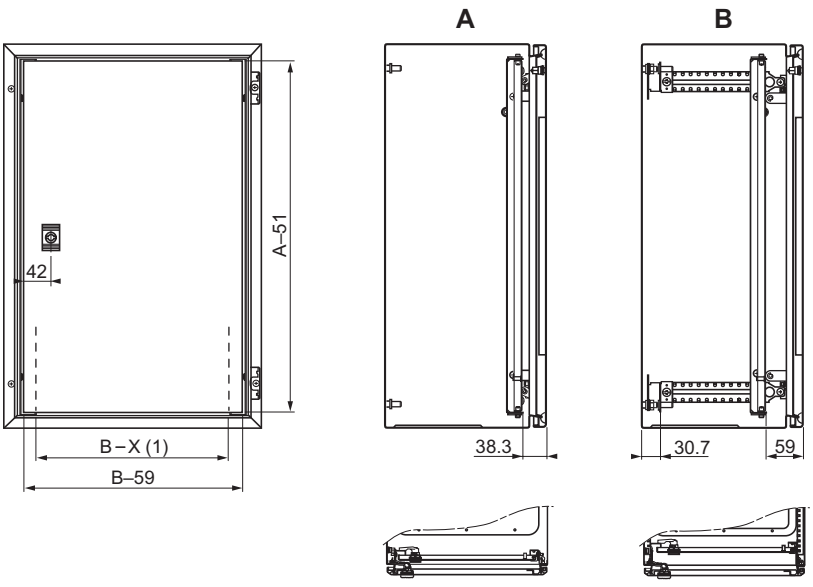
- Sheet-steel door, RAL 7035 grey colour.
- Locking with 3-mm double-bar lock.
- Maximum load, 30 kg/m^2.
- The inner door can be installed directly on the front face of the enclosure or on the step slides (not supplied as standard).
- To mount an inner door and a mounting plate at the same time on the step slides is possible as standard.
- Incompatible with the installation of the door stop and door switch. For further details, please consult us.

Dimensions	References
H 400 × L 300 mm	**NSYPIN43**
H 500 × L 400 mm	**NSYPIN54**
H 600 × L 400 mm	**NSYPIN64**
H 700 × L 500 mm	**NSYPIN75**
H 800 × L 600 mm	**NSYPIN86***
H 1000 × L 600 mm	**NSYPIN106***
H 1000 × L 800 mm	**NSYPIN108***
H 1200 × L 600 mm	**NSYPIN126**
H 1200 × L 800 mm	**NSYPIN128***

* Equipped with welded vertical profiles in order to facilitate cable management.

Dimensions

Installation on the front of the enclosure (A) or installation on step slides (B).



(1) Dimension resulting from installation on step slides: B-83 mm.
Dimension resulting from direct installation (without step slides): B-91 mm.

See also the accessories

Support for cable ducting with diameter 22 page **7/121**

Support for adhesive DIN rail page **7/50**

Cable ducting and ducting support page **7/120**

Spacial steel enclosure application offer

Offers dimensioned for your applications

Spacial S57: the universal steel enclosure with screw-on cover

Practical

Vertical and horizontal installations. Body without cut-outs for cable-gland plate.
Screw-on cover. 4 dimensions with screw-on cover from 200 × 300 × 150 to 300 × 500 × 200. Delivered empty. Do you need other dimensions? Please consult our specific service.

Spacial S3DB: the junction enclosure with drop door for easier access

Smart

Vertical and horizontal installations. Body without cut-outs for cable-gland plates.
180° hinges.
11 dimensions with drop door from H250 × W300 × D150 to H250 × W400 × D150.
Reversible enclosure (the height becomes the width).
Delivered empty.
Model presented with ladder support and DIN rail (to be ordered separately, see page **7/50**).

Spacial S3DM: the enclosure for modular distribution applications

Practical

Body with top and bottom cable-gland plates.
8 dimensions with cable-gland plate and glazed door.
Delivered empty.
Model presented with modular chassis (to be ordered separately, see page **2/42**).

Spacial VDM: the sealed 19" enclosure for local networks and electronics in industrial environments

Functional

Built-in 19" uprights
8 dimensions with 2 versions: single and double body.
The VDM models are equipped with 19" uprights.

Spacial S3CM: the Control and Human-Machine Dialogue enclosure, ideal for all your interfaces

Ergonomic

The rail of the frame guarantees good rigidity for the enclosure.
8 dimensions.
Rotation through 170º; complete range of joints, fixed or rotating.

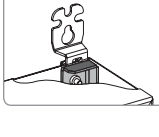
Selection guide for application wall-mounting enclosures

Specifications					Basic enclosures					
					Empty application enclosures					
Dimensions			N° of doors	IP	Steel industrial boxes, IP 66 Spacial S57	S3DB terminal enclosures (1)	FL terminal enclosures (1)	S3DM modular enclosures with glazed door (1)	VDM steel enclosures with 19" swing rack	
H	W	D			Page 1/6	Page 2/38	Page 2/40	Page 2/42	Page 2/44	
200	300	150	1	66	NSYSBS302015					
250	300	150	1	66		NSYS3DB25315				
250	400	150	1	66		NSYS3DB25415				
250	500	150	1	66		NSYS3DB25515				
300	300	150	1	66	NSYSBS303015	NSYS3DB3315				
300	300	170	1	66			NSYS3DBFL3317			
300	400	150	1	66	NSYSBS403015	NSYS3DB3415				
300	400	170	1	66			NSYS3DBFL3417			
300	500	150	1	66		NSYS3DB3515				
300	500	200	1	66	NSYSBS503020					
300	600	150	1	66		NSYS3DB3615				
300	600	400	1	66					NSYVDM4U4P	
300	600	500	1	66						
400	300	150	1	66		NSYS3DB4315		NSYS3DM4315T		
400	300	170	1	66			NSYS3DBFL4317			
400	600	400	1	66					NSYVDM7U4P	
400	600	500	1	66						
400	800	150	1	66		NSYS3DB4815				
500	400	150	1	66		NSYS3DB5415		NSYS3DM5415T		
500	600	400	1	66					NSYVDM9U4P	
500	600	500	1	66						
600	400	150	1	66		NSYS3DB6415		NSYS3DM6415T		
600	600	150	1	66				NSYS3DM6615T		
700	500	150	1	66						
700	500	150	1	66				NSYS3DM7515T		
700	600	400	1	66					NSYVDM13U4P	
700	600	500	1	66						
800	600	150	1	66						
800	600	150	1	66				NSYS3DM8615T		
800	600	400	1	66					NSYVDM16U4P	
800	600	500	1	66						
1000	600	150	1	66				NSYS3DM10615T		
1000	800	150	1	66				NSYS3DM10815T		

(1) Empty enclosure.

Wall-fixing brackets

Steel: **NSYAEFPFSC**
Stainless steel: **NSYAEFPFXSC**



Reinforcement for heavy loads

NSYAEFAHLBSC

Cable gland

Page **7/104**

Specific

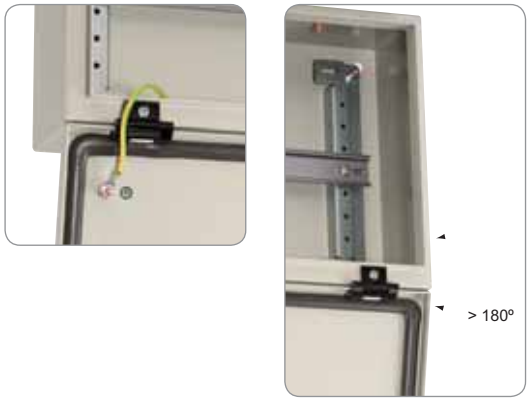
Do you need other dimensions? Do you require a special colour or cut-outs? All these enclosures can be customised. See our specific offer, page 0/10.

						Accessories					
19″ enclosure with glazed door (2)						Electricity distribution		Automatism			
	Number of U	1-body 19″ fixed rack	Number of U	2 parts with 19″ fixed rack	Number of U	Modular mounting plate	N° of modules	DIN rail support and DIN rail	Plain mounting plate	Telequick mounting plate	Aluminium vertical rails
		Page 2/44		Page 2/44		Page 7/70			Page 7/2	Page 7/4	Page 7/8
								NSYAMRD2030	NSYMM32		
								NSYAMRD2530	NSYMM3025		
								NSYAMRD2540	NSYMM2540		
								NSYAMRD2550	NSYMM2550		
								NSYAMRD3030	NSYMM33	NSYMR33	NSYMDVR3
								NSYAMRD3030	NSYMM33	NSYMR33	
								NSYAMRD3040	NSYMM43	NSYMR34	NSYMDVR3
								NSYAMRD3040	NSYMM43	NSYMR34	
								NSYAMRD3050	NSYMM53		NSYMDVR3
								NSYAMRD3050	NSYMM53		NSYMDVR3
								NSYAMRD36	NSYMM36		NSYMDVR3
	4	NSYVDM5U4F	5	NSYVD2M5U4	5			NSYAMRD36	NSYMM36		NSYMDVR3
				NSYVD2M5U5	5			NSYAMRD36	NSYMM36		NSYMDVR3
						NSYDLM24	24	NSYAMRD43	NSYMM43	NSYMR43	NSYMDVR4
								NSYAMRD43	NSYMM43	NSYMR43	
	7	NSYVDM8U4F	8	NSYVD2M8U4	8				NSYMM64	NSYMR46	NSYMDVR4
				NSYVD2M8U5	8			NSYAMRD48	NSYMM64	NSYMR46	NSYMDVR4
								NSYAMRD54	NSYMM48		NSYMDVR4
						NSYDLM48	48		NSYMM54	NSYMR54	NSYMDVR5
	9	NSYVDM10U4F	10	NSYVD2M10U4	10				NSYMM65		NSYMDVR5
				NSYVD2M10U5	10				NSYMM65		NSYMDVR5
						NSYDLM48P	48	NSYAMRD64	NSYMM64	NSYMR64	NSYMDVR6
						NSYDLM84	84		NSYMM66	NSYMR66	NSYMDVR6
						NSYDLM66	66		NSYMM75	NSYMR75	NSYMDVR7
						NSYDLM88	88		NSYMM75	NSYMR75	NSYMDVR7
	13	NSYVDM14U4F	14	NSYVD2M14U4	14						NSYMDVR7
				NSYVD2M14U5	14						NSYMDVR7
						NSYDLM84P			NSYMM86	NSYMR86	NSYMDVR8
						NSYDLM112			NSYMM86	NSYMR86	NSYMDVR8
	16	NSYVDM17U4F	17	NSYVD2M17U4	17				NSYMM86	NSYMR86	NSYMDVR8
				NSYVD2M17U5	17				NSYMM86	NSYMR86	NSYMDVR8
						NSYDLM168			NSYMM106	NSYMR106	NSYMDVR10
						NSYDLM240			NSYMM108	NSYMR108	NSYMDVR10

(2) Plain door, please consult us.

The ideal junction enclosure for your application
Introduction

Vertical position. Horizontal position.



Example of installation with the ladder mounting plate.

Terminal enclosure with a depth of 150 mm, from H 250 × W 300 to H 600 × W 400 mm with plain door, for equipping with terminals. The body does not have any cable-gland openings.
11 references.
Selection guide, page **2/36**.

Technical characteristics

- Protection degree: IP 66.
- Resistance to external mechanical impacts: IK 10.
- Structured finish, epoxy-polyester powder, RAL 7035 grey colour.

Body
Single-piece body, folded and welded. Front rail with double sheet thickness, gutter-shaped.
- Depth 150 mm.

The terminal enclosure can be installed vertically (the width becomes the height).
- Wall mounting directly or by means of fixing lugs (to be ordered separately).
- 4 M8 × 25 shouldered backstuds.
- Body without cable-gland openings.

Door
- Easily removable and reversible door, with 20-mm return with double sheet thickness granting excellent rigidity; equipped with 2 hinges opening to 180°.
- Door opening to more than 180° for maximum accessibility (the door comes to rest on the body of the enclosure in top position).
- Maximum acceptable load on the door: 20 kg/m^2.
- Wall-mounting enclosure supplied with 3-mm double-bar lock as standard.
- Polyurethane gasket.
- M6 × 16 earthing screw for equipotential connection between the door and the body of the enclosure.

Dedicated accessories
The terminal enclosure, with a depth of 150 mm, can be equipped:
- With 2 rails to be installed on the 4 M8 × 25 shouldered backstuds.
- With a symmetrical rail to be installed on the rails.
- With a 6-mm^2 earth braid to be placed between the body and the door.
- See page **2/18**.

It can also be equipped with a plain mounting plate, see page **7/2**.
This range is completed by the Spacial offer with screw-on cover, see page **1/6**.

Specific

On demand, it is possible to install the same enclosure dimension with a door with standard opening (not drop-leaf). Please consult our specific service.

See also the accessories

Fixing lugs for the earthing strip page **7/141**

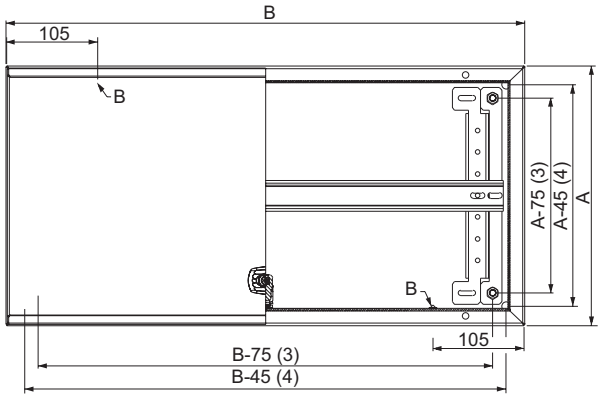
Cable-gland entries without connectors page **7/106**

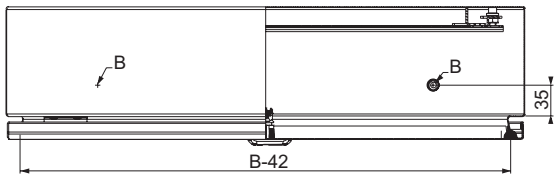
Viewing window page **7/135**

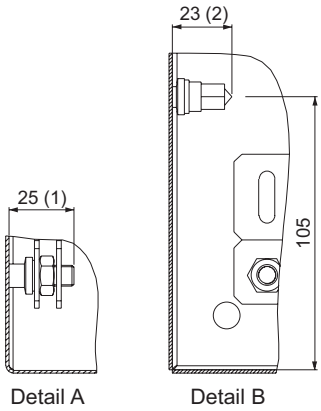
Dimensions

A: Enclosure height
B: Enclosure width
C: Enclosure depth

(1) With ladder mounting plate installed.
(2) M6 × 17.5 mm earthing stud.
(3) Stud centre-to-centre distance.
(4) Centre-to-centre distance of the holes for direct fixing.
(5) Drop-leaf door.







The provided dimensions are with the ladder mounting plate, which is the most commonly used accessory with this enclosure.

See also the accessories

Equipment mounting plate page **7/2**

Accessories for mounting plate page **7/7**

Cable-management accessories page **7/120**

The ideal coupling enclosure with FL21 cut-out

Introduction

Coupling enclosure, depth 170 mm, with plain door, for equipping with terminals. Equipped with a plain door without drop-leaf opening. Delivered without cable-gland plate.
Selection guide, page **2/36**.

Technical characteristics

- Protection degree: IP 65 (with membrane mounted).
- Resistance to external mechanical impacts: IK 10.
- Structured finish, epoxy-polyester powder, RAL 7035 grey colour.

Body
Single-piece body, folded and welded. Front rail with double sheet thickness, gutter-shaped.
- Wall mounting directly or by means of fixing lugs (to be ordered separately).
- 4 M8 × 25 shouldered backstuds.
- Body with FL21-type cable-gland opening on the bottom of the enclosure (blanking plate ref. **NSYAECPFLBP** to be ordered separately).
- FL21 membranes, page **7/105**.

Door
- Easily removable and reversible door, with 20-mm return with double sheet thickness granting excellent rigidity; equipped with 2 hinges opening to 120º.
- Door opening to more than 120° for maximum accessibility (the door comes to rest on the body of the enclosure in top position).
- Maximum acceptable load on the door: 50 kg/m^2.
- Wall-mounting enclosure supplied with 3-mm double-bar lock as standard.
- Polyurethane gasket.
- M6 × 16 earthing screw for equipotential connection between the door and the body of the enclosure.

Dedicated accessories
The terminal enclosure, with a depth of 170 mm, can be equipped:
- With 2 rails to be installed on the 4 M8 × 25 shouldered backstuds.
- With a symmetrical rail to be installed on the rails.
- With a 6-mm^2 earth connection to be placed between the body and the door.
- See page **7/139**.

It can also be equipped with a plain mounting plate, see page **7/2**.

This range is completed by the Spacial S3DB and Spacial S57 offer.

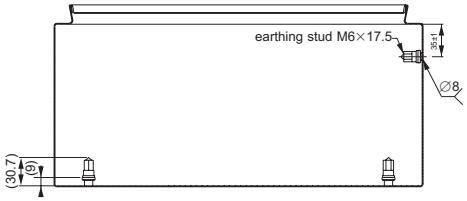
See also the accessories

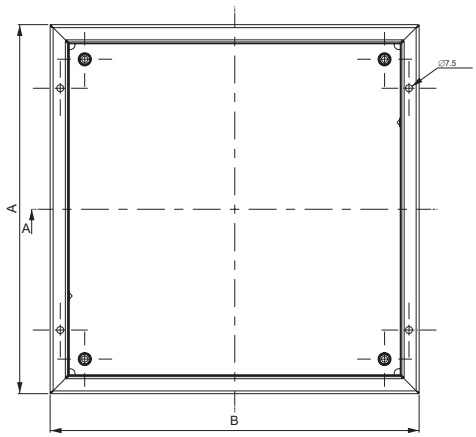
Fixing lugs for the earthing strip page **7/141**

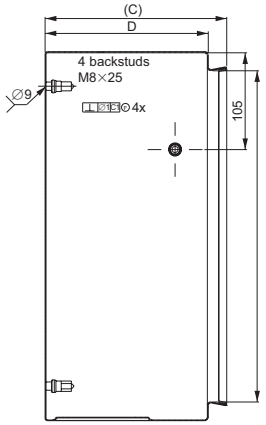
Cable-gland entries without connectors page **7/106**

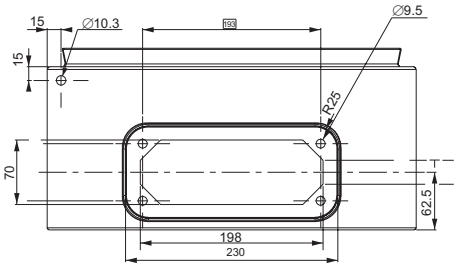
Viewing window page **7/135**

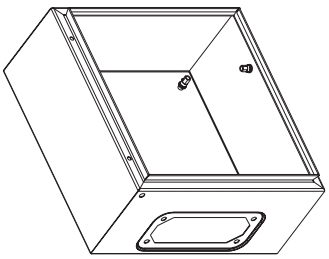
Dimensions


earthing stud M6×17.5
35±1
∅8
(30.7)
(9)


∅7.5
A
A
B


(C)
D
4 backstuds
M8×25
∅9
4x
105


15
∅10.3
193
∅9.5
15
R25
70
62.5
198
230



The dimensioned steel enclosure for your modular distribution application

Introduction

S3DM enclosure.

S3DM enclosure equipped with a DLM* modular chassis.

Top and bottom chequered cable-gland plates.

8 dimensions with a depth of 150 mm and glazed door. From H 400 × W 300 to H 1000 × W 800 mm.
Enclosure with transparent door, 4-mm Securit® glass.
Plain door on demand, see page **2/43**.
Selection guide, page **2/36**.

Technical characteristics

- Structured finish, polyester powder, RAL 7035 grey colour.
- Protection degree: IP 66.
- Resistance to external mechanical impacts: IK 08.

Body

- Single-piece body, folded and welded. Front rail with double sheet thickness, gutter-shaped.
- Wall mounting by means of fixing lugs (to be ordered separately, see page **2/24**).
- 4 M8 × 25-mm shouldered backstuds for installing chassis and step slides, leaving a space of 10 mm behind them.
- Cable-gland plate (245 × 80) at the top and bottom of the enclosure, guaranteeing the maximum access surface (page **2/27**).

Door

- Transparent door, 4-mm Securit® glass (plain door, see page **2/43**).
- Easily removable and reversible door, with 20-mm return with double thickness granting excellent rigidity, opening to 120°, equipped with 2 or 3 invisible hinges. Three locking points for heights of more than 600 mm.
- Wall-mounting enclosure supplied with 3-mm double-bar lock as standard.
- Perforated rails on the hinge side of the door, with drill holes with a diameter of 4.2 mm in steps of 25 mm.
- Polyurethane gasket.
- M6 × 16-mm earthing screw for equipotential connection between the door and the body of the enclosure.

Dedicated accessories

- The Spacial S3DM enclosure for modular distribution can be equipped with:

– A modular chassis (**NSYDLM•••**) with cut-out front panels for 24 to 234 modules according to the dimensions and references (see page **7/70**).
– A 6-mm^2 earth connection placed between the body and the door.

For enclosures with a depth of 150 mm, the chassis can be installed at the front or on the backstuds at the rear. It is possible to adjust its depth using the adjustable supports.
It can also be equipped with a plain mounting plate, see page **7/2**.

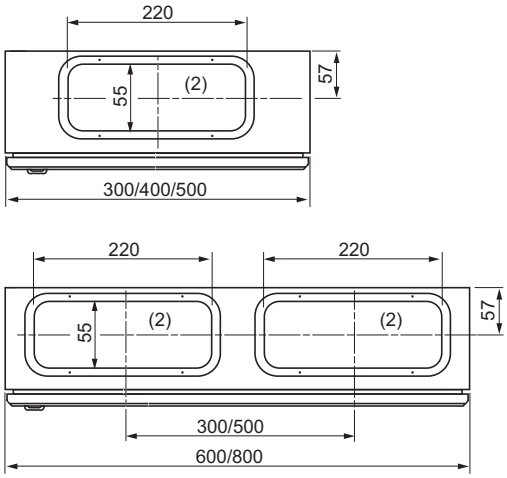
*The DLM modular chassis consists of metal cut-out front panels which can clip on with any screws. Rigid structure made from galvanised steel.The depth of the chassis can be adjusted from 40 to 85 mm, between the rail and the front panel, allowing the installation of all types of devices.The enclosure can be equipped with accessories from the Spacial standard wall-mounting range.

See also the accessories

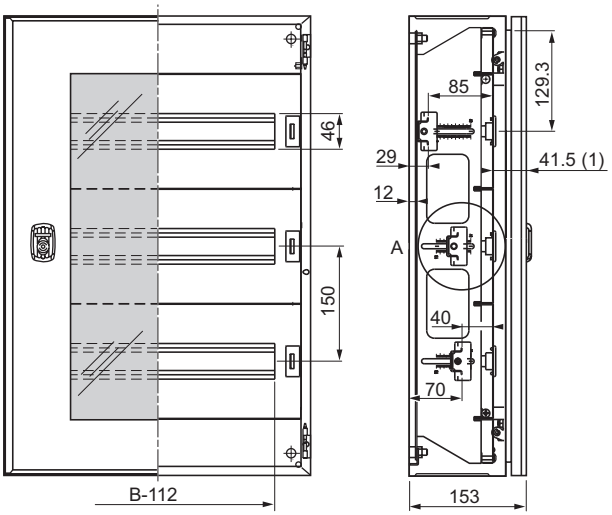
Blanking plate page **7/73**

Terminal blocks page **7/98**

Dimensions

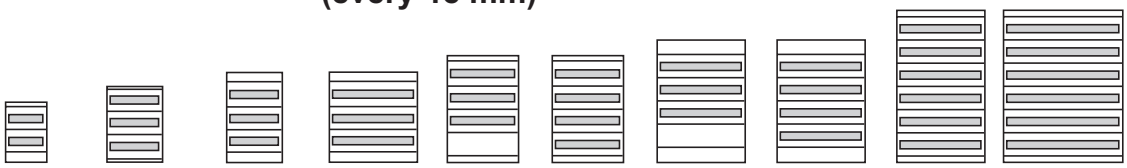


(1) Front face of the modular chassis / front face of the door.
(2) Cable-gland plates at the top and bottom of the enclosure.



Front panel cut-out
(see page **7/71**)

Number of modules per chassis** (every 18 mm)



Chassis reference	NSYDLM24	NSYDLM48*	NSYDLM48P*	NSYDLM84*	NSYDLM66	NSYDLM88	NSYDLM84P	NSYDLM112	NSYDLM168	NSYDLM240
Enclosure height (mm)	400	500	600	600	700	700	800	800	1000	1000
Enclosure width (mm)	300	400	400	600	500	500	600	600	600	800
Number of rows	2	3	3	3	3	4	3	4	6	6
Modules per row	12	16	16	28	22	22	28	28	28	39
Total nº of modules	24	48	48	84	66	88	84	112	168	234

* References **NSYDLM48**, **NSYDLM48P** and **NSYDLM84**, the central row cannot receive modules at the height of the lock (check our technical instructions) when installed at the front of the enclosure. In this case, 1 module is sealed up.
** DLM modular chassis, see page **7/70**.

The provided dimensions are with the modular chassis, which is the most commonly used accessory with this enclosure.

Selection guide of plain doors for S3DM enclosure

Description	References
Spacial wall-mounting enclosure, H400 × W300	**NSYPS3D43**
Spacial wall-mounting enclosure, H500 × W400	**NSYPS3D54**
Spacial wall-mounting enclosure, H600 × W400	**NSYPS3D64**
Spacial wall-mounting enclosure, H600 × W600	**NSYPS3D66**
Spacial wall-mounting enclosure, H700 × W500	**NSYPS3D75**

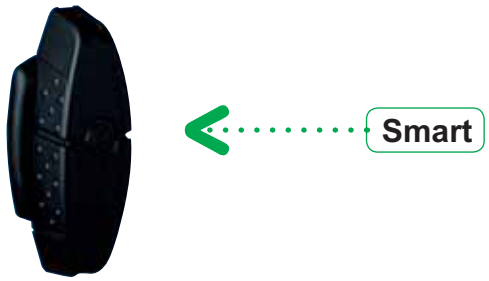
See also the accessories

Mounting plate
page **7/2**

Accessories for mounting plate
page **7/7**

Cable-management accessories
page **7/101**

The IP 66 19" steel enclosure is ideal for your application!



19" enclosure, IP 66

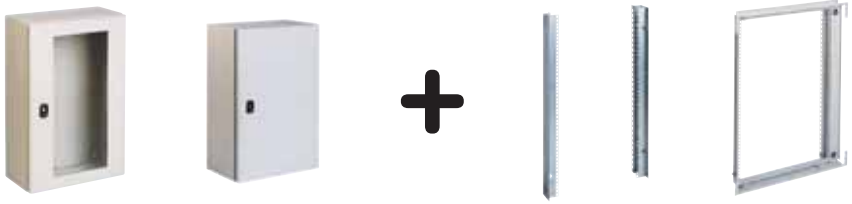
Smart:

Easily dismountable, captive hinges.

Easy:

Effortless door closing with flexible polyurethane gasket.

Enclosures equipped



Enclosures to be equipped

Choice:

1-body enclosure with swing rack: 5 references from 4 U to 16 U.
1-body enclosure with fixed rack:
5 references from 5 U to 17 U.
2-body enclosure: 10 references, 400 or 500 mm deep, from 5 U to 17 U.
All form inserts, many key locks.

Simplified control:

Pre-installed fixed or swing rack; earth connection placed between the door and the body; the enclosure is ready to use; the cardboard packaging can be reused after cabling.

Practical:

Cable-gland plates at top and bottom:
- on the rear part (2-body enclosure),
- on the body (1-body enclosure).

Smart:

Locking handle delivered with the provisional (partial engagement) or final (full engagement) enclosure.
Can also be used to loosen the caps protecting the studs when painting.

Attractive:

Chamfered door, plasma welding, polyester paint, tinted Securit® glass, ergonomic bi-material handle (optional).

And also...

Practical:

Large range of accessories, reusable packaging.

Light and resistant:

Sheet-steel enclosure, cross-shaped structure, before folding.

Certification:

According to standard IEC 62208.

19" enclosure, IP 66
Introduction and selection guides

1-body enclosure with fixed rack

Spacial VDM 1-body 19" enclosure steel

The offer of VDM 19" steel enclosures, for electronics and networks, consists of 2 ranges:
- 1-body enclosure, 400 mm deep, with fixed or swing rack.
- 2-body enclosure, 380 and 480 mm deep.

Technical characteristics

- Structured finish, polyester powder, RAL 7035 grey colour. Other colours, please consult us.
- Protection degree: IP 66.
- Resistance to external mechanical impacts: IK 08.
- Single-piece body, folded and welded. Front rail with double sheet thickness, gutter-shaped.
- Perforated rails on the door, with drill holes of ∅ 4.2 mm in steps of 25 mm.
- Transparent door, Securit® glass, easily removable and reversible, with 20-mm return with double thickness granting excellent rigidity, opening to 120°, equipped with 2 or 3 invisible hinges. Three closure points for heights of more than 600 mm.
- Wall-mounting enclosure supplied with 3-mm double-bar lock as standard.
- Polyurethane gasket.
- 6 mm^2 earth connection placed between the door and the body of the enclosure.
- Wall mounting by means of fixing lugs (to be ordered separately).
- Special installation: please consult us.

1-body enclosure with swing rack

1-body enclosure, 400 mm deep, with fixed rack

Number of U	Ext. dimensions (mm)			Reference
	Height	Width	Depth	
5	300	600	400	**NSYVDM5U4F**
8	400	600	400	**NSYVDM8U4F**
10	500	600	400	**NSYVDM10U4F**
14	700	600	400	**NSYVDM14U4F**
17	800	600	400	**NSYVDM17U4F**

1-body enclosure, 400 mm deep, with swing rack

Number of U	Ext. dimensions (mm)			Reference
	Height	Width	Depth	
4	300	600	400	**NSYVDM4U4P**
7	400	600	400	**NSYVDM7U4P**
9	500	600	400	**NSYVDM9U4P**
13	700	600	400	**NSYVDM13U4P**
16	800	600	400	**NSYVDM16U4P**

- These enclosures are available equipped with a 19" swing rack or a 19" fixed rack.
- Enclosure in 2 pieces: body + door.
- Heights: 4, 7, 9, 13 and 16 U with a swing rack and 5, 8, 10, 14 and 17 U with a fixed rack.
- Cable-gland plate at the bottom of the enclosure
- Fixed rack depth-adjustable in steps of 25 mm using the step slides.
- Maximum load: 3 kg per unit.

19" enclosure, IP 66
Introduction and selection guides

Spacial VDM 2-body 19" enclosure steel

Rear

- Depth: 150 mm.
- Internal attachment point for fixing various supports.
- Hinges and locking system with the body.
- Cable-gland plate at the top and bottom.

Body

- Usable depth of 183 or 283 mm.
- Two 19" uprights made from treated steel, installed 65 mm back from the front panel.
- Height: 5, 8, 10, 14 and 17 U.
- Intermediate body installed on the rear with 120° hinge.
- Maximum load: 2 kg per unit.

2-body enclosure, 380 mm deep, with fixed rack

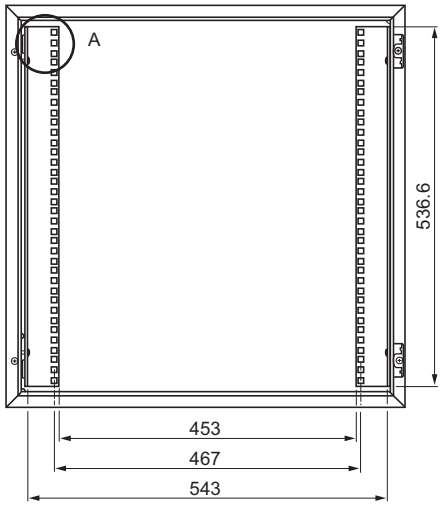
Number of U	Ext. dimensions (mm)			Reference
	Height	Width	Depth	
5	300	600	380	**NSYVD2M5U4**
8	400	600	380	**NSYVD2M8U4**
10	500	600	380	**NSYVD2M10U4**
14	700	600	380	**NSYVD2M14U4**
17	800	600	380	**NSYVD2M17U4**

2-body enclosure, 480 mm deep, with fixed rack

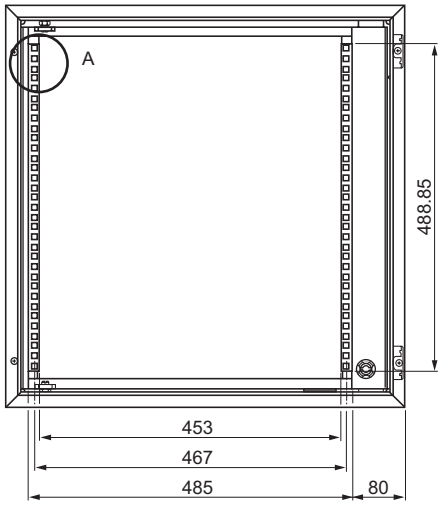
Number of U	Ext. dimensions (mm)			Reference
	Height	Width	Depth	
5	300	600	480	**NSYVD2M5U5**
8	400	600	480	**NSYVD2M8U5**
10	500	600	480	**NSYVD2M10U5**
14	700	600	480	**NSYVD2M14U5**
17	800	600	480	**NSYVD2M17U5**

19" enclosure, IP 66
Dimensions

Fixed chassis

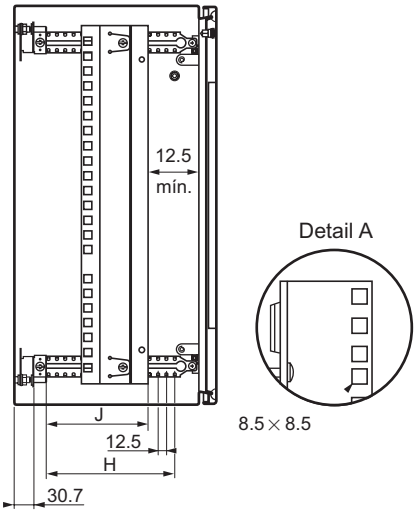


Swing chassis

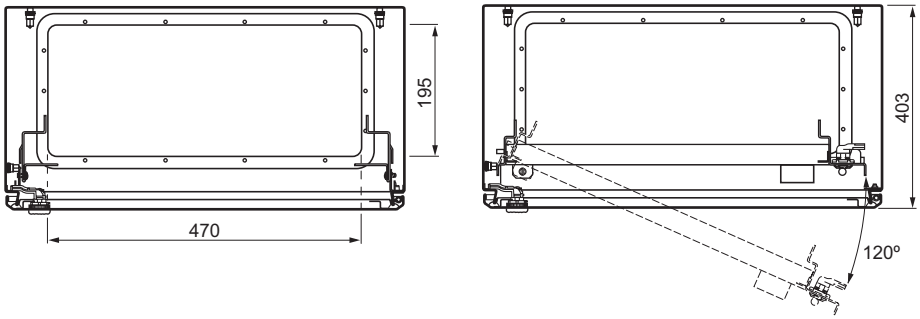


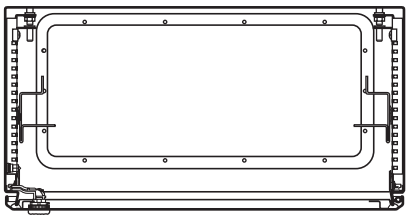
Fixed chassis mounted on the step slides

Lateral view



Top view



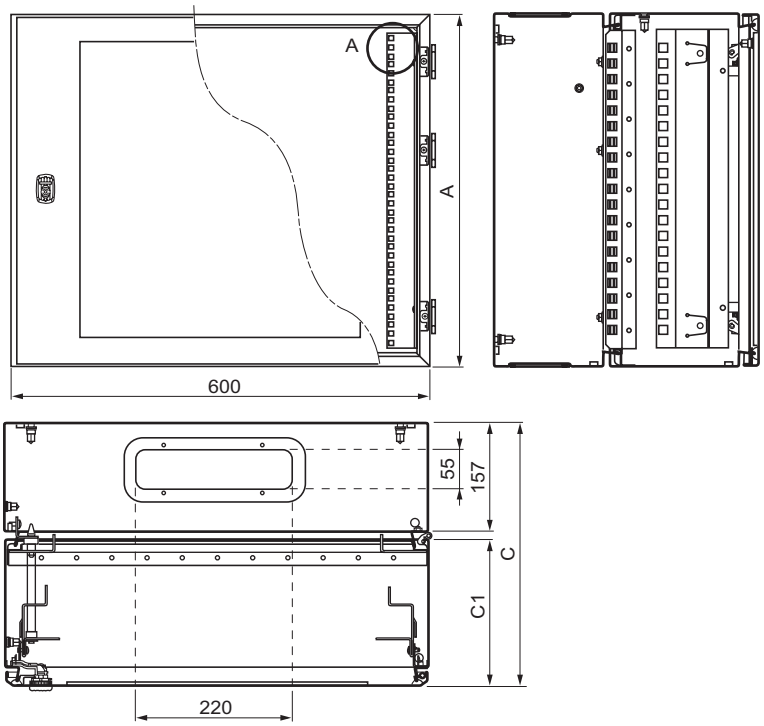


H (bars) (mm)	J (travel) (mm)
200	100
250	150
300	200
400	300

Enclosures dimension			Fixed chassis	Swing chassis	Unit number	D	E	F	G
Height (A)	Width (B)	Depth (C)							
400	600	250/300	**NSYVDM8UF**		8	-	359	188/238	61
600	600	250/300	**NSYVDM12UF**		12	-	537	188/238	61
800	600	250/300/400	**NSYVDM17UF**		17	-	759	188/238/338	61
1000	600	250/300	**NSYVDM21UF**		21	-	937	188/238	61
400	600	250/300		**NSYVDM7UP**	7	342	311	188/238	59
600	600	250/300		**NSYVDM11UP**	11	542	489	188/238	59
800	600	250/300/400		**NSYVDM16UP**	16	742	711	188/238/338	59
1000	600	250/300		**NSYVDM20UP**	20	942	889	188/238	59
1000	800	250/300/400		**NSYVDM20U8P**	20	942	889	188/238/338	59
1200	800	300/400		**NSYVDM20U8P**	25	1142	1111	238/338	59

19" enclosure, IP 66
Dimensions

2-body 19" enclosure



A (mm)	C (mm)	C1 (mm)	Reference
300	373	183	**NSYVD2M5U4**
400	373	183	**NSYVD2M5U5**
500	373	183	**NSYVD2M8U4**
700	373	183	**NSYVD2M8U5**
800	373	183	**NSYVD2M10U4**
300	473	283	**NSYVD2M10U5**
400	473	283	**NSYVD2M14U4**
500	473	283	**NSYVD2M14U5**
700	473	283	**NSYVD2M17U4**
800	473	283	**NSYVD2M17U5**

19" enclosures
Introduction and selection guides

Industrial networks to be equipped with 19" uprights

Technical characteristics

- Two types of enclosures are available:
– Enclosure with plain door,
– Enclosure with glazed door, Securit® glass, 4 mm thick.
- Structured finish, polyester powder, RAL 7035 grey colour.
- Protection degree: IP 66 for all single-door enclosures.
- Resistance to external mechanical impacts:
– IK 10 for the plain-door enclosures,
– IK 08 for the glazed-door enclosures.
- The enclosures are delivered without 19" rack.

Fixed or swing rack

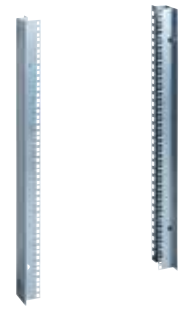
- Fixed rack made up of 2 uprights with fixings.
- Swing rack opening to 120° with 3-mm double-bar insert lock.
- Material: galvanised sheet steel, 20/10 mm thick.
- Maximum load: 3 kg per unit.

Selection guide for S3D universal enclosures to be equipped with 19" fixed or swing rack

Enclosure dimensions (mm)			Reference of the empty enclosure		Fixed rack (1)		Swing rack (1)	
Height	Width	Depth	Glazed door	Plain door	Reference	Number of U	Reference	Number of U
400	600	250	**NSYS3D4625T**	**NSYS3D4625**	**NSYVDM8UF**	8	**NSYVDM7UP**	7
600	600	250	**NSYS3D6625T**	**NSYS3D6625**	**NSYVDM12UF**	12	**NSYVDM11UP**	11
600	600	300	**NSYS3D6630T**	**NSYS3D6630**	**NSYVDM12UF**	12	**NSYVDM11UP**	11
600	600	400	**NSYS3D6640T**	**NSYS3D6640**	**NSYVDM12UF**	12	**NSYVDM11UP**	11
800	600	250	**NSYS3D8625T**	**NSYS3D8625**	**NSYVDM17UF**	17	**NSYVDM16UP**	16
800	600	300	**NSYS3D8630T**	**NSYS3D8630**	**NSYVDM17UF**	17	**NSYVDM16UP**	16
800	600	400	**NSYS3D8640T**	**NSYS3D8640**	**NSYVDM17UF**	17	**NSYVDM16UP**	16
1000	600	250	**NSYS3D10625T**	**NSYS3D10625**	**NSYVDM21UF**	21	**NSYVDM20UP**	20
1000	600	400	**NSYS3D10640T**	**NSYS3D10640**	**NSYVDM21UF**	21	**NSYVDM20UP**	20
1000	800	250	**NSYS3D10825T**	**NSYS3D10825**	**-**	-	**NSYVDM20U8P**	20
1000	800	300	**NSYS3D10830T**	**NSYS3D10830**	**-**	-	**NSYVDM20U8P**	20
1000	800	400	**NSYS3D10840T**	**NSYS3D10840**	**-**	-	**NSYVDM20U8P**	20
1200	800	300	**NSYS3D12830T**	**NSYS3D12830**	**-**	-	**NSYVDM25U8P**	25
1200	800	400	**NSYS3D12840T**	**NSYS3D12840**	**-**	-	**NSYVDM25U8P**	25

(1) The racks are to be ordered separately.

Mounting accessories
Installation accessories



19" fixed chassis for wall mounting enclosure IP 66

- 19" fixed chassis comprising 2 19" uprights with fixing.
- Matérial: galvanized steel, thickness 20/10 mm.
- Maximum load: 3 kg per unit.
- Adjustable in depth by fixing on the step slides in accessories.

Enclosure (mm)		Unit number	Reference
Height	Width		
400	600	8	**NSYVDM8UF**
600	600	12	**NSYVDM12UF**
800	600	17	**NSYVDM17UF**
1000	600	21	**NSYVDM21UF**

19" swing chassis for wall mounting enclosure IP 66

- 19" swing chassis opening to 120° with closure by 3 mm double bar insert.
- Material: steel, textured epoxy-polyester powder paint colour grey RAL 7035.
- Maximum load: 3 kg per unit.

Enclosure (mm)		Unit number	Reference
Height	Width		
400	600	7	**NSYVDM7UP**
600	600	11	**NSYVDM11UP**
800	600	16	**NSYVDM16UP**
1000	600	20	**NSYVDM20UP**
1000	800	20	**NSYVDM20U8P**
1200	800	25	**NSYVDM25U8P**

The Spacial S3DEX steel enclosure according to the ATEX directive

Aesthetics
New RAL 7035

Choice
With 10 sizes

Easy
Easily reversible door

Solid
Resistance to external mechanical impacts IK 10

Smart
1 operating point for 3 locking points from H600

Aesthetics

- Sheet-steel enclosure.
- Structured finish, RAL 7035 grey colour.
- Single-piece body with a cross-shaped structure.

Solid

- Resistance to external mechanical impacts: IK 10.
- Protection degree: IP 66. Polyurethane gasket.
- Front rail of the body with double fold, gutter-shaped.

Choice

- Solid door: 10 references.

Smart

- 3-mm double-bar lock as standard.
- For heights exceeding 600 mm, three closure points with single operating point.

Easy

- The door can be removed and turned over to open towards the left.

Practical

- Large variety of common accessories with the Spacial wall-mounting enclosure range.

– Plain mounting plate.
– Silkscreened mounting plate.
– Microperforated mounting plate.
– Telequick mounting plate.
– DIN rail chassis.

- Reusable packaging.

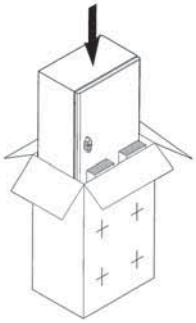
Blind nut for external earth connection.

Earthing studs welded to the door and inside the body.

The mounting plate is mounted on four 10-mm shouldered backstuds.

The 4 fixing holes are blocked by 4 crimped blind nuts.

Example of specific ATEX marking.



Delivered in reusable cardboard with assembly instructions enclosed and wall installation template on the cardboard.

Introduction

Download our ATEX certificates and product sheets over the internet.

Technical characteristics

The Spacial S3DEX range of steel enclosures is certified by LCIE with no. LCIE 02ATEX0037U and codicil no. LCIE 02ATEX0037U/01 (component certificate).

The enclosures have the following marks:
Ⓔx II 2 GD Ex tD A21 IP6X according to ATEX directive 94/9/EC and standards EN 60079-0 (2004), EN 60079-7 (2006), EN 61241-0 (2005) and EN 61241-1 (2004).

Technical description

- Tightness by protection rating: IP 66 (enclosures with single door).
- Resistance to external impacts: IK 10.
- Structured finish, epoxy-polyester powder paint, RAL 7035 grey colour.

Compared with the universal Spacial wall-mounting enclosure, the Spacial S3DEX enclosure has:
- The four fixing holes blocked by four crimped blind nuts.
- One crimped M8 blind nut for an external earth connection (braid not supplied).

Enclosure body

- 4 M8 × 25 shouldered backstuds for mounting the mounting plate and the step slides leaving a space of 10 mm behind them.
- Cable-gland plate with grid pattern to facilitate drilling and provide the maximum access surface.
- Welded earthing stud for equipotential connection between the door and the body.

Door

- Standard enclosure supplied with a double-bar lock.
- Polyurethane sealing gasket.
- Equipotential connection between the door and the body by means of the M6 × 16 earthing screws.
- Removable and reversible door, opening to 120°.
- Simple reversal of linkage.
- Maximum load: 50 kg/m^2.
- Perforated rails on the door: 2 vertical rails from H = 400 mm, 2 vertical rails and 2 horizontal rails from W = 800 mm.

Ambient temperature limits:
–25 °C ≤ Ta ≤ +40 °C.

Delivered in an impact-resistant, eco-friendly packaging.

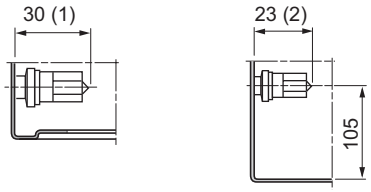
Enclosure dimensions (mm)			Enclosure reference	Mounting plates				Mixed symmetrical chassis	Bars slides	Fixing legs	
Height	Width	Depth		Plain	Silkscreened	Microperforated	Telequick			Steel	Stainless steel
300	200	150	NSYS3DEX3215	NSYMM32	-	-	NSYMR32	-	-	NSYAEFPFSC	NSYAEFPFXSC
300	300	200	NSYS3DEX3320	NSYMM33	-	NSYMF33	NSYMR33	NSYMD33	NSYSDCR200	NSYAEFPFSC	NSYAEFPFXSC
400	300	200	NSYS3DEX4320	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYMD43	NSYSDCR200	NSYAEFPFSC	NSYAEFPFXSC
400	400	200	NSYS3DEX4420	NSYMM44	NSYMS44	NSYMF44	-	-	NSYSDCR200	NSYAEFPFSC	NSYAEFPFXSC
500	400	200	NSYS3DEX5420	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYMD54	NSYSDCR200	NSYAEFPFSC	NSYAEFPFXSC
600	400	250	NSYS3DEX6425	NSYMM64	NSYMS46	NSYMF64	NSYMR64	NSYMD64	NSYSDCR250	NSYAEFPFSC	NSYAEFPFXSC
600	600	250	NSYS3DEX6625	NSYMM66	NSYMS66	NSYMF66	NSYMR66	NSYMD66	NSYSDCR250	NSYAEFPFSC	NSYAEFPFXSC
700	500	250	NSYS3DEX7525	NSYMM75	NSYMS75	NSYMF75	NSYMR75	NSYMD75	NSYSDCR250	NSYAEFPFSC	NSYAEFPFXSC
800	600	300	NSYS3DEX8630	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMD86	NSYSDCR300	NSYAEFPFSC	NSYAEFPFXSC
1000	800	300	NSYS3DEX10830	NSYMM108	-	NSYMF108	NSYMR108	NSYMD108	NSYSDCR300	NSYAEFPFSC	NSYAEFPFXSC

The accessories of the Spacial standard wall-mounting enclosures can be installed in the Spacial S3DEX wall-mounting enclosures. However, plastic accessories should not be used, due to the risk of a static charge.

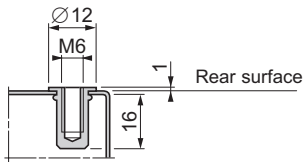
Dimensions

A: Height
B: Width
C: Depth

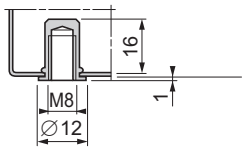
(1) 4 M8 × 25 mm backstuds.
(2) 2 M6 × 17.5 mm earthing studs.
(3) Stud centre-to-centre distance.
(4) Crimped blind nut centre-to-centre distance.
(5) Blind nut for external earth.



Detail (1) **Detail (2)**

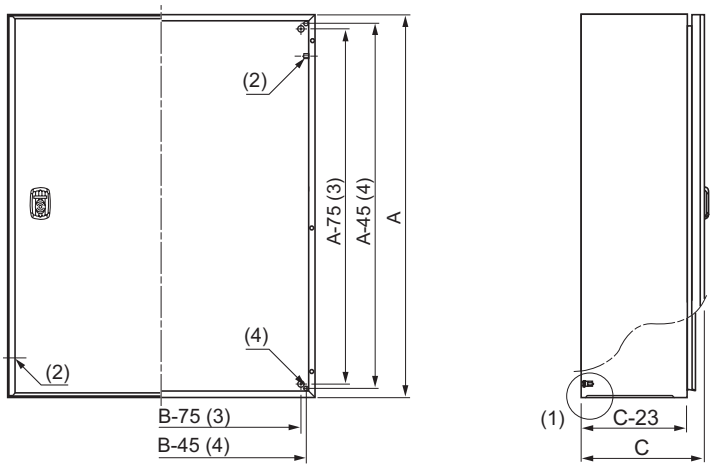


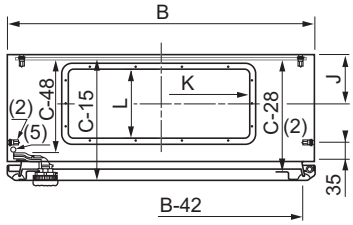
Detail (4)
4 crimped blind nuts for direct fixing of the fixing lugs



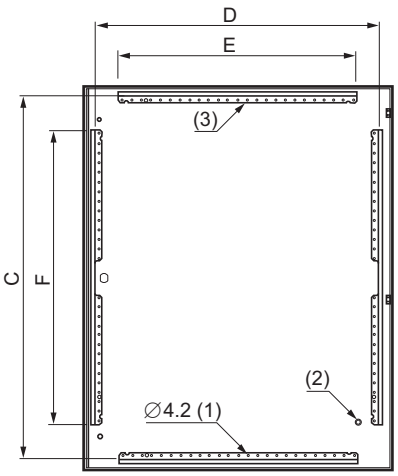
Detail (5)
1 crimped blind nut for the external earth

1-door enclosure





Enclosure (mm)		Cable-gland plate				
Width	Depth	Dimensions (mm)	No	J	K	L
200	150	140 × 80	1	57	115	55
300	200	245 × 130	1	80	220	105
400	200-250	345 × 130	1	80	320	105
500	250	445 × 130	1	80	420	105
600	250	545 × 130	1	80	520	105
600	300	495 × 220	1	126	470	195
800	300	345 × 130	2	80	320	105



(1) Perforations with a pitch of 25 mm.
(2) 1 M6 × 17.5 mm earthing stud.

Perforated rails on the door

Enclosure (3) (mm)		Perforated rails on the door (mm)			
Height (A)	Width (B)	Vertical		Horizontal	
		F	D	E	C
400	300	320	237	-	-
400	400	320	337	-	-
600	400	370	337	-	-
600	600	370	537	-	-
700	500	470	437	-	-
800	600	570	537	-	-
1000	800	770	737	620	949

(3) The doors of enclosures with dimensions of less than 800 × 600 mm do not have horizontal wire guides.

The steel enclosure suited to your electromagnetic protection needs

Enclosure delivered with plain mounting plate

- Single-piece metal enclosures made from special sheets of ALUZINC 150.
- The presence of 55% aluminium on the surface of the sheet metal ensures good reflection of electromagnetic waves.
- Painted on the outside with epoxy-polyester resin, RAL 7035 grey, structured.

Technical characteristics

- Protection degree: IP 55, according to IEC 60529.
- Resistance to external mechanical impacts: IK 10.
- Body:

– Single-piece body, folded and welded.
– Entirely sealed body with no cable entry and no opening.

- Equipped with four shouldered backstuds allowing direct fixing of the mounting plate:

– Built-in plain mounting plate made from galvanised sheet steel (potential reference sheet).
– Its low resistivity promotes earth continuity.
– Direct fixing or using wall-fixing lugs, ref. **NSYPFCR** (to be ordered separately).

- Door:

– The special body-door gasket (IP + EMC) provides, in addition to water and dust **tightness**, electric continuity between the door and the body of the enclosure.
– The metal lock with earth continuity helps improve the general shielding.
– An earthing braid added to the enclosure between the body and the door guarantees a good earth connection and, consequently, good electromagnetic compatibility.
– 3-mm double-bar lock.

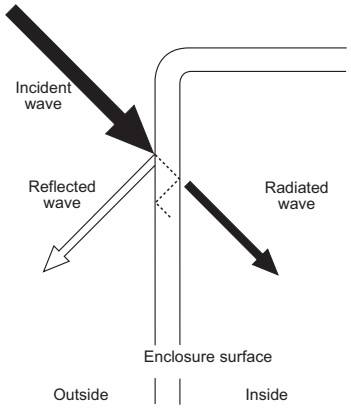
Other sizes: consult us.

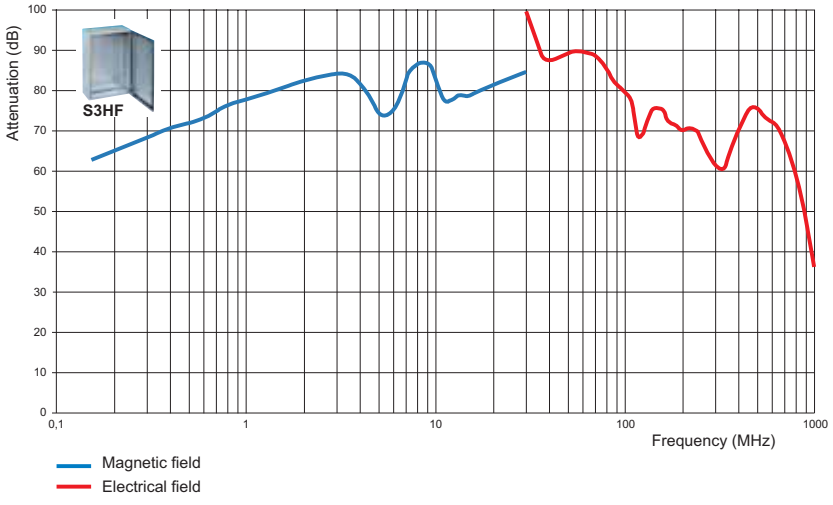
Dimensions (mm)			Fig.	Weight Kg	Reference
Height	Width	Depth			
400	300	200	1	7.5	**NSYS3HF4320P**
400	600	200	1	13.0	**NSYS3HF4620P**
500	400	200	2	11.5	**NSYS3HF5420P**
600	400	200	2	13.0	**NSYS3HF6420P**
600	600	250	2	20.5	**NSYS3HF6625P**
700	500	250	2	19.0	**NSYS3HF7525P**
800	600	300	2	32.8	**NSYS3HF8630P**
1000	800	300	2	53.2	**NSYS3HF10830P**
1200	800	300	2	59.0	**NSYS3HF12830P**

Fixing lugs, ref. **NSYPFCR** to be ordered separately (1 set of 4 lugs).

Attenuation of the Spacial S3HF enclosure

The graphic next to these lines shows the attenuation curves (dB) according to the frequency (MHz).
General information on Electromagnetic Compatibility, see pages **9/14** to **9/16**.





Dimensions

A = Height.
B = Width.
C = Depth.

Figure 1

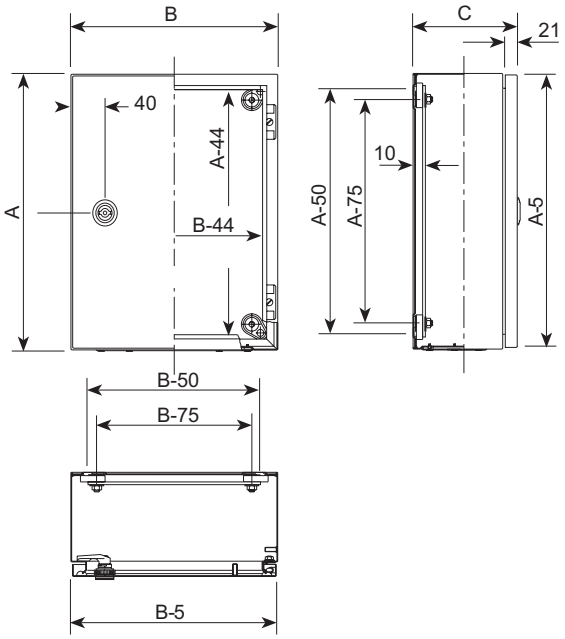
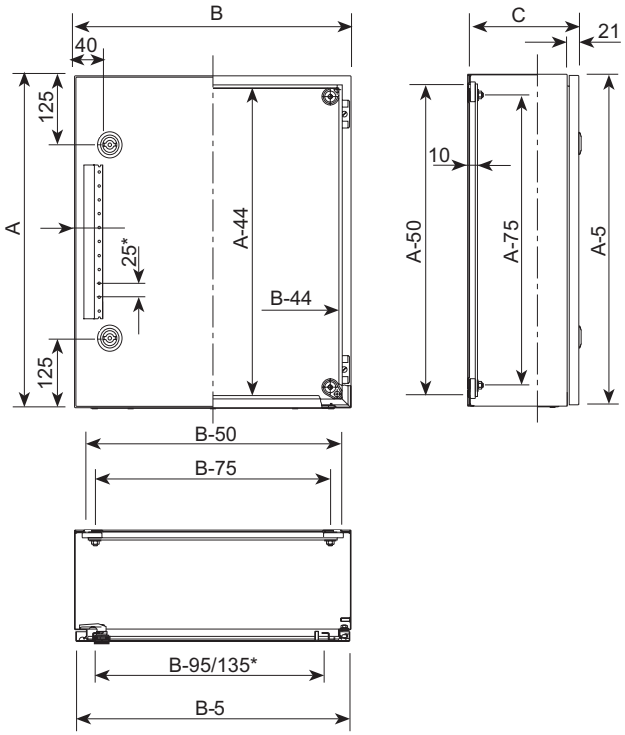


Figure 2



* Model 1200 × 800.

2

See also the accessories

Door accessories see page **7/130**

Rails see page **7/50**

Ventilation see page **8/20**

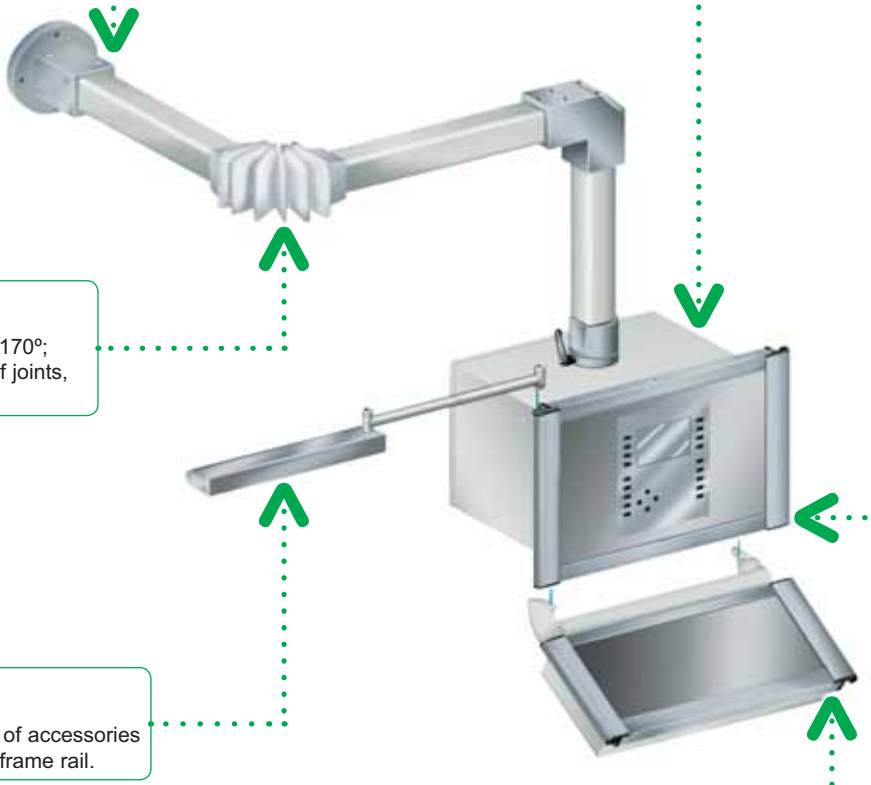
The Control and Human-Machine Dialogue enclosure, ideal for all your interfaces

Robustness

Fixing on metal support.
Metal tube.
Fixing on aluminium enclosure.

Choice

8 dimensions.



Flexibility

Rotation through 170°; complete range of joints, fixed or rotating.

Ergonomics

The rail of the frame guarantees good rigidity for the enclosure.

Easy

Direct installation of accessories on the enclosure frame rail.

Practical

Keyboard box fixed directly on the enclosure.

The Spacial S3CM offer for human-machine dialogue consists of:
– Control enclosures.
– A box-keyboard.
– A system of arms and joints, fixed or rotating.
– Accessories.
The global dialogue system combines robustness with aesthetics and ergonomics.

Choice

8 enclosure sizes, with steel body,
from 300 × 300 × 200 mm to 800 × 600 × 300 mm.

Solid

IK 10.
Top wall reinforced by a plate with a thickness of 3 mm.

Sealing

IP 54, polyurethane gasket.

Aesthetics

Extruded aluminium rail frame.
RAL 7040 paint: body.
RAL 7035 paint: enclosure.

Customisation to your image or the aesthetics of your machine: consult us.

Easy

Easy access to the equipment by a rear door, opening to 120°.

Robustness

2 tube sizes in extruded steel, 50 and 80 mm square, thickness 4 mm.

Practical

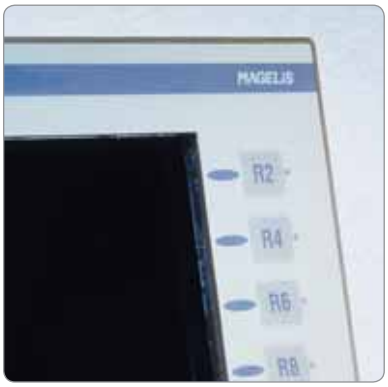
Large range of accessories.

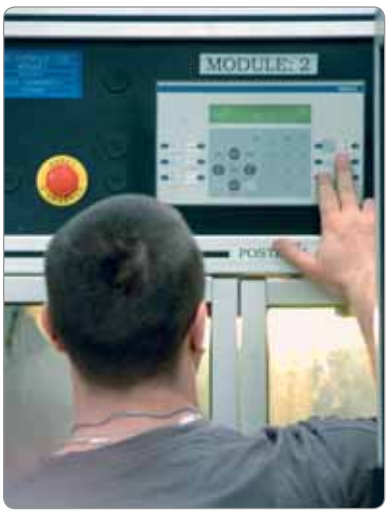
Smart

- Direct installation of accessories on the enclosure frame rail:
– Lighting.
– Vertical document support.
– Keyboard support.
– Keyboard support.
– Laptop computer support.
- A box-keyboard is installed directly on the enclosure.

Standard equipment

2 perforated rails installed on the 2 lateral sides, for installing equipment, earth connection installed on the body.





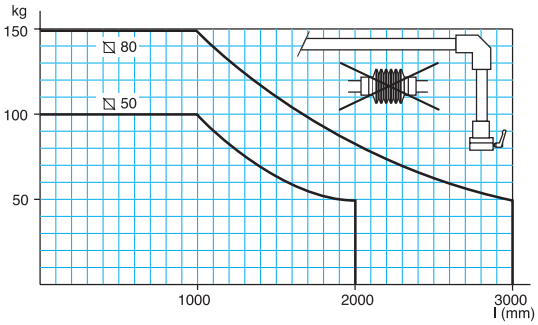
Specific

Customised enclosure production, contact us.

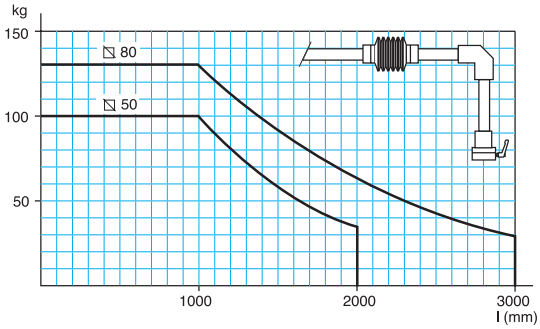
Choice of models according to the load and the overhang

Our system of tubes and joints, fixed or rotating, enables all the solutions to respond to the installation needs of the control enclosures for human-machine dialogue. Every model is suitable for tubes with a square section of 50 mm for light loads, or of 80 mm for heavy loads (see selection table on page **2/62**).

Without intermediate joint

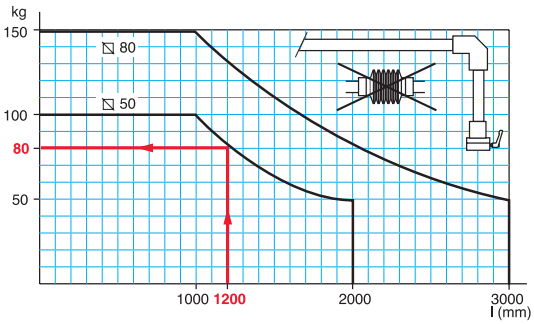


Without intermediate joint



Examples

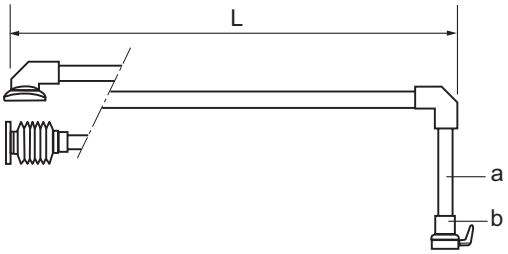
1- Without intermediate joint



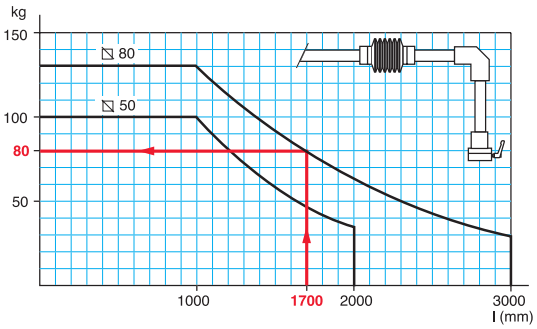
1- Suspension system without intermediate join attached:

The load (a + b + enclosure + installed equipment) must be less than the maximum load.

Example:
Using a system with a diameter of 50 mm, without intermediate join, with an offset of 1200 mm, the maximum supported load is 80 kg.



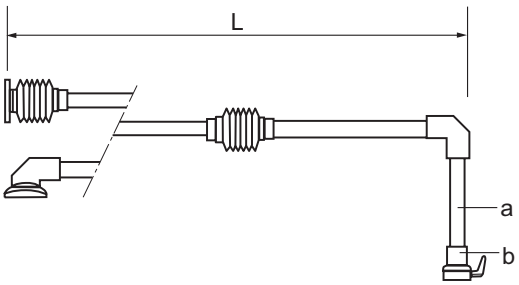
2- Without intermediate joint



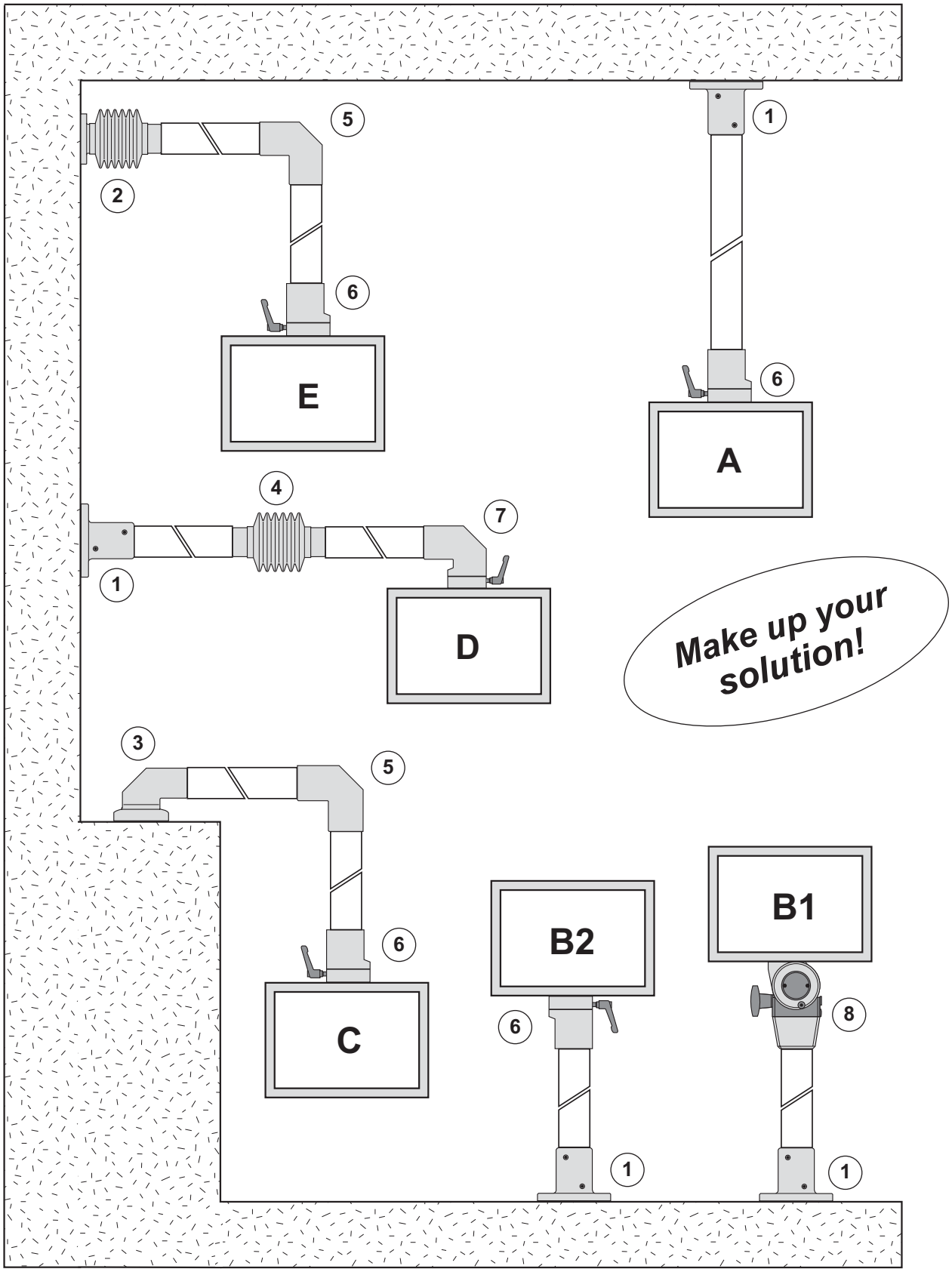
2- Suspension system with intermediate join attached:

The load (a + b + enclosure + installed equipment) must be less than the maximum load.

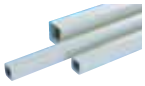
Example:
Using a system with a diameter of 80 mm, without intermediate join, with an offset of 1700 mm, the maximum supported load is 80 kg.



Assembly overview

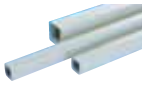


Selection guide

Enclosure	H × W X D (mm) top wall	References					
		To ceiling		B1 floor		B2 floor	
		50 mm	80 mm	50 mm	80 mm	50 mm	80 mm
	300 × 300 × 200	NSYS3CM303020	-	NSYS3CM303020	-	NSYS3CM303020	-
	300 × 400 × 200	NSYS3CM304020	-	NSYS3CM304020	-	NSYS3CM304020	-
	400 × 400 × 200	NSYS3CM404020	-	NSYS3CM404020	-	NSYS3CM404020	-
	400 × 600 × 250	NSYS3CM406025	-	NSYS3CM406025	-	NSYS3CM406025	-
	500 × 500 × 250	NSYS3CM505025	-	NSYS3CM505025	-	NSYS3CM505025	-
	600 × 600 × 200	NSYS3CM606020	-	NSYS3CM606020	-	NSYS3CM606020	-
	600 × 800 × 300	-	NSYS3CM608030	-	NSYS3CM608030	-	NSYS3CM608030
	800 × 600 × 300	-	NSYS3CM806030	-	NSYS3CM806030	-	NSYS3CM806030
Tube	**Length (m) / Tube section**	**50 mm**	**80 mm**	**50 mm**	**80 mm**	**50 mm**	**80 mm**
	0.5	NSYCMT5005	NSYCMT8005	NSYCMT5005	NSYCMT8005	NSYCMT5005	NSYCMT8005
	1	NSYCMT5010	NSYCMT8010	NSYCMT5010	NSYCMT8010	NSYCMT5010	NSYCMT8010
	1.5	NSYCMT5015	NSYCMT8015	NSYCMT5015	NSYCMT8015	NSYCMT5015	NSYCMT8015
	2	NSYCMT5020	NSYCMT8020	NSYCMT5020	NSYCMT8020	NSYCMT5020	NSYCMT8020
Fixing on support (steel material)							
	1 Fixed base	NSYCMUMR50	NSYCMUMR80	NSYCMUMR50	NSYCMUMR80	NSYCMUMR50	NSYCMUMR80
	2 Wall fixing with joint	-	-	-	-	-	-
	3 Rotating straight fitting	-	-	-	-	-	-
Inter-tube fitting (aluminium material)							
	4 Horizontal inter-tube joint	-	-	-	-	-	-
	5 Fixed bracket	-	-	-	-	-	-
Fixing on enclosure (aluminium material)							
	6 Rotating fixing on enclosure	NSYCMUCR50	NSYCMUCR80	-	-	NSYCMUCR50	NSYCMUCR80
	7 Rotating fixing in bracket on enclosure	-	-	-	-	-	-
	8 Tilting fixing on enclosure	-	-	NSYCMUCP50 (1) NSYCMUCP80 (2)	NSYCMUCP50 (3) NSYCMUCP80 (3)	-	-

(1) For tube ∅ 50 mm.
(2) For tube ∅ 80 mm.
(3) Installation on an enclosure D300 requires plate ref. **NSYCMUCPAD87** (see page **2/74**).

Selection guide

Enclosure	H × W × D (mm) top wall	References					
		C on frame.		D wall		E wall	
		50 mm	80 mm	50 mm	80 mm	50 mm	80 mm
	300 × 300 × 200	NSYS3CM303020	-	NSYS3CM303020	-	NSYS3CM303020	-
	300 × 400 × 200	NSYS3CM304020	-	NSYS3CM304020	-	NSYS3CM304020	-
	400 × 400 × 200	NSYS3CM404020	-	NSYS3CM404020	-	NSYS3CM404020	-
	400 × 600 × 250	NSYS3CM406025	-	NSYS3CM406025	-	NSYS3CM406025	-
	500 × 500 × 250	NSYS3CM505025	-	NSYS3CM505025	-	NSYS3CM505025	-
	600 × 600 × 200	NSYS3CM606020	-	NSYS3CM606020	-	NSYS3CM606020	-
	600 × 800 × 300	-	NSYS3CM608030	-	NSYS3CM608030	-	NSYS3CM608030
	800 × 600 × 300	-	NSYS3CM806030	-	NSYS3CM806030	-	NSYS3CM806030
Tube	**Length (m) / Tube section**	**50 mm**	**80 mm**	**50 mm**	**80 mm**	**50 mm**	**80 mm**
	0.5	NSYCMT5005	NSYCMT8005	NSYCMT5005	NSYCMT8005	NSYCMT5005	NSYCMT8005
	1	NSYCMT5010	NSYCMT8010	NSYCMT5010	NSYCMT8010	NSYCMT5010	NSYCMT8010
	1.5	NSYCMT5015	NSYCMT8015	NSYCMT5015	NSYCMT8015	NSYCMT5015	NSYCMT8015
	2	NSYCMT5020	NSYCMT8020	NSYCMT5020	NSYCMT8020	NSYCMT5020	NSYCMT8020
Fixing on support (steel material)							
	1 Fixed base	-	-	NSYCMUMR50	NSYCMUMR80	-	-
	2 Wall fixing with joint	-	-	-	-	NSYCMUMA50	NSYCMUMA80
	3 Rotating straight fitting	NSYCMUMC50	NSYCMUMC80	-	-	-	-
Inter-tube fitting (aluminium material)							
	4 Horizontal inter-tube joint	-	-	NSYCMUIA50	NSYCMUIA80	-	-
	5 Fixed bracket	NSYCMUTC50	NSYCMUTC80	-	-	NSYCMUTC50	NSYCMUTC80
Fixing on enclosure (aluminium material)							
	6 Rotating fixing on enclosure	NSYCMUCR50	NSYCMUCR80	-	-	NSYCMUCR50	NSYCMUCR80
	7 Rotating fixing in bracket on enclosure	-	-	NSYCMUCC50	NSYCMUCC80	-	-
	8 Tilting fixing on enclosure	-	-	-	-	-	-

Control enclosure
Introduction

Technical characteristics:

- RAL 7035 grey, structured finish, epoxy-polyester powder.
- Protection degree: IP 54.
- Resistance to external mechanical impacts: IK 10.
- Dimensions and weights, see page **2/65**.

The control enclosures consist of:

- **A steel body equipped with:**
  – Reinforcement plate: the top wall is reinforced by a plate (3 mm) and pierced with a hole ∅ 54 or 87 mm (according to the reference) to allow hanging installation of the enclosure.
  – 4 welded studs on the 2 inner vertical walls, for fixing the rails.
  – 2 rails (with drill holes) for installing equipment.
  – A rear door, opening to 120° and closing with double-bar lock.

- **An aluminium front face (2.5 mm thick):**
  – This surface is protected on both sides by a plastic film, allowing the installation of the dialogue elements.
  – A trim frame made from 4 extruded-aluminium rails: the frame and the front face are delivered assembled. Structured finish, epoxy-polyester powder, RAL 7040 grey colour (other colours on demand).

- The design of these rails takes into account the accessory mounting functions (lamp, document support, keyboard support, laptop support, etc.), the ergonomics for handling the enclosure and its overall aesthetics.

Perforated rails installed on lateral studs:

Rear door with double-bar lock.

Frame ergonomics.

Fixing of the trim frame by screws.

Detail of the reinforcement plate.

Installation example.

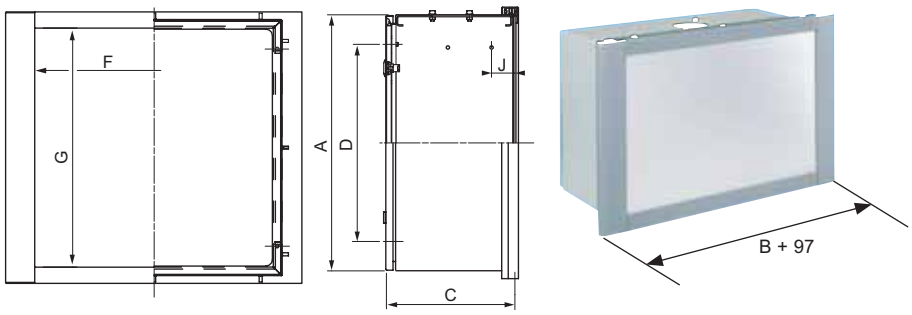
Dimensions

External dimensions (mm)			D	F	G	H	J	K	L	PPC (1)	kg	Tube section (mm)	Enclosure
Height A	Width B	Depth C											References
300	300	200	162	260	260	100	45	58	7	-	8.6	50	**NSYS3CM303020**
300	400	200	162	260	360	100	45	58	7	-	9.5	50	**NSYS3CM304020**
400	400	200	262	360	360	100	45	58	7	-	11.4	50	**NSYS3CM404020**
400	600	250	262	360	560	125	75	58	7	●	17.9	50	**NSYS3CM406025***
500	500	250	362	460	460	125	75	58	7	-	20.2	50	**NSYS3CM505025**
600	600	200	462	560	560	100	45	58	7	●	26.5	50	**NSYS3CM606020***
600	800	300	462	560	760	150	100	87	9	-	34.9	80	**NSYS3CM608030**
800	600	300	662	760	560	150	100	87	9	●	33.6	80	**NSYS3CM806030***

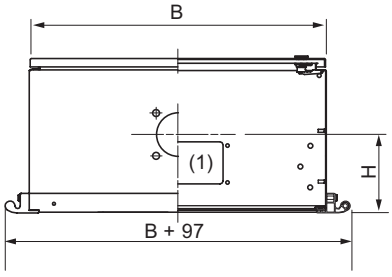
* Enclosure equipped with a cable-gland plate (see diagram below).

A: Height
B: Width
C: Depth

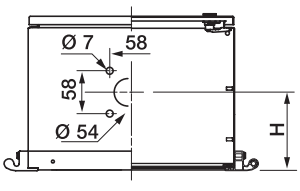
Control enclosure



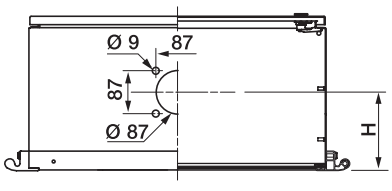
W600 enclosure + keyboard installation



Enclosure D200 to D250



D300 enclosure



(1) PPC: cable-gland plate.

Box-keyboard for control enclosure

Introduction

The box is installed on the control enclosures with a width of 600 mm. It then has an angle of 120° with its front face. All the accessories required for installation are delivered with 2 brackets and 1 trim rail, 1 hose for cable entry.

Technical features:

- Protection degree: IP 54.
- Resistance to external mechanical impacts: IK 10.
- Weight: 8 kg.

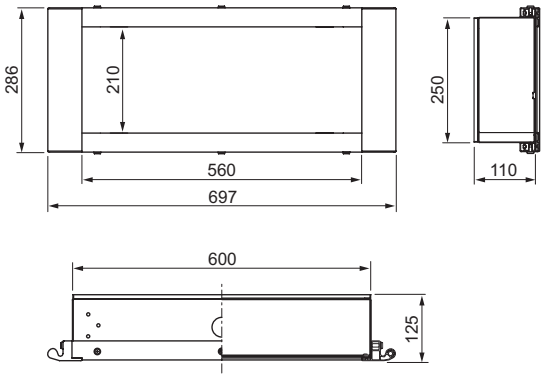
The box for the keyboard consists of:

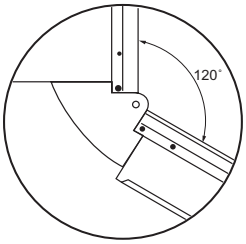
- A steel body, structured finish, epoxy-polyester powder, RAL 7035 grey colour, with a screwed cover.
- An aluminium front face (2.5 mm thick) for installing a keyboard.
- A trim frame made from 2 extruded-aluminium rails guaranteeing ergonomic handling of the box and the aesthetics of the unit.
  The frame and the front face are delivered assembled. Structured finish, epoxy-polyester powder, RAL 7040 grey colour.

These enclosures can be customised (colour, machining, etc.). Please contact us.

Specific

External dimensions (mm)			Box-keyboard
Height	Width	Depth	Reference
250	600	110	**NSYCMT2560110**





Detail from the installation of the box-keyboard on the control enclosure

Example
Enclosure equipped with the box-keyboard.

Accessories

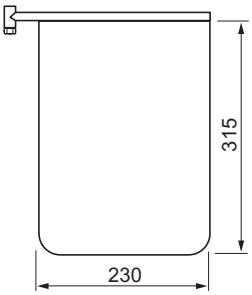
Support example.

Support

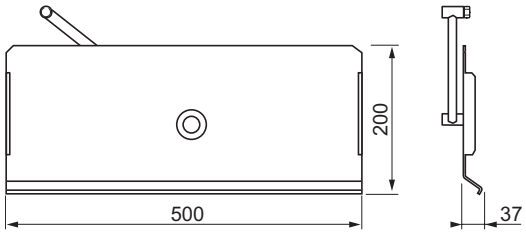
- Three different types of support are available:
  – Vertical support for documents, size 315 × 230 mm, sheet steel 1.2 mm thick.
  – Horizontal support for keyboard, size 500 × 200 mm, sheet steel 2 mm thick.
  – Horizontal support for laptop computer, size 350 × 310 mm, sheet steel 2 mm thick.
- Installation on the left or right rail of the frame of the control enclosure.
- Structured finish, epoxy-polyester powder, RAL 7035 grey colour.

Weight (kg)	Type of support	References
1.15	Vertical	**NSYCMSPP**
2.16	Keyboard	**NSYCMBPT**
2.04	Laptop computer	**NSYCMBPC**

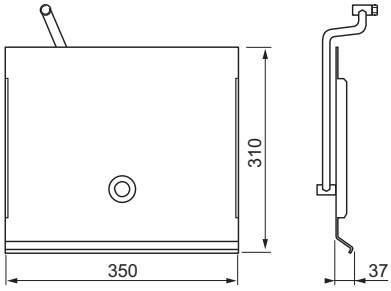
NSYCMSPP



NSYCMBPT



NSYCMBPC

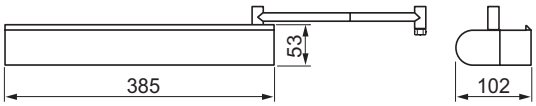


NSYCMLAG lighting.

Lighting

- A lighting device adapts directly to the left or right rail of the frame of the control enclosure.
- Low-power lighting source, E27 socket, 11 W, 220-240 V / 50-60 Hz.
- Protection degree: IP 20.
- Insulation class II.
- According to standards IEC 55014 and IEC 61000-6-2.
- Weight: 1.5 kg.

Name	Reference
Lighting	**NSYCMLAG**

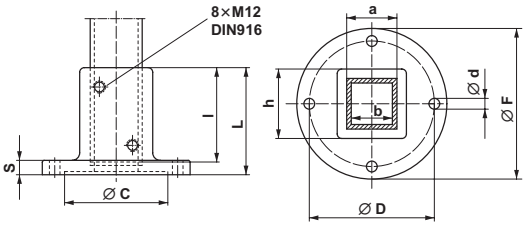


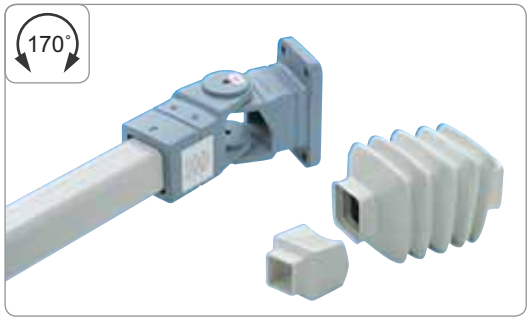
Composition
Fixing on support

1 Fixed base

- Support foot for direct horizontal or vertical connection.
- Material: moulded steel, structured finish, powder, RAL 7040 grey colour.

Dimensions (mm)										Weight (kg)	References
⧄ a	b	c	d	D	F	h	I	L	S		
50 mm square	42	105	11	125	152	72	97	110	15	3.25	**NSYCMUMR50**
80 mm square	72	134	11	173	201	111	126	140	16	7	**NSYCMUMR80**

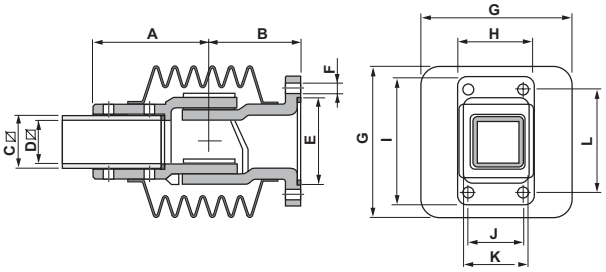




2 Wall fixing with joint

- Device allowing rotation through 170º of a horizontal tube, with a square section of 50 or 80 mm, and its fixing on a vertical surface.
- Protection by bellows, RAL 7035 grey colour.
- Possibility of passing cables through the inside of the joint.
- Material: moulded steel, structured finish, powder, RAL 7040 grey colour.

Dimensions (mm)												Weight (kg)	References
⧄ C for tube	A	B	D	E	F	G	H	I	J	K	L		
50 mm square	118	92	42	85	11	148	80	130	55	68	105	4.35	**NSYCMUMA50**
80 mm square	160	115	72	130	11	190	115	175	90	103	150	9.45	**NSYCMUMA80**

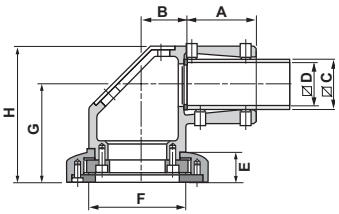


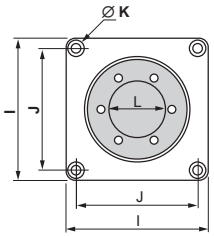
Composition
Fixing on support

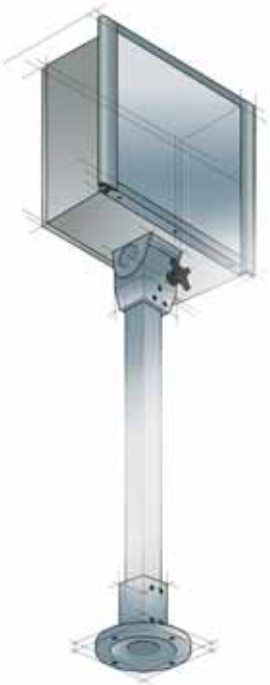
3 Rotating straight fitting

- Device allowing the fixing and rotation through 295º of tubes, with a square section of 50 or 80 mm, in horizontal position.
- Without blocking the chosen position.
- Option of passing cables through the inside.
- Material: moulded steel, structured finish, epoxy-polyester powder, RAL 7040 grey colour.
- Fixing by 4 screws, not included.

Dimensions (mm)												Weight (kg)	References
⧅ C	A	B	D	E	F	G	H	I	J	K	L		
50 mm square	68	50	42	30	96	96	134	140	120	9	55	5.4	**NSYCMUMC50**
80 mm square	98	74	72	45	144	141.5	195.5	210	180	13	84	15.7	**NSYCMUMC80**







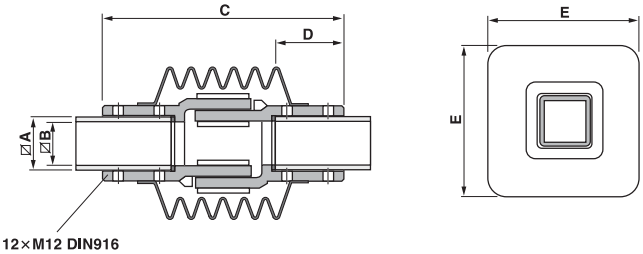
Example
Installation with tilting fixing on the enclosure and fixed base.

Composition
Inter-tube fitting

4 Horizontal inter-tube joint

- Device allowing the linking and rotation through 170º of 2 horizontal tubes, with a square section of 50 or 80 mm.
- Protection by bellows, RAL 7035 grey colour.
- Possibility of passing cables through the inside of the joint.
- Material: moulded steel, structured finish, powder, RAL 7040 grey colour.

Dimensions (mm)					Weight (kg)	References
⧅ A for tube	B	C	D	E		
50 mm square	42	236	67	148	4.25	**NSYCMUIA50**
80 mm square	72	320	94	190	10	**NSYCMUIA80**

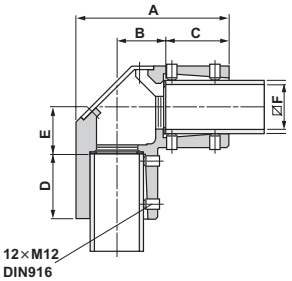


5 Fixed bracket

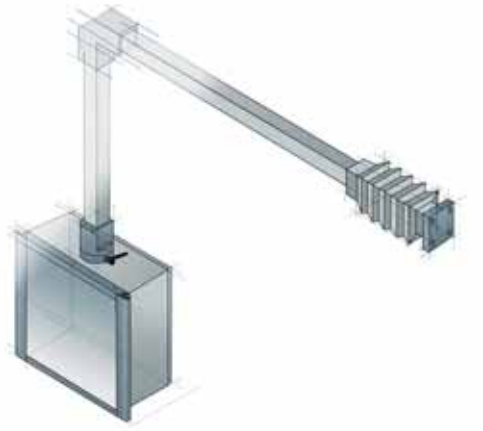
Our system of tubes and joints, fixed or rotating, enables all the solutions to respond to the installation needs of the control enclosures for human-machine dialogue. Every model is suitable for tubes with a square section of 50 mm for light loads, or of 80 mm for heavy loads (see selection table on page **2/62**).

- Device allowing the combination and fixing of a horizontal tube with a vertical tube.
- Two models for tubes with a square section of 50 or 80 mm.
- Option of passing cables through the inside.
- Material: aluminium, structured finish, powder, RAL 7040 grey colour.

Dimensions (mm)							Weight (kg)	Fixed bracket
⧅ G	A	B	C	D	E	F		References
50 mm square	144	46	60	60	46	42	1.35	**NSYCMUTC50**
80 mm square	193	56	83	83	56	70	2.4	**NSYCMUTC80**



Composition
Inter-tube fitting



Example
Installation on enclosure with rotating straight fixing, fixed fitting bracket and support fixing with joint.

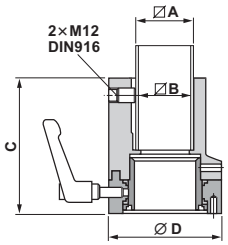
Installation example
Installation with rotating straight fixing on enclosure, inter-tube joint and rotating straight fitting.

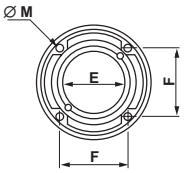
Composition
Fixing on enclosure

6 Rotating fixing on enclosure

- Device allowing the fixing and rotation through 310º of tubes, with a square section of 50 or 80 mm, in vertical position.
- System for blocking in the chosen position.
- Option of passing cables through the inside.
- Material: aluminium, structured finish, powder, RAL 7040 grey colour.
- Fixing through the support surface by 4 screws.

Dimensions (mm)							Weight (kg)	References
⌀A	B	C	D	E	F	M		
50 mm square	42	115	96	52,3	58	M6	1.25	**NSYCMUCR50**
80 mm square	72	145	139	85	87	M8	3.1	**NSYCMUCR80**



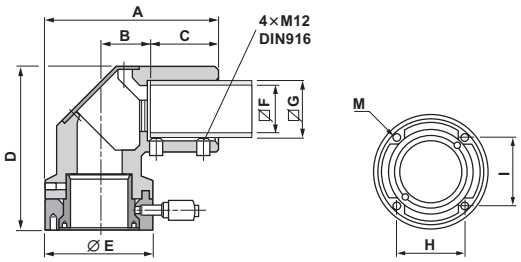


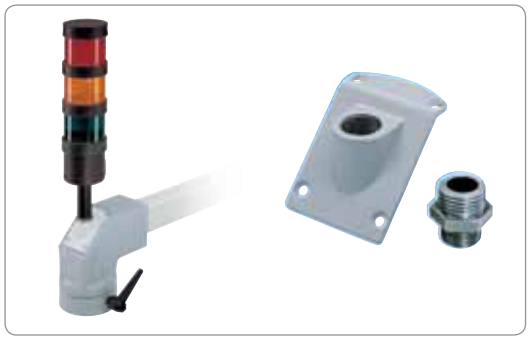
Composition
Fixing on enclosure

7 Rotating fixing in bracket on enclosure

- Devices allowing the fixing and rotation through 310° of tubes, with a square section of 50 or 80 mm, in horizontal position.
- System for blocking in the chosen position.
- Option of passing cables through the inside.
- Material: aluminium, structured finish, powder, RAL 7040 grey colour.
- Fixing through the support surface by 4 screws.

Dimensions (mm)										Weight (kg)	References
⌀ G	A	B	C	D	E	F	H	I	M		
50 mm square	154	46	60	147	96	42	42	58	M6	2	**NSYCMUCC50**
80 mm square	208.5	56	83	190	139	72	70	87	M8	6.55	**NSYCMUCC80**

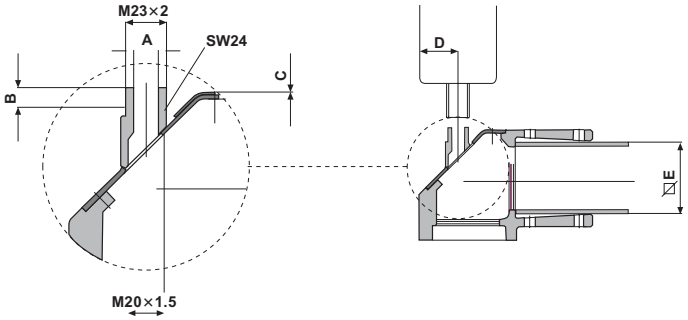




Adapter for signalling beacon

- This adapter allows the direct installation of a beacon for signalling the state of the machine.
- It is installed on fixed brackets ref. **NSYCMUTC50** and **NSYCMUTC80**.
- Option of passing cables through the inside.
- Material: aluminium, structured finish, powder, RAL 7040 grey colour.

Dimensions (mm)					Weight (kg)	References
⌀ E	A	B	C	D		
50 mm square	14	11	8.7	31.5	0.025	**NSYCMACS50**
80 mm square	14	11	2.5	43	0.08	**NSYCMACS80**

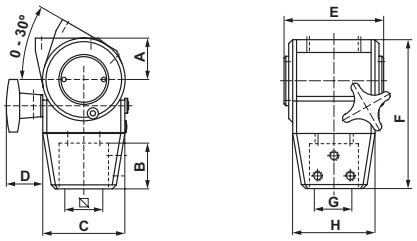


Composition
Fixing on enclosure

8 Tilting fixing on enclosure

- This fixing allows the enclosures to be tilted up to 30°.
- System for blocking in the chosen position.
- It is installed on enclosures with depths of 200 and 250 mm.
- The installation on enclosures with a depth of 300 mm requires an adapter plate.

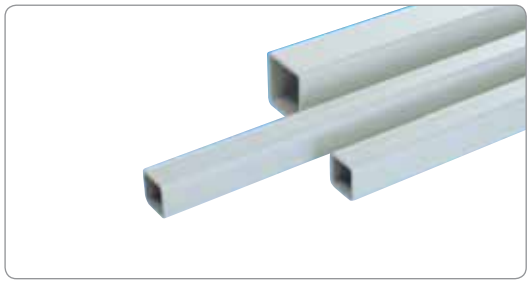
Dimensions (mm)									Weight (kg)	References \ 50 mm
Ø for tube	A	B	C	D	E	F	G	H		
50 mm square	50	55	100	44	121	182	50	100	2.98	**NSYCMUCP50**
80 mm square	50	55	100	44	121	182	50	100	3.10	**NSYCMUCP80**



Adapter part for enclosure D300 / ∅ 80 mm

Reference
NSYCMUCPAD87

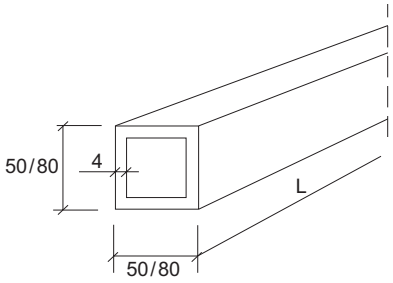
Composition
Length elements



Tube

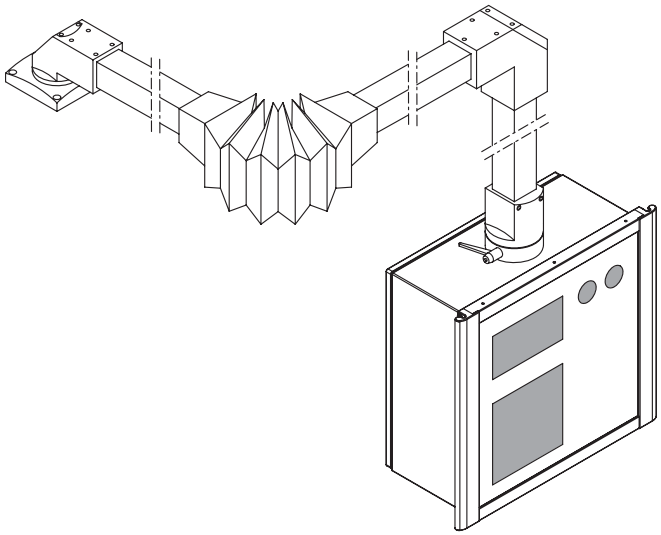
- The tubes are available in:
– 2 sizes: square of 50 and 80 mm,
– 4 lengths: 0.5, 1, 1.5 and 2 m.
- Material: extruded steel, 4 mm thick, structured finish, powder, RAL 7035 grey colour.
- Weights:
– 50 × 80: 6.5 kg / m.
– 80 × 80: 10.5 kg / m.

Joints		
References		
Length (m)	50 mm square	80 mm square
0.5	NSYCMT5005	NSYCMT8005
1	NSYCMT5010	NSYCMT8010
1.5	NSYCMT5015	NSYCMT8015
2	NSYCMT5020	NSYCMT8020



Specific

Cut-outs on front face: contact us.



3

Steel floor-standing enclosures

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Spacial SF Steel floor-standing suitable enclosures 3/12

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Dimensions 3/26

Accessories 3/27

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Electronic application 3/95

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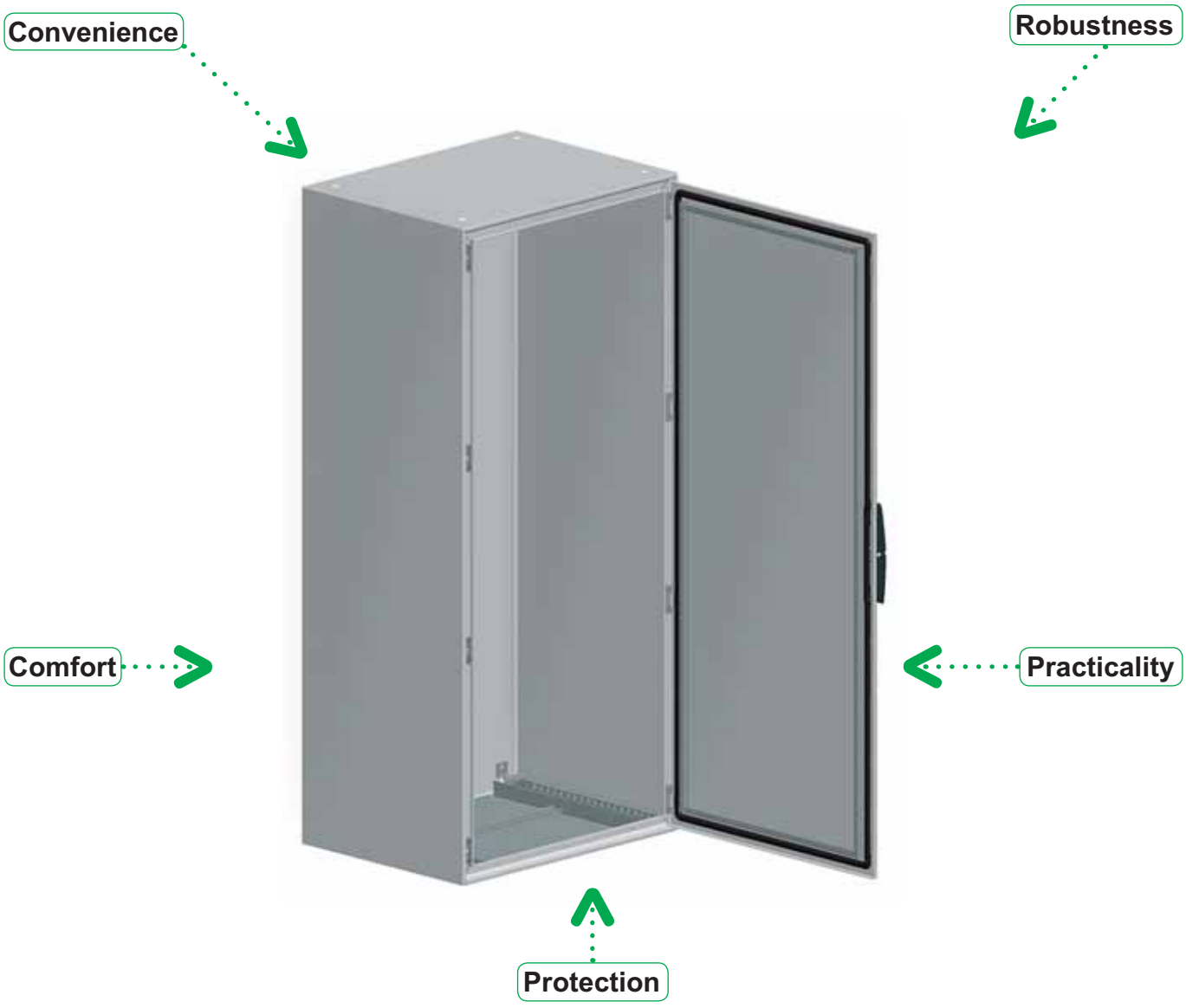
Power distribution 3/119

Prisma Plus application 3/121

Automobile application 3/136

Compact metal enclosures
Overview



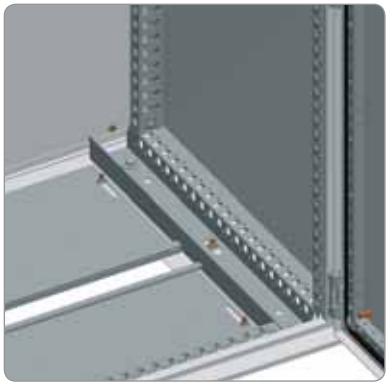
Robustness:

Body made as a single piece with welded rear panel.
Front part forming a rigid frame with welded corners.

Compact metal enclosures
Overview

Practicality:

Two door rails, which can be height-adjustable and used for fixing cables.
The adaptation profile installed in the front of the enclosure and the universal 40-mm cross rail (1 row) in the rear provide the same fixing points as the suitable enclosure.



Protection:

IP guaranteed by the rigidity of the enclosure, the expanded-polyurethane sealing gasket of the enclosure and the subsequent welding.Double-door enclosures with inner lock on the left door.

Comfort:

Handle with sturdy design for easily activating the locking system, allowing the installation of any shape insert and any cylindrical combination key. Easily interchangeable insert with one click.

Convenience:

The customised product meets specific needs in terms of cut-outs, colours and accessory installation.

Compact metal enclosures
Overview

Compact metal enclosures

IP55 enclosure, IK10 for plain door and IK08 for transparent door.
The body is made from sheet steel, welded rear panel, and the front forms a rigid frame with welded corners.
Doors made from folded and welded steel, 120º opening, hinges with captive pin made from zamak and handle lock with 5-mm double-bar insert.
Assembled enclosure with plain or transparent door door, painted with epoxy-polyester resin, textured RAL 7035 grey, with or without galvanised-steel mounting plate.

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Dimensions	3/10

Compact metal enclosures
Overview

Accessories for 19” racks

19” racks

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Customised compact metal enclosures

All RAL and NF colours. All surface treatments. All cut-outs made by high-precision laser, with no burrs. Accessory installation in plant.

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Compact metal enclosures
Overview

Main accessories

Locks and lock inserts	Lifting systems	Plinths
Page	**Page**	**Page**
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Inner door	Door accessories
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Mounting plate	Adaptation profiles	Rails
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Cross rails
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Compact metal enclosures
Overview

Front door and rear panel, with or without galvanised mounting plate IP55

Basic composition

- Structure: body made from sheet steel, welded rear panel, with the front forming a rigid frame with welded corners.
- Front door:
– Plain door with reinforcement frame.
– Or, transparent Securit® glass door.
- The double doors are overlapping, with system for fixing the left door.
- Welded rear panel.
- Standard locking system with handle and 5-mm double-bar insert.
- 4 support brackets for the mounting plate.
- Cable-gland plate in 2 parts.
- Supply with or without galvanised mounting plate depending on the reference.
- Options:
– Cross rails.
– Individual plinths with heights of 100 and 200 mm.

Certifications

- BV, DNV, UL* and CUL.
*1 Door: 1, 2, 3, 3R, 4, 5, 12, 12K and 13
*2 Doors: 1, 12, 12K

Easy installation

- The **Spacial SM** compact metal enclosure is made up of a compact body, welded rear panel and front part forming a rigid frame with its corners welded. 4 deep supports, 2 at the top and 2 at the bottom, for adjusting the equipment fixing bracket with a pitch of 25 mm.
- Sheet-steel door, painted with epoxy-polyester resin in textured RAL7035 grey. Reinforcement frame made up of two perforated uprights with a pitch of 25 mm and two door rails (height-adjustable), which can be used for fixing cables. Vertical profiles for the enclosures with a height of 1200 mm.
- 4 zamak hinges and 4 locking points for the enclosures, with heights from 1200 to 2000 mm.
- Cable-gland plate in two parts with sealing gasket cross-section of 3 × 10 mm:
- A broad range of accessories offered for the production of:
– Plates for automatisms.
– Modular distribution system.
– 19" racks.
– etc.
- Degree of protection IP55 according to IEC 60529.
- Resistance to mechanical impacts: IK10 according to IEC 62262 (IK08 for the transparent doors).

Locking system

- New design, modern appearance, ergonomic, sturdy, complying with numerous specifications:
– Combination keys.
– Shape inserts.
– Push button.
- Optional:
– Handle lock for versions DIN, KABA, ASSA.
– Handle lock for 2 inserts, "AND" or "OR" combination.
– Padlock locking.
– CNOMO kit.

Compact metal enclosures
Selection guide

Nominal dimensions (mm)			No. of doors	Plain door		Transparent door	Plinth		
							Height 100 (mm)		
Height (A)	Width (B)	Depth (C)		With mounting plate	Without mounting plate	Without mounting plate	Front kit (corners + front panels)	Side panels, 2 u.	
1200	800	300	1	NSYSM12830P	NSYSM12830	-	NSYSPF8100	NSYSPS3100	
1200	1000	300	2	NSYSM1210302DP	NSYSM1210302D	-	NSYSPF10100	NSYSPS3100	
1200	1200	400	2	NSYSM1212402DP	NSYSM1212402D	-	NSYSPF12100	NSYSPS4100	
1400	600	300	1	NSYSM14630P	NSYSM14630	-	NSYSPF6100	NSYSPS3100	
1400	600	400	1	NSYSM14640P	NSYSM14640	-	NSYSPF6100	NSYSPS4100	
1400	800	300	1	NSYSM14830P	NSYSM14830	-	NSYSPF8100	NSYSPS3100	
1400	800	400	1	NSYSM14840P	NSYSM14840	NSYSM14840T	NSYSPF8100	NSYSPS4100	
1400	1000	400	2	NSYSM1410402DP	NSYSM1410402D	-	NSYSPF10100	NSYSPS4100	
1400	1200	400	2	NSYSM1412402DP	NSYSM1412402D	-	NSYSPF12100	NSYSPS4100	
1600	600	300	1	NSYSM16630P	NSYSM16630	-	NSYSPF6100	NSYSPS3100	
1600	600	400	1	NSYSM16640P	NSYSM16640	NSYSM16640T	NSYSPF6100	NSYSPS4100	
1600	800	300	1	NSYSM16830P	NSYSM16830	NSYSM16830T	NSYSPF8100	NSYSPS3100	
1600	800	400	1	NSYSM16840P	NSYSM16840	NSYSM16840T	NSYSPF8100	NSYSPS4100	
1600	1000	300	2	NSYSM1610302DP	NSYSM1610302D	-	NSYSPF10100	NSYSPS3100	
1600	1000	400	2	NSYSM1610402DP	NSYSM1610402D	-	NSYSPF10100	NSYSPS4100	
1600	1200	300	2	NSYSM1612302DP	NSYSM1612302D	-	NSYSPF12100	NSYSPS3100	
1600	1200	400	2	NSYSM1612402DP	NSYSM1612402D	-	NSYSPF12100	NSYSPS4100	
1800	600	300	1	NSYSM18630P	NSYSM18630	-	NSYSPF6100	NSYSPS3100	
1800	600	400	1	NSYSM18640P	NSYSM18640	NSYSM18640T	NSYSPF6100	NSYSPS4100	
1800	600	500	1	NSYSM18650P	NSYSM18650	-	NSYSPF6100	NSYSPS5100	
1800	800	300	1	NSYSM18830P	NSYSM18830	NSYSM18830T	NSYSPF8100	NSYSPS3100	
1800	800	400	1	NSYSM18840P	NSYSM18840	NSYSM18840T	NSYSPF8100	NSYSPS4100	
1800	800	500	1	NSYSM18850P	NSYSM18850	NSYSM18850T	NSYSPF8100	NSYSPS5100	
1800	800	600	1	NSYSM18860P	NSYSM18860	-	NSYSPF8100	NSYSPS6100	
1800	1000	400	1	NSYSM181040P	NSYSM181040	-	NSYSPF10100	NSYSPS4100	
1800	1000	400	2	NSYSM1810402DP	NSYSM1810402D	-	NSYSPF10100	NSYSPS4100	
1800	1000	500	2	NSYSM1810502DP	NSYSM1810502D	-	NSYSPF10100	NSYSPS5100	
1800	1200	400	2	NSYSM1812402DP	NSYSM1812402D	-	NSYSPF12100	NSYSPS4100	
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1800	1600	400	2	NSYSM1816402DP	NSYSM1816402D	-	NSYSPF16100	NSYSPS4100	
1800	1600	500	2	NSYSM1816502DP	NSYSM1816502D	-	NSYSPF16100	NSYSPS5100	
2000	600	300	1	NSYSM20630P	NSYSM20630	-	NSYSPF6100	NSYSPS3100	
2000	600	400	1	NSYSM20640P	NSYSM20640	NSYSM20640T	NSYSPF6100	NSYSPS4100	
2000	600	500	1	NSYSM20650P	NSYSM20650	-	NSYSPF6100	NSYSPS5100	
2000	800	300	1	NSYSM20830P	NSYSM20830	NSYSM20830T	NSYSPF8100	NSYSPS3100	
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2000	800	600	1	NSYSM20860P	NSYSM20860	NSYSM20860T	NSYSPF8100	NSYSPS6100	
2000	1000	400	2	NSYSM2010402DP	NSYSM2010402D	-	NSYSPF10100	NSYSPS4100	
2000	1000	500	2	NSYSM2010502DP	NSYSM2010502D	-	NSYSPF10100	NSYSPS5100	
2000	1200	400	2	NSYSM2012402DP	NSYSM2012402D	-	NSYSPF12100	NSYSPS4100	
2000	1200	500	2	NSYSM2012502DP	NSYSM2012502D	-	NSYSPF12100	NSYSPS5100	
2000	1200	600	2	NSYSM2012602DP	NSYSM2012602D	-	NSYSPF12100	NSYSPS6100	
2000	1600	400	2	NSYSM2016402DP	NSYSM2016402D	-	NSYSPF16100	NSYSPS4100	
2000	1600	500	2	NSYSM2016502DP	NSYSM2016502D	-	NSYSPF16100	NSYSPS5100	
2000	1600	600	2	NSYSM2016602DP	NSYSM2016602D	-	NSYSPF16100	NSYSPS6100	

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180° hinge page 3/68

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Door cross rail page 7/30

Compact metal enclosures
Selection guide

Plinth		Inner door	Mounting plate	Standard vertical uprights	Technical vertical uprights	Off-centre 19" swing rack	Centred 19" swing rack
Height 200 (mm)							
Front kit (corners + front panels)	Side panels, 4 u.						
NSYSPF8200	NSYSPS3200	-	NSYMP128	-	NSYTVR12	-	-
NSYSPF10200	NSYSPS3200	-	NSYMP1210	-	NSYTVR12	-	-
NSYSPF12200	NSYSPS4200	-	NSYMP1212	-	NSYTVR12	-	-
NSYSPF6200	NSYSPS3200	-	NSYMP146	-	NSYTVR14	-	-
NSYSPF6200	NSYSPS4200	-	NSYMP146	-	NSYTVR14	-	-
NSYSPF8200	NSYSPS3200	-	NSYMP148	-	NSYTVR14	NSYRSW27	NSYRSWC27
NSYSPF8200	NSYSPS4200	-	NSYMP148	-	NSYTVR14	NSYRSW27	NSYRSWC27
NSYSPF10200	NSYSPS4200	-	NSYMP1410	-	NSYTVR14	-	-
NSYSPF12200	NSYSPS4200	-	NSYMP1412	-	NSYTVR14	-	-
NSYSPF6200	NSYSPS3200	NSYID166	NSYMP166	-	NSYTVR16	-	-
NSYSPF6200	NSYSPS4200	NSYID166	NSYMP166	-	NSYTVR16	-	-
NSYSPF8200	NSYSPS3200	NSYID168	NSYMP168	-	NSYTVR16	NSYRSW31	NSYRSWC31
NSYSPF8200	NSYSPS4200	NSYID168	NSYMP168	-	NSYTVR16	NSYRSW31	NSYRSWC31
NSYSPF10200	NSYSPS3200	-	NSYMP1610	-	NSYTVR16	-	-
NSYSPF10200	NSYSPS4200	-	NSYMP1610	-	NSYTVR16	-	-
NSYSPF12200	NSYSPS3200	-	NSYMP1612	-	NSYTVR16	-	-
NSYSPF12200	NSYSPS4200	-	NSYMP1612	-	NSYTVR16	-	-
NSYSPF6200	NSYSPS3200	NSYID186	NSYMP186	NSYVR18	NSYTVR18	-	-
NSYSPF6200	NSYSPS4200	NSYID186	NSYMP186	NSYVR18	NSYTVR18	-	-
NSYSPF6200	NSYSPS5200	NSYID186	NSYMP186	NSYVR18	NSYTVR18	-	-
NSYSPF8200	NSYSPS3200	NSYID188	NSYMP188	NSYVR18	NSYTVR18	NSYRSW36	NSYRSWC36
NSYSPF8200	NSYSPS4200	NSYID188	NSYMP188	NSYVR18	NSYTVR18	NSYRSW36	NSYRSWC36
NSYSPF8200	NSYSPS5200	NSYID188	NSYMP188	NSYVR18	NSYTVR18	NSYRSW36	NSYRSWC36
NSYSPF8200	NSYSPS6200	NSYID188	NSYMP188	NSYVR18	NSYTVR18	NSYRSW36	NSYRSWC36
NSYSPF10200	NSYSPS4200	NSYID1810	NSYMP1810	NSYVR18	NSYTVR18	-	-
NSYSPF10200	NSYSPS4200	NSYID1810	NSYMP1810	NSYVR18	NSYTVR18	-	-
NSYSPF10200	NSYSPS5200	NSYID1810	NSYMP1810	NSYVR18	NSYTVR18	-	-
NSYSPF12200	NSYSPS4200	-	NSYMP1812	NSYVR18	NSYTVR18	-	-
NSYSPF12200	NSYSPS5200	-	NSYMP1812	NSYVR18	NSYTVR18	-	-
NSYSPF16200	NSYSPS4200	-	NSYMP1816	NSYVR18	NSYTVR18	-	-
NSYSPF16200	NSYSPS5200	-	NSYMP1816	NSYVR18	NSYTVR18	-	-
NSYSPF6200	NSYSPS3200	NSYID206	NSYMP206	NSYVR20	NSYTVR20	-	-
NSYSPF6200	NSYSPS4200	NSYID206	NSYMP206	NSYVR20	NSYTVR20	-	-
NSYSPF6200	NSYSPS5200	NSYID206	NSYMP206	NSYVR20	NSYTVR20	-	-
NSYSPF8200	NSYSPS3200	NSYID208	NSYMP208	NSYVR20	NSYTVR20	NSYRSW40	NSYRSWC40
NSYSPF8200	NSYSPS4200	NSYID208	NSYMP208	NSYVR20	NSYTVR20	NSYRSW40	NSYRSWC40
NSYSPF8200	NSYSPS5200	NSYID208	NSYMP208	NSYVR20	NSYTVR20	NSYRSW40	NSYRSWC40
NSYSPF8200	NSYSPS6200	NSYID208	NSYMP208	NSYVR20	NSYTVR20	NSYRSW40	NSYRSWC40
NSYSPF10200	NSYSPS4200	NSYID2010	NSYMP2010	NSYVR20	NSYTVR20	-	-
NSYSPF10200	NSYSPS5200	NSYID2010	NSYMP2010	NSYVR20	NSYTVR20	-	-
NSYSPF12200	NSYSPS4200	-	NSYMP2012	NSYVR20	NSYTVR20	-	-
NSYSPF12200	NSYSPS5200	-	NSYMP2012	NSYVR20	NSYTVR20	-	-
NSYSPF12200	NSYSPS6200	-	NSYMP2012	NSYVR20	NSYTVR20	-	-
NSYSPF16200	NSYSPS4200	-	NSYMP2016	NSYVR20	NSYTVR20	-	-
NSYSPF16200	NSYSPS5200	-	NSYMP2016	NSYVR20	NSYTVR20	-	-
NSYSPF16200	NSYSPS6200	-	NSYMP2016	NSYVR20	NSYTVR20	-	-

3

Cross rails page 7/31

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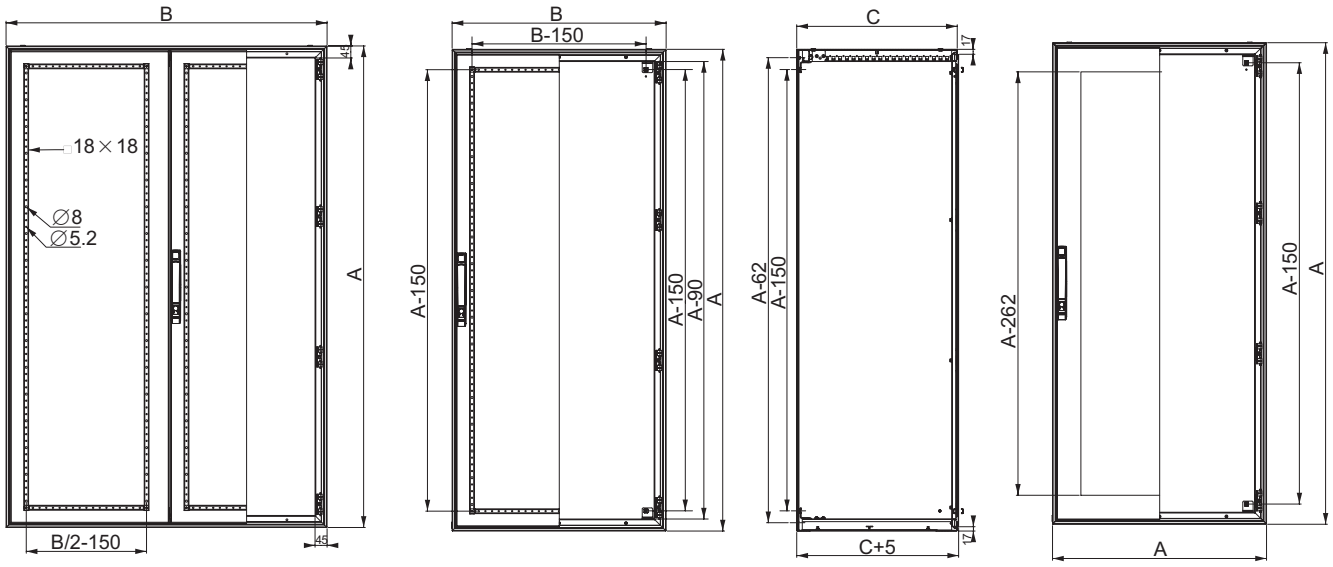
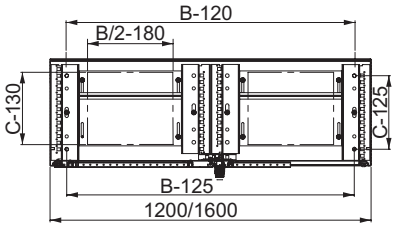
Door switch page 7/134

Cabling accessories page 7/114

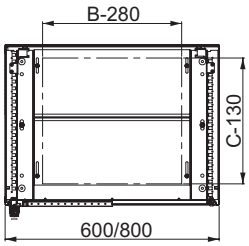
Compact metal enclosures
Dimensions

Dimensions

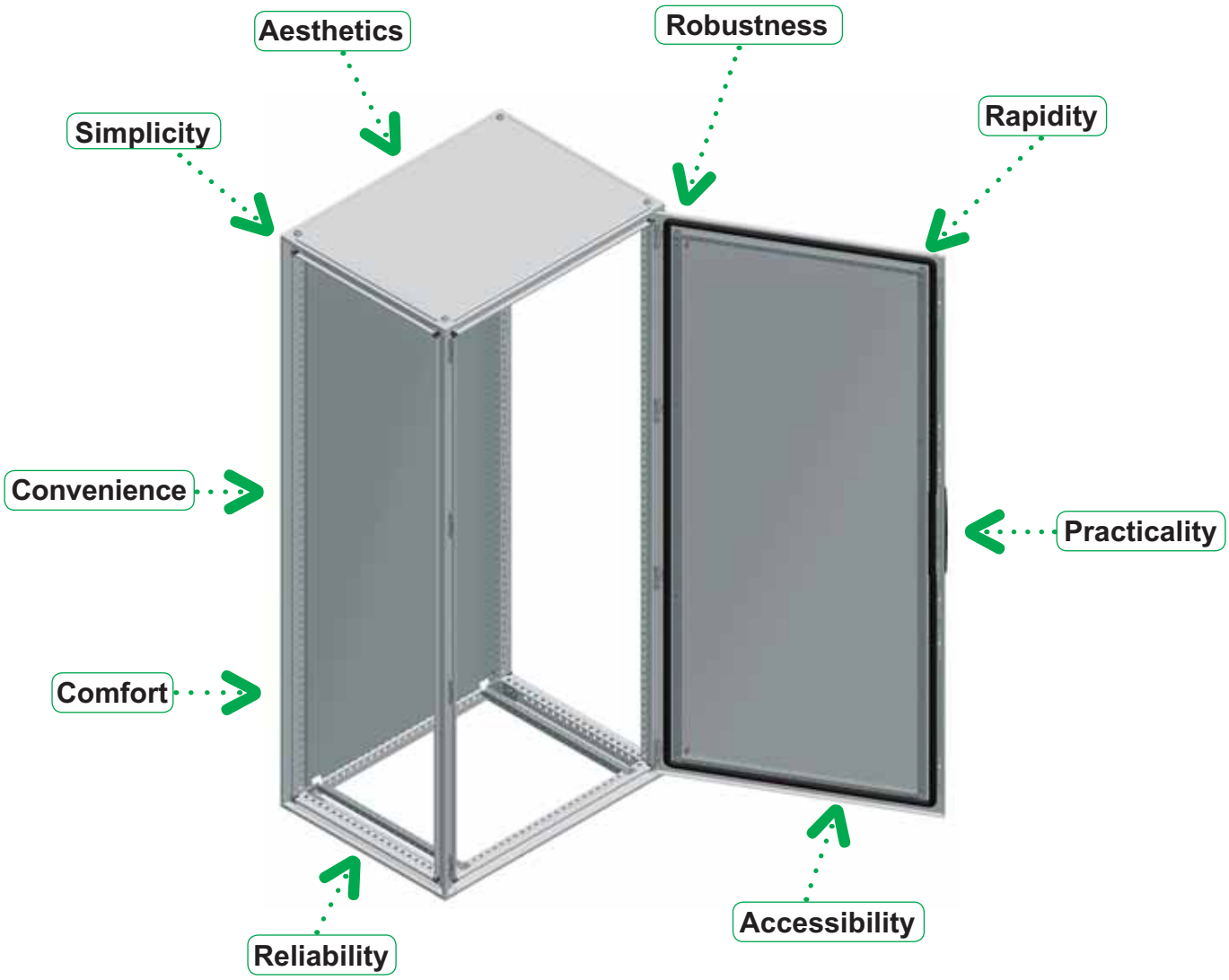




Models with a width of 1200 mm
without top/bottom adjustment rails

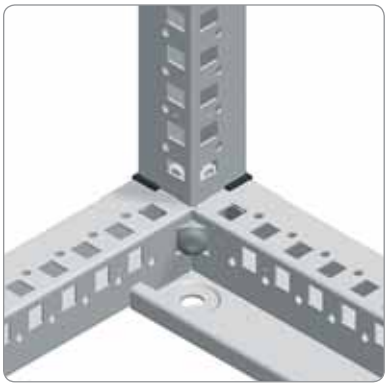


Suitable metal enclosures
Overview



Robustness:

Structure formed from a single 1.5-mm galvanised-steel section, with a high moment of inertia.
Vertical uprights joined with top and bottom frames, screwed together with connections of sintered steel.
Panels built into the structure.



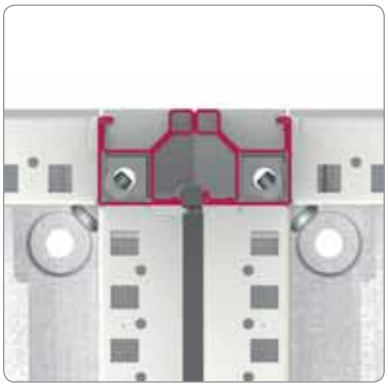
Suitable metal enclosures
Overview

Practicality:

Two door cross rails, which can be height-adjustable and used for fixing cables.

Reliability:

The design of the profile creates a double protective barrier against the entry of water and dust when coupling two enclosures.
The first barrier is the metal connection of the sections, and the second barrier is the EPDM gasket that guarantees the sealing.

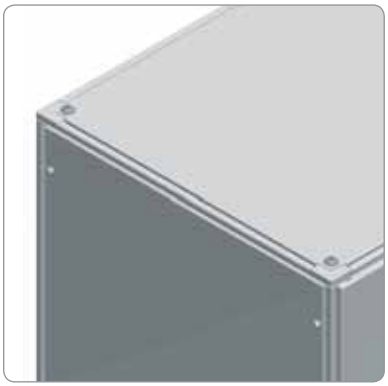


Comfort:

Handle with robust design for easily activating the locking system, allowing the installation of any shape insert and any cylindrical combination key.
Panels with captive screws for easier assembly and dismantling.

Aesthetics:

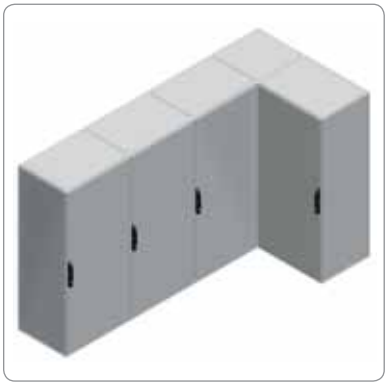
The built-in panels, enclosure suites and handle with new design give the enclosure a new appearance.



Suitable metal enclosures
Overview

Simplicity:

The new design allows enclosures to be coupled in any direction, adapting to all installation surfaces.



Convenience:

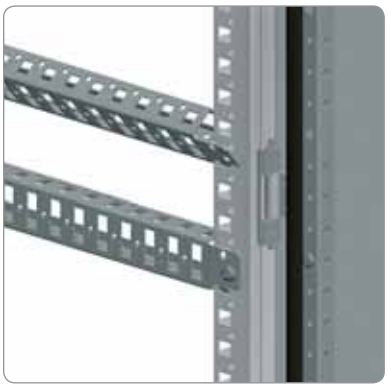
The customised product meets specific needs in terms of dimensions, cut-outs, colours and accessory installation.

Accessibility:

The symmetric design of the profile allows doors to be installed on any side of the enclosure, opening to right or left, providing full accessibility to the enclosure.

Rapidity:

The double system of cut-outs on the structure allows most accessories to be installed using self-tapping TORX T30 M6 screws or nuts.
Clip-on quick-fixing cross rails, fixed with self-tapping screws.



Suitable metal enclosures
Overview

Suitable metal enclosures, assembled and as kits

Enclosures compliant with international standard IEC 62208 for empty enclosures for low-voltage switchgear and controlgear assemblies.
IP55 enclosure, IK10 for plain door and IK08 for transparent door.
The structure is made from profiled and laser-welded galvanised steel, with vertical and horizontal cut-outs with a pitch of 25 mm.
Doors made from folded and welded steel, 120º opening, hinges with captive pin made from zamak and handle lock with 5-mm double-bar insert.
To guarantee the continuity of the protection circuit, according to standard IEC 62208, it is necessary to install a protection conductor.

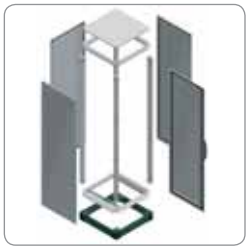
Suitable metal enclosures

Assembled enclosure with plain or transparent front door and with rear panel, painted with epoxy-polyester resin, textured RAL 7035 grey, with or without galvanised-steel mounting plate.

Suitable metal enclosure kits

All the components that make up the suitable metal enclosure exist as separate references, offering multiple possibilities.

Assembled supply



Supply in kit form

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Introduction	3/19	3/22
References	3/20	3/24
Dimensions	3/26	3/26

Compartmentalised enclosures and PC racks

Roof and panels fixed from the inside (only for PC racks).
Partial front doors, mounted with zamak hinges, 3-mm double-bar lock.
Degree of protection IP40 with open keyboard tray.

Compartmentalised suitable metal enclosures

Compartmentalised enclosure separating the various working zones, limiting access to them, painted with epoxy-polyester resin, textured RAL 7035 grey.

PC racks

The PC rack is designed to protect computer equipment in an industrial environment, painted with epoxy-polyester resin, textured RAL 7035 grey.

Compartmentalised enclosure

PC rack

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Suitable metal enclosures
Overview

Electronic application

Transparent front door, plain rear door and side panels fixed from the outside. Painted with epoxy-polyester resin, textured RAL 7035 grey. In enclosures with widths of 600 and 800 mm, it is possible to install fixed or swing racks.

Electronic application, for 19” racks

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Accessories for 19” racks

Fixed 19" racks	Swing 19" racks

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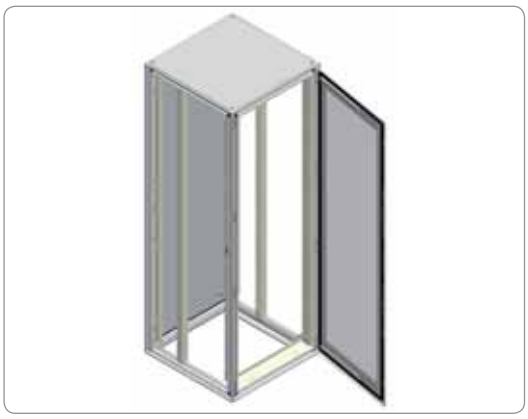

Prisma Plus application

Assembled or dismantled enclosures with a height of 2000 mm and 3 depths (500, 600 and 800 mm). Adaptation uprights allowing the installation of the components of the Prisma Plus functional frames.

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Suitable metal enclosures
Overview

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Customised suitable metal enclosures

All RAL and NF colours. All surface treatments. All cut-outs made by high-precision laser, with no burrs or deformations.
Accessory installation in plant.

Suitable metal enclosures
Overview

Main accessories

Side panels	Plinth	Enclosure suites	Lifting systems	Cable-entry plates
Page	Page	Page	Page	Page
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Inner door	Door accessories	Locks and lock inserts
Page	Page	Page
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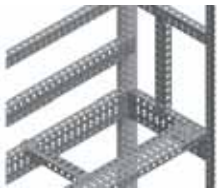
Mounting plate	Standard uprights	Technical uprights	Rails	Cross rails	Rail connectors
					
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Suitable metal enclosures
Overview

Front door and rear panel, with or without IP55 galvanised mounting plate

Basic composition

- Structure: Top and bottom frame, vertical uprights.
- Front door, two versions:
– Plain door with reinforcement frame.
– Transparent Securit® glass door.
- The double doors are overlapping, with system for fixing the left door.
- Rear panel screwed on with captive screws.
- Removable roof.
- Standard locking system with handle and 5-mm double-bar insert.
- 4 support brackets for the mounting plate.
- Sliding rail for the mounting plate.
- Supply with or without galvanised mounting plate depending on the reference.
- Further options:
– Cross rails.
– Individual and set plinths with heights of 100 and 200 mm.
– Cable-gland plates.

Certifications

– BV, DNV, UL and CUL*.
*1D.- 1, 12, 12K
*2D.- 1, 12, 12K

Easy installation

- The **Spacial SF** suitable metal enclosure is made up of: 4 uprights and 2 frames, top and bottom. Thanks to its use of a single, laser-welded, galvanised-steel structure, the enclosure has great robustness. The structure has cut-outs with a pitch of 25 mm for fixing accessories, using the same type of screw throughout the entire structure.
- The structure of the enclosure allows the integration of panels, thus obtaining the same nominal length (or size) with or without panels.
- Allows several enclosures to be coupled with full versatility. Offers the possibility of creating any desired shape of coupled enclosures, plus the possibility of installing doors on any side of the enclosure. The coupling surface between enclosures offers a double protective barrier against the entry of water and/or dust.
- The panels are made up of:
– Sheet-steel door, painted with epoxy-polyester resin, textured RAL 7035 grey,
– Sheet-steel rear and side panels painted with epoxy-polyester resin, textured RAL 7035 grey, double folded to increase the rigidity and fixed with captive screws that simplify assembly and dismantling.
– Individual plinths or plinths for sets, painted with epoxy-polyester resin, RAL 7022 grey, greatly simplifying cable management.
- A broad range of accessories offered for the production of:
– Plates for automatisms.
– Modular distribution system.
– 19” racks.
– etc.
- Degree of protection IP55 according to IEC 60529.
- Resistance to mechanical impacts: IK10 according to IEC 62262 (IK08 for the transparent doors).

Locking system

- New design, modern appearance, ergonomic, robust, complying with numerous specifications:
– Combination keys.
– Shape inserts.
– Push button.
- Optional:
– Handle lock, lock for versions DIN, KABA, ASSA.
– Handle lock for 2 inserts, "AND" or "OR" combination.
– Padlock locking.
– CNOMO kit.

Suitable metal enclosures

Assembled supply

Nominal dimensions (mm)			No. of doors	Plain door		Transparent door	Side panels	Cable-entry plate		
Height (A)	Width (B)	Depth (C)		With mounting plate	Without mounting plate	Without mounting plate		Plain	1 entry	2 entries
1200	600	400	1	NSYSF12640P	NSYSF12640	-	NSY2SP124	NSYEC64	NSYEC641	-
1200	600	600	1	NSYSF12660P	NSYSF12660	-	NSY2SP126	NSYEC66	NSYEC661	NSYEC662
1200	800	400	1	NSYSF12840P	NSYSF12840	-	NSY2SP124	NSYEC84	NSYEC841	-
1200	800	600	1	NSYSF12860P	NSYSF12860	-	NSY2SP126	NSYEC86	NSYEC861	NSYEC862
1400	600	400	1	NSYSF14640P	NSYSF14640	-	NSY2SP144	NSYEC64	NSYEC641	-
1400	800	400	1	NSYSF14840P	NSYSF14840	-	NSY2SP144	NSYEC84	NSYEC841	-
1600	600	600	1	NSYSF16660P	NSYSF16660	-	NSY2SP166	NSYEC66	NSYEC661	NSYEC662
1600	600	800	1	NSYSF16680P	NSYSF16680	-	NSY2SP168	NSYEC68	NSYEC681	NSYEC682
1600	800	600	1	NSYSF16860P	NSYSF16860	-	NSY2SP166	NSYEC86	NSYEC861	NSYEC862
1600	800	800	1	NSYSF16880P	NSYSF16880	-	NSY2SP168	NSYEC88	NSYEC881	NSYEC882
1800	400	400	1	-	NSYSF18440	-	NSY2SP184	NSYEC44	NSYEC441	-
1800	400	500	1	-	NSYSF18450	-	NSY2SP185	NSYEC45	NSYEC451	-
1800	400	600	1	-	NSYSF18460	-	NSY2SP186	NSYEC46	NSYEC461	-
1800	600	400	1	NSYSF18640P	NSYSF18640	NSYSF18640T	NSY2SP184	NSYEC64	NSYEC641	-
1800	600	500	1	NSYSF18650P	NSYSF18650	NSYSF18650T	NSY2SP185	NSYEC65	NSYEC651	-
1800	600	600	1	NSYSF18660P	NSYSF18660	-	NSY2SP186	NSYEC66	NSYEC661	NSYEC662
1800	600	800	1	-	-	NSYSF18680T	NSY2SP188	NSYEC68	NSYEC681	NSYEC682
1800	800	400	1	NSYSF18840P	NSYSF18840	NSYSF18840T	NSY2SP184	NSYEC84	NSYEC841	-
1800	800	500	1	NSYSF18850P	NSYSF18850	NSYSF18850T	NSY2SP185	NSYEC85	NSYEC851	-
1800	800	600	1	NSYSF18860P	NSYSF18860	NSYSF18860T	NSY2SP186	NSYEC86	NSYEC861	NSYEC862
1800	800	600	2	NSYSF188602DP	NSYSF188602D	-	NSY2SP186	NSYEC86	NSYEC861	NSYEC862
1800	1000	400	1	NSYSF181040P	NSYSF181040	-	NSY2SP184	NSYEC104	NSYEC1041	-
1800	1000	400	2	NSYSF1810402DP	NSYSF1810402D	-	NSY2SP184	NSYEC104	NSYEC1041	-
1800	1000	500	1	NSYSF181050P	NSYSF181050	-	NSY2SP185	NSYEC105	NSYEC1051	-
1800	1000	600	1	NSYSF181060P	NSYSF181060	-	NSY2SP186	NSYEC106	NSYEC1061	NSYEC1062
1800	1000	600	2	NSYSF1810602DP	NSYSF1810602D	-	NSY2SP186	NSYEC106	NSYEC1061	NSYEC1062
1800	1200	400	2	NSYSF1812402DP	NSYSF1812402D	-	NSY2SP184	NSYEC124	NSYEC1241	-
1800	1200	500	2	NSYSF1812502DP	NSYSF1812502D	-	NSY2SP185	NSYEC125	NSYEC1251	-
1800	1200	600	2	NSYSF1812602DP	NSYSF1812602D	-	NSY2SP186	NSYEC126	NSYEC1261	NSYEC1262
2000	300	500	1	-	NSYSF20350	-	NSY2SP205	NSYEC35	NSYEC351	-
2000	300	600	1	-	NSYSF20360	-	NSY2SP206	NSYEC36	NSYEC361	-
2000	300	800	1	-	NSYSF20380	-	NSY2SP208	-	NSYEC381	-
2000	400	400	1	-	NSYSF20440	-	NSY2SP204	NSYEC44	NSYEC441	-
2000	400	500	1	-	NSYSF20450	-	NSY2SP205	NSYEC45	NSYEC451	-
2000	400	600	1	-	NSYSF20460	-	NSY2SP206	NSYEC46	NSYEC461	-
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2000	600	500	1	NSYSF20650P	NSYSF20650	NSYSF20650T	NSY2SP205	NSYEC65	NSYEC651	-
2000	600	600	1	NSYSF20660P	NSYSF20660	-	NSY2SP206	NSYEC66	NSYEC661	NSYEC662
2000	600	800	1	NSYSF20680P	NSYSF20680	-	NSY2SP208	NSYEC68	NSYEC681	NSYEC682
2000	800	400	1	NSYSF20840P	NSYSF20840	NSYSF20840T	NSY2SP204	NSYEC84	NSYEC841	-
2000	800	500	1	NSYSF20850P	NSYSF20850	NSYSF20850T	NSY2SP205	NSYEC85	NSYEC851	-
2000	800	600	1	NSYSF20860P	NSYSF20860	NSYSF20860T	NSY2SP206	NSYEC86	NSYEC861	NSYEC862
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2000	800	800	1	NSYSF20880P	NSYSF20880	NSYSF20880T	NSY2SP208	NSYEC88	NSYEC881	NSYEC882
2000	1000	400	1	NSYSF201040P	NSYSF201040	NSYSF201040T	NSY2SP204	NSYEC104	NSYEC1041	-
2000	1000	400	2	NSYSF2010402DP	NSYSF2010402D	-	NSY2SP204	NSYEC104	NSYEC1041	-
2000	1000	500	1	NSYSF201050P	NSYSF201050	NSYSF201050T	NSY2SP205	NSYEC105	NSYEC1051	-
2000	1000	500	2	NSYSF2010502DP	NSYSF2010502D	-	NSY2SP205	NSYEC105	NSYEC1051	-
2000	1000	600	1	NSYSF201060P	NSYSF201060	NSYSF201060T	NSY2SP206	NSYEC106	NSYEC1061	NSYEC1062
2000	1000	600	2	NSYSF2010602DP	NSYSF2010602D	-	NSY2SP206	NSYEC106	NSYEC1061	NSYEC1062
2000	1000	800	1	NSYSF201080P	NSYSF201080	-	NSY2SP208	NSYEC108	NSYEC1081	NSYEC1082
2000	1200	400	2	NSYSF2012402DP	NSYSF2012402D	-	NSY2SP204	NSYEC124	NSYEC1241	-
2000	1200	500	2	NSYSF2012502DP	NSYSF2012502D	-	NSY2SP205	NSYEC125	NSYEC1251	-
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2000	1200	800	2	NSYSF2012802DP	NSYSF2012802D	-	NSY2SP208	NSYEC128	NSYEC1281	NSYEC1282
2000	1600	400	2	NSYSF2016402DP	NSYSF2016402D	-	NSY2SP204	NSYEC164	NSYEC1641	-
2000	1600	500	2	NSYSF2016502DP	NSYSF2016502D	-	NSY2SP205	NSYEC165	NSYEC1651	-
2000	1600	600	2	NSYSF2016602DP	NSYSF2016602D	-	NSY2SP206	NSYEC166	NSYEC1661	NSYEC1662
2200	400	600	1	-	NSYSF22460	-	NSY2SP226	NSYEC46	NSYEC461	-
2200	600	600	1	NSYSF22660P	NSYSF22660	-	NSY2SP226	NSYEC66	NSYEC661	NSYEC662
2200	600	800	1	NSYSF22680P	NSYSF22680	-	NSY2SP228	NSYEC68	NSYEC681	NSYEC682
2200	800	600	1	NSYSF22860P	NSYSF22860	-	NSY2SP226	NSYEC86	NSYEC861	NSYEC862
2200	800	800	1	NSYSF22880P	NSYSF22880	NSYSF22880T	NSY2SP228	NSYEC88	NSYEC881	NSYEC882
2200	1000	600	1	NSYSF221060P	NSYSF221060	-	NSY2SP226	NSYEC106	NSYEC1061	NSYEC1062
2200	1200	600	2	NSYSF2212602DP	NSYSF2212602D	-	NSY2SP226	NSYEC126	NSYEC1261	NSYEC1262
2200	1200	800	2	NSYSF2212802DP	NSYSF2212802D	-	NSY2SP228	NSYEC128	NSYEC1281	NSYEC1282

Enclosure coupling kit page 3/32

Plinth page 3/36

Lifting eyebolts page 3/55

Lifting brackets page 3/55

Door cross rail page 3/68

Suitable metal enclosures

Assembled supply

Nominal dimensions (mm)			Plinth				Mounting plate	Intermediate mounting plate	Standard vertical uprights	Technical vertical uprights
			Height 100 (mm)		Height 200 (mm)					
Height (A)	Width (B)	Depth (C)	Front kit (corners + front panels)	Side panels, 2 u.	Front kit (corners + front panels)	Side panels, 4 u.				
1200	600	400	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200	NSYMP126	NSYSIMP12	-	NSYTVR12
1200	600	600	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200	NSYMP126	NSYSIMP12	-	NSYTVR12
1200	800	400	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200	NSYMP128	NSYSIMP12	-	NSYTVR12
1200	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP128	NSYSIMP12	-	NSYTVR12
1400	600	400	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200	NSYMP146	NSYSIMP14	-	NSYTVR14
1400	800	400	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200	NSYMP148	NSYSIMP14	-	NSYTVR14
1600	600	600	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200	NSYMP166	NSYSIMP16	-	NSYTVR16
1600	600	800	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200	NSYMP166	NSYSIMP16	-	NSYTVR16
1600	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP168	NSYSIMP16	-	NSYTVR16
1600	800	800	NSYSPF8100	NSYSPS8100	NSYSPF8200	NSYSPS8200	NSYMP168	NSYSIMP16	-	NSYTVR16
1800	400	400	NSYSPF4100	NSYSPS4100	NSYSPF4200	NSYSPS4200	-	-	NSYVR18	NSYTVR18
1800	400	500	NSYSPF4100	NSYSPS5100	NSYSPF4200	NSYSPS5200	-	-	NSYVR18	NSYTVR18
1800	400	600	NSYSPF4100	NSYSPS6100	NSYSPF4200	NSYSPS6200	-	-	NSYVR18	NSYTVR18
1800	600	400	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200	NSYMP186	NSYSIMP18	NSYVR18	NSYTVR18
1800	600	500	NSYSPF6100	NSYSPS5100	NSYSPF6200	NSYSPS5200	NSYMP186	NSYSIMP18	NSYVR18	NSYTVR18
1800	600	600	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200	NSYMP186	NSYSIMP18	NSYVR18	NSYTVR18
1800	600	800	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200	NSYMP186	NSYSIMP18	NSYVR18	NSYTVR18
1800	800	400	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200	NSYMP188	NSYSIMP18	NSYVR18	NSYTVR18
1800	800	500	NSYSPF8100	NSYSPS5100	NSYSPF8200	NSYSPS5200	NSYMP188	NSYSIMP18	NSYVR18	NSYTVR18
1800	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP188	NSYSIMP18	NSYVR18	NSYTVR18
1800	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP188	NSYSIMP18	NSYVR18	NSYTVR18
1800	1000	400	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200	NSYMP1810	NSYSIMP18	NSYVR18	NSYTVR18
1800	1000	400	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200	NSYMP1810	NSYSIMP18	NSYVR18	NSYTVR18
1800	1000	500	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200	NSYMP1810	NSYSIMP18	NSYVR18	NSYTVR18
1800	1000	600	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200	NSYMP1810	NSYSIMP18	NSYVR18	NSYTVR18
1800	1000	600	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200	NSYMP1810	NSYSIMP18	NSYVR18	NSYTVR18
1800	1200	400	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200	NSYMP1812	NSYSIMP18	NSYVR18	NSYTVR18
1800	1200	500	NSYSPF12100	NSYSPS5100	NSYSPF12200	NSYSPS5200	NSYMP1812	NSYSIMP18	NSYVR18	NSYTVR18
1800	1200	600	NSYSPF12100	NSYSPS6100	NSYSPF12200	NSYSPS6200	NSYMP1812	NSYSIMP18	NSYVR18	NSYTVR18
2000	300	500	NSYSPF3100	NSYSPS5100	NSYSPF3200	NSYSPS5200	-	-	NSYVR20	NSYTVR20
2000	300	600	NSYSPF3100	NSYSPS6100	NSYSPF3200	NSYSPS6200	-	-	NSYVR20	NSYTVR20
2000	300	800	NSYSPF3100	NSYSPF8100	NSYSPF3200	NSYSPF8200	-	-	NSYVR20	NSYVTR20
2000	400	400	NSYSPF4100	NSYSPS4100	NSYSPF4200	NSYSPS4200	-	-	NSYVR20	NSYTVR20
2000	400	500	NSYSPF4100	NSYSPS5100	NSYSPF4200	NSYSPS5200	-	-	NSYVR20	NSYTVR20
2000	400	600	NSYSPF4100	NSYSPS6100	NSYSPF4200	NSYSPS6200	-	-	NSYVR20	NSYTVR20
2000	400	800	NSYSPF4100	NSYSPS8100	NSYSPF4200	NSYSPS8200	-	-	NSYVR20	NSYTVR20
2000	600	400	NSYSPF6100	NSYSPS4100	NSYSPF6200	NSYSPS4200	NSYMP206	NSYSIMP20	NSYVR20	NSYTVR20
2000	600	500	NSYSPF6100	NSYSPS5100	NSYSPF6200	NSYSPS5200	NSYMP206	NSYSIMP20	NSYVR20	NSYTVR20
2000	600	600	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200	NSYMP206	NSYSIMP20	NSYVR20	NSYTVR20
2000	600	800	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200	NSYMP206	NSYSIMP20	NSYVR20	NSYTVR20
2000	800	400	NSYSPF8100	NSYSPS4100	NSYSPF8200	NSYSPS4200	NSYMP208	NSYSIMP20	NSYVR20	NSYTVR20
2000	800	500	NSYSPF8100	NSYSPS5100	NSYSPF8200	NSYSPS5200	NSYMP208	NSYSIMP20	NSYVR20	NSYTVR20
2000	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP208	NSYSIMP20	NSYVR20	NSYTVR20
2000	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP208	NSYSIMP20	NSYVR20	NSYTVR20
2000	800	800	NSYSPF8100	NSYSPS8100	NSYSPF8200	NSYSPS8200	NSYMP208	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	400	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	400	NSYSPF10100	NSYSPS4100	NSYSPF10200	NSYSPS4200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	500	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	500	NSYSPF10100	NSYSPS5100	NSYSPF10200	NSYSPS5200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	600	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	600	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1000	800	NSYSPF10100	NSYSPS8100	NSYSPF10200	NSYSPS8200	NSYMP2010	NSYSIMP20	NSYVR20	NSYTVR20
2000	1200	400	NSYSPF12100	NSYSPS4100	NSYSPF12200	NSYSPS4200	NSYMP2012	NSYSIMP20	NSYVR20	NSYTVR20
2000	1200	500	NSYSPF12100	NSYSPS5100	NSYSPF12200	NSYSPS5200	NSYMP2012	NSYSIMP20	NSYVR20	NSYTVR20
2000	1200	600	NSYSPF12100	NSYSPS6100	NSYSPF12200	NSYSPS6200	NSYMP2012	NSYSIMP20	NSYVR20	NSYTVR20
2000	1200	800	NSYSPF12100	NSYSPS8100	NSYSPF12200	NSYSPS8200	NSYMP2012	NSYSIMP20	NSYVR20	NSYTVR20
2000	1600	400	NSYSPF16100	NSYSPS4100	NSYSPF16200	NSYSPS4200	NSYMP2016	NSYSIMP20	NSYVR20	NSYTVR20
2000	1600	500	NSYSPF16100	NSYSPS5100	NSYSPF16200	NSYSPS5200	NSYMP2016	NSYSIMP20	NSYVR20	NSYTVR20
2000	1600	600	NSYSPF16100	NSYSPS6100	NSYSPF16200	NSYSPS6200	NSYMP2016	NSYSIMP20	NSYVR20	NSYTVR20
2200	400	600	NSYSPF4100	NSYSPS6100	NSYSPF4200	NSYSPS6200	-	-	NSYVR22	NSYTVR22
2200	600	600	NSYSPF6100	NSYSPS6100	NSYSPF6200	NSYSPS6200	NSYMP226	NSYSIMP22	NSYVR22	NSYTVR22
2200	600	800	NSYSPF6100	NSYSPS8100	NSYSPF6200	NSYSPS8200	NSYMP226	NSYSIMP22	NSYVR22	NSYTVR22
2200	800	600	NSYSPF8100	NSYSPS6100	NSYSPF8200	NSYSPS6200	NSYMP228	NSYSIMP22	NSYVR22	NSYTVR22
2200	800	800	NSYSPF8100	NSYSPS8100	NSYSPF8200	NSYSPS8200	NSYMP228	NSYSIMP22	NSYVR22	NSYTVR22
2200	1000	600	NSYSPF10100	NSYSPS6100	NSYSPF10200	NSYSPS6200	NSYMP2210	NSYSIMP22	NSYVR22	NSYTVR22
2200	1200	600	NSYSPF12100	NSYSPS6100	NSYSPF12200	NSYSPS6200	NSYMP2212	NSYSIMP22	NSYVR22	NSYTVR22
2200	1200	800	NSYSPF12100	NSYSPS8100	NSYSPF12200	NSYSPS8200	NSYMP2212	NSYSIMP22	NSYVR22	NSYTVR22

Document pocket
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Door switch
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Locks and lock inserts
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Cross rails
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Cable management
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Suitable metal enclosures
Supplied as a kit

Basic composition

For the construction of a suitable metal enclosure, the following must be ordered separately:

- Galvanised-steel structure, with a single laser-welded profile:
  – Bottom and top frame with roof.
  – Set of 4 vertical uprights.
- Sheet-steel panels, painted with epoxy-polyester resin, textured RAL 7035 grey:
  – Rear panel to be screwed on from the outside.
  – Plain door, single or double, with hinges, catches for the locking bars and reinforcement frame, made up of two vertical uprights and two height-adjustable door cross rails.
  – Transparent Securit® glass door, with hinges and catches for the locking bars.
- Further options:
- Composition accessories such as:
  – Plinths with heights of 100 and 200 mm.
  – Cable-entry plate, plain, with 1 entry and 2 entries.
  – Lifting accessories, door equipment, enclosure suites.
  – Lighting accessories.
  – Ventilation systems, etc.
- Mounting accessories.
- Cable management accessories.
- Power distribution accessories.
- Modular distribution accessories.
- Lighting accessories.
- Aeration, ventilation and air-conditioning systems.

Certifications

- BV, DNV, UL*, CUL.
  *1D.- 1, 12, 12K
  2D.- 1, 12, 12K

Assembled supply

Supply in kit form

Advantages of the kit formula

- Very short structure assembly time: only 15 minutes, with the attachment of 8 screws.
- Reduction of the required working surface.
- Reduction of the volume required for transport and storage.
- Possibility of working on the panels and assembling the enclosure directly before cabling.
- Possibility of having spare panels.
- Great freedom for creating your own enclosure, combining all the available elements.

Suitable metal enclosures
Supplied as a kit

Placement and screwing of the 4 vertical uprights at the corners of the top and bottom frames. Fixing by 8 screws, one at each corner of the enclosure.

Fixing of the hinges and the catches of the locking bar on the vertical uprights. Door installation inserting the captive pins of the hinge in their housing in the door.

Suspension of the rear panel using a self-centring piece to facilitate screwing.

Screwing the panel on using captive screws, screwed directly onto the structure.

Suitable metal enclosures

Supplied as a kit

Nominal dimensions (mm)			No. of doors	Vertical uprights	Bottom frame and top frame with roof	Rear panel	Side panels	Plain door (1)	Transparent door (Securit® glass) (1)	Mounting plate
Height (A)	Width (B)	Depth (C)		Painted with epoxy-polyester resin, textured RAL 7035						
1200	600	400	1	NSYSFV12	NSYSFC64	NSYBP126	NSY2SP124	NSYSFD126	NSYSFD126T	NSYMP126
1200	600	500	1	NSYSFV12	NSYSFC65	NSYBP126	NSY2SP125	NSYSFD126	NSYSFD126T	NSYMP126
1200	600	600	1	NSYSFV12	NSYSFC66	NSYBP126	NSY2SP126	NSYSFD126	NSYSFD126T	NSYMP126
1200	600	800	1	NSYSFV12	NSYSFC68	NSYBP126	NSY2SP128	NSYSFD126	NSYSFD126T	NSYMP126
1200	800	400	1	NSYSFV12	NSYSFC84	NSYBP128	NSY2SP124	NSYSFD128	NSYSFD128T	NSYMP128
1200	800	500	1	NSYSFV12	NSYSFC85	NSYBP128	NSY2SP125	NSYSFD128	NSYSFD128T	NSYMP128
1200	800	600	1	NSYSFV12	NSYSFC86	NSYBP128	NSY2SP126	NSYSFD128	NSYSFD128T	NSYMP128
1200	800	800	1	NSYSFV12	NSYSFC88	NSYBP128	NSY2SP128	NSYSFD128	NSYSFD128T	NSYMP128
1400	600	400	1	NSYSFV14	NSYSFC64	NSYBP146	NSY2SP144	NSYSFD146	NSYSFD146T	NSYMP146
1400	600	500	1	NSYSFV14	NSYSFC65	NSYBP146	NSY2SP145	NSYSFD146	NSYSFD146T	NSYMP146
1400	600	600	1	NSYSFV14	NSYSFC66	NSYBP146	NSY2SP146	NSYSFD146	NSYSFD146T	NSYMP146
1400	600	800	1	NSYSFV14	NSYSFC68	NSYBP146	NSY2SP148	NSYSFD146	NSYSFD146T	NSYMP146
1400	800	400	1	NSYSFV14	NSYSFC84	NSYBP148	NSY2SP144	NSYSFD148	NSYSFD148T	NSYMP148
1400	800	500	1	NSYSFV14	NSYSFC85	NSYBP148	NSY2SP145	NSYSFD148	NSYSFD148T	NSYMP148
1400	800	600	1	NSYSFV14	NSYSFC86	NSYBP148	NSY2SP146	NSYSFD148	NSYSFD148T	NSYMP148
1400	800	800	1	NSYSFV14	NSYSFC88	NSYBP148	NSY2SP148	NSYSFD148	NSYSFD148T	NSYMP148
1600	600	400	1	NSYSFV16	NSYSFC64	NSYBP166	NSY2SP164	NSYSFD166	NSYSFD166T	NSYMP166
1600	600	500	1	NSYSFV16	NSYSFC65	NSYBP166	NSY2SP165	NSYSFD166	NSYSFD166T	NSYMP166
1600	600	600	1	NSYSFV16	NSYSFC66	NSYBP166	NSY2SP166	NSYSFD166	NSYSFD166T	NSYMP166
1600	600	800	1	NSYSFV16	NSYSFC68	NSYBP166	NSY2SP168	NSYSFD166	NSYSFD166T	NSYMP166
1600	800	400	1	NSYSFV16	NSYSFC84	NSYBP168	NSY2SP164	NSYSFD168	NSYSFD168T	NSYMP168
1600	800	500	1	NSYSFV16	NSYSFC85	NSYBP168	NSY2SP165	NSYSFD168	NSYSFD168T	NSYMP168
1600	800	600	1	NSYSFV16	NSYSFC86	NSYBP168	NSY2SP166	NSYSFD168	NSYSFD168T	NSYMP168
1600	800	800	1	NSYSFV16	NSYSFC88	NSYBP168	NSY2SP168	NSYSFD168	NSYSFD168T	NSYMP168
1800	400	400	1	NSYSFV18	NSYSFC44	NSYBP184	NSY2SP184	NSYSFD184	-	-
1800	400	500	1	NSYSFV18	NSYSFC45	NSYBP184	NSY2SP185	NSYSFD184	-	-
1800	400	600	1	NSYSFV18	NSYSFC46	NSYBP184	NSY2SP186	NSYSFD184	-	-
1800	400	800	1	NSYSFV18	NSYSFC48	NSYBP184	NSY2SP188	NSYSFD184	-	-
1800	600	400	1	NSYSFV18	NSYSFC64	NSYBP186	NSY2SP184	NSYSFD186	NSYSFD186T	NSYMP186
1800	600	500	1	NSYSFV18	NSYSFC65	NSYBP186	NSY2SP185	NSYSFD186	NSYSFD186T	NSYMP186
1800	600	600	1	NSYSFV18	NSYSFC66	NSYBP186	NSY2SP186	NSYSFD186	NSYSFD186T	NSYMP186
1800	600	800	1	NSYSFV18	NSYSFC68	NSYBP186	NSY2SP188	NSYSFD186	NSYSFD186T	NSYMP186
1800	800	400	1	NSYSFV18	NSYSFC84	NSYBP188	NSY2SP184	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	500	1	NSYSFV18	NSYSFC85	NSYBP188	NSY2SP185	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	600	1	NSYSFV18	NSYSFC86	NSYBP188	NSY2SP186	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	600	2	NSYSFV18	NSYSFC86	NSYBP188	NSY2SP186	NSYSFD1882D	-	NSYMP188
1800	800	800	1	NSYSFV18	NSYSFC88	NSYBP188	NSY2SP188	NSYSFD188	NSYSFD188T	NSYMP188
1800	800	800	2	NSYSFV18	NSYSFC88	NSYBP188	NSY2SP188	NSYSFD1882D	-	NSYMP188
1800	1000	400	1	NSYSFV18	NSYSFC104	NSYBP1810	NSY2SP184	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	400	2	NSYSFV18	NSYSFC104	NSYBP1810	NSY2SP184	NSYSFD18102D	-	NSYMP1810
1800	1000	500	1	NSYSFV18	NSYSFC105	NSYBP1810	NSY2SP185	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	600	1	NSYSFV18	NSYSFC106	NSYBP1810	NSY2SP186	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	600	2	NSYSFV18	NSYSFC106	NSYBP1810	NSY2SP186	NSYSFD18102D	-	NSYMP1810
1800	1000	800	1	NSYSFV18	NSYSFC108	NSYBP1810	NSY2SP188	NSYSFD1810	NSYSFD1810T	NSYMP1810
1800	1000	800	2	NSYSFV18	NSYSFC108	NSYBP1810	NSY2SP188	NSYSFD18102D	-	NSYMP1810
1800	1200	400	2	NSYSFV18	NSYSFC124	NSYBP1812	NSY2SP184	NSYSFD18122D	NSYSFD18122DT	NSYMP1812
1800	1200	500	2	NSYSFV18	NSYSFC125	NSYBP1812	NSY2SP185	NSYSFD18122D	NSYSFD18122DT	NSYMP1812
1800	1200	600	2	NSYSFV18	NSYSFC126	NSYBP1812	NSY2SP186	NSYSFD18122D	NSYSFD18122DT	NSYMP1812
1800	1200	800	2	NSYSFV18	NSYSFC128	NSYBP1812	NSY2SP188	NSYSFD18122D	NSYSFD18122DT	NSYMP1812

(1) Hinges, locking bar catches and handle with 5-mm double-bar insert included.

Enclosure coupling kit page 3/32

Plinth page 3/36

Cable-gland plate pages 3/49 and 3/60

Lifting eyebolts page 3/55

Door accessories page 3/68

Suitable metal enclosures

Supplied as a kit

Nominal dimensions (mm)			No. of doors	Vertical uprights	Bottom frame and top frame with roof	Rear panel	Side panels	Plain door (1)	Transparent door (Securit® glass) (1)	Mounting plate
Height (A)	Width (B)	Depth (C)		Painted with epoxy-polyester resin, textured RAL 7035						
2000	300	500	1	NSYSFV20	NSYSFC35	NSYBP203	NSY2SP205	NSYSFD203	-	-
2000	300	600	1	NSYSFV20	NSYSFC36	NSYBP203	NSY2SP206	NSYSFD203	-	-
2000	400	400	1	NSYSFV20	NSYSFC44	NSYBP204	NSY2SP204	NSYSFD204	-	-
2000	400	500	1	NSYSFV20	NSYSFC45	NSYBP204	NSY2SP205	NSYSFD204	-	-
2000	400	600	1	NSYSFV20	NSYSFC46	NSYBP204	NSY2SP206	NSYSFD204	-	-
2000	400	800	1	NSYSFV20	NSYSFC48	NSYBP204	NSY2SP208	NSYSFD204	-	-
2000	600	400	1	NSYSFV20	NSYSFC64	NSYBP206	NSY2SP204	NSYSFD206	NSYSFD206T	NSYMP206
2000	600	500	1	NSYSFV20	NSYSFC65	NSYBP206	NSY2SP205	NSYSFD206	NSYSFD206T	NSYMP206
2000	600	600	1	NSYSFV20	NSYSFC66	NSYBP206	NSY2SP206	NSYSFD206	NSYSFD206T	NSYMP206
2000	600	800	1	NSYSFV20	NSYSFC68	NSYBP206	NSY2SP208	NSYSFD206	NSYSFD206T	NSYMP206
2000	800	400	1	NSYSFV20	NSYSFC84	NSYBP208	NSY2SP204	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	500	1	NSYSFV20	NSYSFC85	NSYBP208	NSY2SP205	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	600	1	NSYSFV20	NSYSFC86	NSYBP208	NSY2SP206	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	600	2	NSYSFV20	NSYSFC86	NSYBP208	NSY2SP206	NSYSFD2082D	-	NSYMP208
2000	800	800	1	NSYSFV20	NSYSFC88	NSYBP208	NSY2SP208	NSYSFD208	NSYSFD208T	NSYMP208
2000	800	800	2	NSYSFV20	NSYSFC88	NSYBP208	NSY2SP208	NSYSFD2082D	-	NSYMP208
2000	1000	400	1	NSYSFV20	NSYSFC104	NSYBP2010	NSY2SP204	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	400	2	NSYSFV20	NSYSFC104	NSYBP2010	NSY2SP204	NSYSFD20102D	-	NSYMP2010
2000	1000	500	1	NSYSFV20	NSYSFC105	NSYBP2010	NSY2SP205	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	500	2	NSYSFV20	NSYSFC105	NSYBP2010	NSY2SP205	NSYSFD20102D	-	NSYMP2010
2000	1000	600	1	NSYSFV20	NSYSFC106	NSYBP2010	NSY2SP206	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	600	2	NSYSFV20	NSYSFC106	NSYBP2010	NSY2SP206	NSYSFD20102D	-	NSYMP2010
2000	1000	800	1	NSYSFV20	NSYSFC108	NSYBP2010	NSY2SP208	NSYSFD2010	NSYSFD2010T	NSYMP2010
2000	1000	800	2	NSYSFV20	NSYSFC108	NSYBP2010	NSY2SP208	NSYSFD20102D	-	NSYMP2010
2000	1200	400	2	NSYSFV20	NSYSFC124	NSYBP2012	NSY2SP204	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1200	500	2	NSYSFV20	NSYSFC125	NSYBP2012	NSY2SP205	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1200	600	2	NSYSFV20	NSYSFC126	NSYBP2012	NSY2SP206	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1200	800	2	NSYSFV20	NSYSFC128	NSYBP2012	NSY2SP208	NSYSFD20122D	NSYSFD20122DT	NSYMP2012
2000	1600	400	2	NSYSFV20	NSYSFC164	NSYBP2016	NSY2SP204	NSYSFD20162D	-	NSYMP2016
2000	1600	500	2	NSYSFV20	NSYSFC165	NSYBP2016	NSY2SP205	NSYSFD20162D	-	NSYMP2016
2000	1600	600	2	NSYSFV20	NSYSFC166	NSYBP2016	NSY2SP206	NSYSFD20162D	-	NSYMP2016
2200	400	400	1	NSYSFV22	NSYSFC44	NSYBP224	NSY2SP224	NSYSFD224	-	-
2200	400	500	1	NSYSFV22	NSYSFC45	NSYBP224	NSY2SP225	NSYSFD224	-	-
2200	400	600	1	NSYSFV22	NSYSFC46	NSYBP224	NSY2SP226	NSYSFD224	-	-
2200	400	800	1	NSYSFV22	NSYSFC48	NSYBP224	NSY2SP228	NSYSFD224	-	-
2200	600	400	1	NSYSFV22	NSYSFC64	NSYBP226	NSY2SP224	NSYSFD226	NSYSFD226T	NSYMP226
2200	600	500	1	NSYSFV22	NSYSFC65	NSYBP226	NSY2SP225	NSYSFD226	NSYSFD226T	NSYMP226
2200	600	600	1	NSYSFV22	NSYSFC66	NSYBP226	NSY2SP226	NSYSFD226	NSYSFD226T	NSYMP226
2200	600	800	1	NSYSFV22	NSYSFC68	NSYBP226	NSY2SP228	NSYSFD226	NSYSFD226T	NSYMP226
2200	800	400	1	NSYSFV22	NSYSFC84	NSYBP228	NSY2SP224	NSYSFD228	NSYSFD228T	NSYMP228
2200	800	500	1	NSYSFV22	NSYSFC85	NSYBP228	NSY2SP225	NSYSFD228	NSYSFD228T	NSYMP228
2200	800	600	1	NSYSFV22	NSYSFC86	NSYBP228	NSY2SP226	NSYSFD228	NSYSFD228T	NSYMP228
2200	800	800	1	NSYSFV22	NSYSFC88	NSYBP228	NSY2SP228	NSYSFD228	NSYSFD228T	NSYMP228
2200	1000	400	1	NSYSFV22	NSYSFC104	NSYBP2210	NSY2SP224	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1000	500	1	NSYSFV22	NSYSFC105	NSYBP2210	NSY2SP225	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1000	600	1	NSYSFV22	NSYSFC106	NSYBP2210	NSY2SP226	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1000	800	1	NSYSFV22	NSYSFC108	NSYBP2210	NSY2SP228	NSYSFD2210	NSYSFD2210T	NSYMP2210
2200	1200	400	2	NSYSFV22	NSYSFC124	NSYBP2212	NSY2SP224	NSYSFD22122D	NSYSFD22122DT	NSYMP2212
2200	1200	500	2	NSYSFV22	NSYSFC125	NSYBP2212	NSY2SP225	NSYSFD22122D	NSYSFD22122DT	NSYMP2212
2200	1200	600	2	NSYSFV22	NSYSFC126	NSYBP2212	NSY2SP226	NSYSFD22122D	NSYSFD22122DT	NSYMP2212
2200	1200	800	2	NSYSFV22	NSYSFC128	NSYBP2212	NSY2SP228	NSYSFD22122D	NSYSFD22122DT	NSYMP2212

(1) Hinges, locking bar catches and handle with 5-mm double-bar insert included.

Cross rails page 7/31

Trays page 7/44

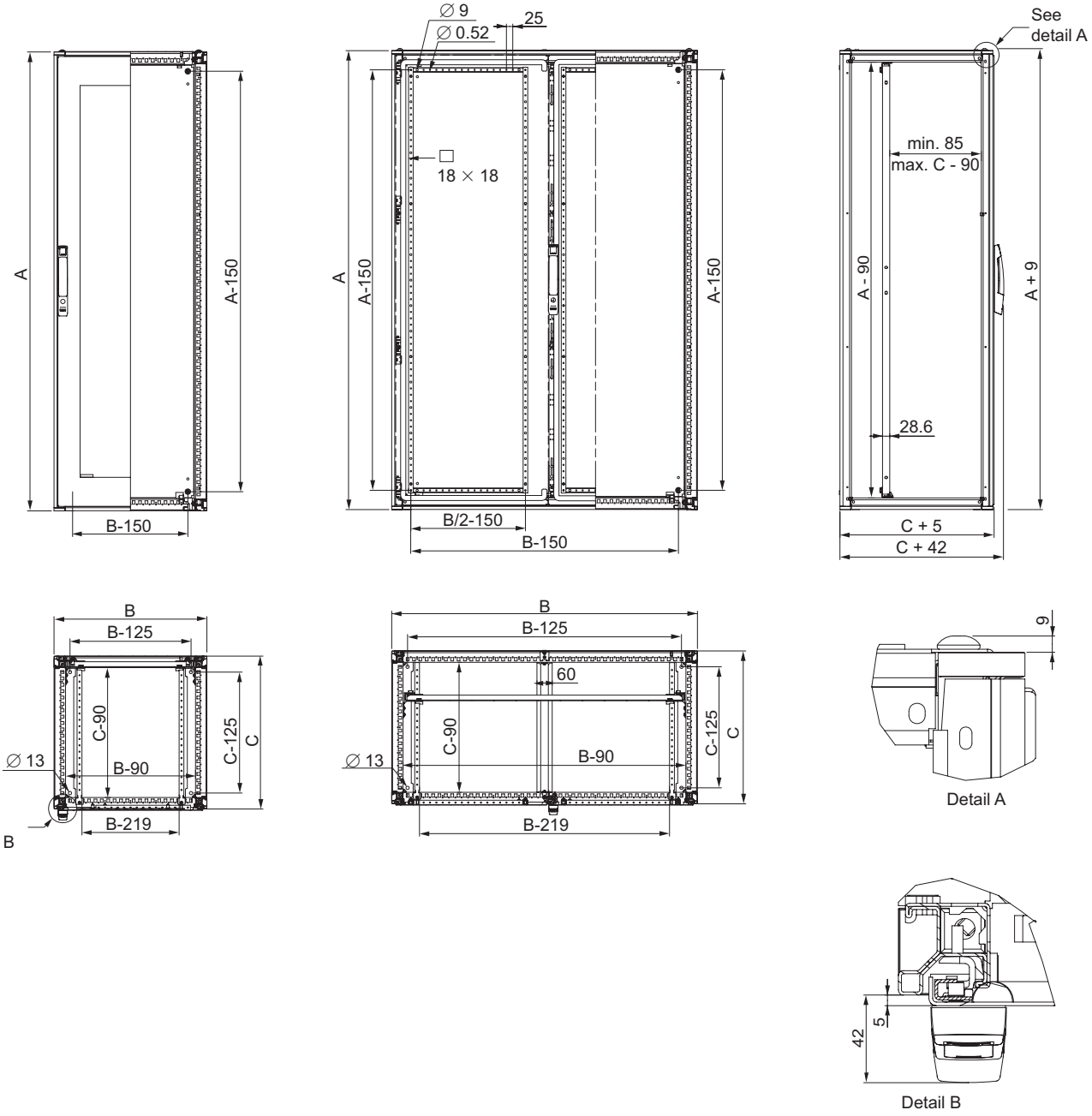
Cable management page 7/114

Modular distribution page 7/74

19" racks page 3/95

Suitable metal enclosures
Dimensions

Dimensions



Composition accessories
Panels

Side panels

External fixing

- Set of 2 side panels fixed from the outside of the enclosure.
- Captive screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 2 side panels fixed from the outside and fixing elements.

Nominal dimensions (mm)		Reference
Height	Depth	
1200	400	NSY2SP124
	500	NSY2SP125
	600	NSY2SP126
	800	NSY2SP128
1400	400	NSY2SP144
	500	NSY2SP145
	600	NSY2SP146
	800	NSY2SP148
1600	400	NSY2SP164
	500	NSY2SP165
	600	NSY2SP166
	800	NSY2SP168
1800	400	NSY2SP184
	500	NSY2SP185
	600	NSY2SP186
	800	NSY2SP188
2000	400	NSY2SP204
	500	NSY2SP205
	600	NSY2SP206
	800	NSY2SP208
2200	400	NSY2SP224
	500	NSY2SP225
	600	NSY2SP226
	800	NSY2SP228

Trim cap

- Trim cap for external fixing panels, both side and rear.
- Material: polyamide 6.
- Finish: RAL 7035 grey.

Supply: 50 units.

Reference by unit. Order by multiples of 50 (50, 100, 150...).

Reference
NSYCSP

Composition accessories
Panels

>Advantage:

They prevent access by unauthorised persons; advisable for use in public spaces.

Side panels

Internal fixing

- Set of 2 side panels fixed from the inside of the enclosure, preventing access by unauthorised persons. Very useful in public spaces.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 2 side panels with internal fixing, with sealing gasket and bag of accessories.

Nominal dimensions (mm)		Reference
Height	Depth	
1200	600	**NSY2SPI126**
1800	500	**NSY2SPI185**
	600	**NSY2SPI186**
	800	**NSY2SPI188**
2000	400	**NSY2SPI204**
	500	**NSY2SPI205**
	600	**NSY2SPI206**
	800	**NSY2SPI208**
2200	600	**NSY2SPI226**
	800	**NSY2SPI228**

>Advantage:

Quick access to the inside of the enclosure.

Quick-fixing side panels

- Set of 2 side panels fixed to the outside of the enclosure by clipping locks.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.
- IP40.

Supply: 2 side panels, fixed by clips, with no sealing gasket and fixing elements.

Nominal dimensions (mm)		Reference
Height	Depth	
1200	600	**NSY2SPQ126**
	800	**NSY2SPQ128**
1400	600	**NSY2SPQ146**
	800	**NSY2SPQ148**
1600	600	**NSY2SPQ166**
	800	**NSY2SPQ168**
1800	600	**NSY2SPQ186**
	800	**NSY2SPQ188**
2000	600	**NSY2SPQ206**
	800	**NSY2SPQ208**
2200	600	**NSY2SPQ226**
	800	**NSY2SPQ228**

Composition accessories
Panels

>Advantage:

It prevents access by unauthorised persons; advisable for use in public spaces.

Internal fixing rear panel

- Rear panel fixed from the inside of the enclosure, preventing unauthorised personnel from accessing and removing it. Normally used in public spaces.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 1 rear panel fixed from the inside and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width	
1200	600	**NSYBPI126**
1600	600	**NSYBPI166**
	800	**NSYBPI168**
1800	600	**NSYBPI186**
	800	**NSYBPI188**
	1000	**NSYBPI1810**
2000	400	**NSYBPI204**
	600	**NSYBPI206**
	800	**NSYBPI208**
	1000	**NSYBPI2010**
	1200	**NSYBPI2012**
2200	600	**NSYBPI226**
	800	**NSYBPI228**
	1000	**NSYBPI2210**

Partition panel

- Partition panel for direct fixing to the structure, guarantees a water/dustproof protection of IP10 between enclosure suites.
- Material: galvanised steel.

Supply: 1 partition panel, sealing gasket and fixing elements.

Nominal dimensions (mm)		Reference
Height	Depth	
1600	600	**NSYPPS166**
	800	**NSYPPS168**
1800	400	**NSYPPS184**
	500	**NSYPPS185**
	600	**NSYPPS186**
2000	400	**NSYPPS204**
	500	**NSYPPS205**
	600	**NSYPPS206**
	800	**NSYPPS208**
2200	600	**NSYPPS226**
	800	**NSYPPS228**

Composition accessories
Panels

Protective cover for lateral sockets

- Protective cover for sockets mounted on the modular partition panel.
- Depth of 200 mm.
- Door opening of 120°.
- Internal locking system shared with the enclosure. 5-mm double-bar flat escutcheon. Possibility of changing the flat escutcheon for the handle.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: protective cover, plain cable-entry plate and fixing elements.

Nominal dimensions (mm)		Reference
Height (A)	Depth (C)	
1800	500	**NSYCPC185**
	600	**NSYCPC186**
2000	500	**NSYCPC205**
	600	**NSYCPC206**

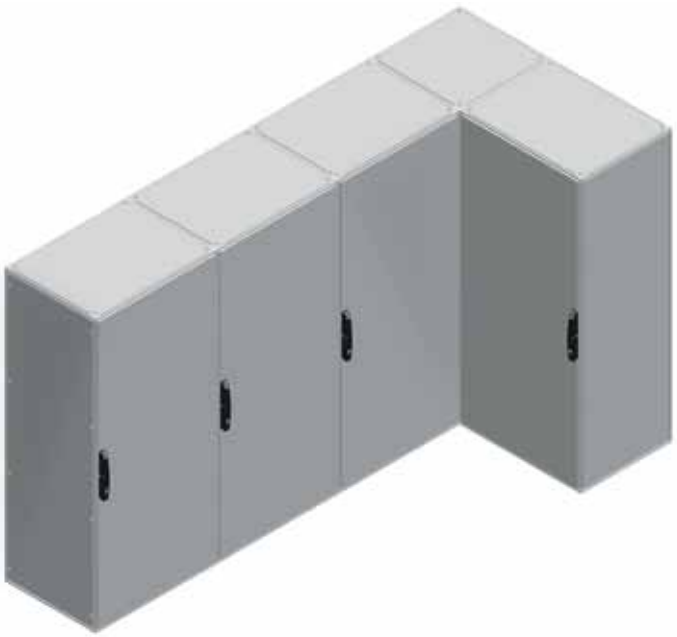
Composition accessories
Enclosure suites

Combination examples with Spacial SF

The construction design of the enclosures is based on forming sets of enclosures. Thanks to the speed and ease with which enclosures can be coupled in the width and depth directions, and the elements created especially to facilitate joining and transporting them, we can provide the best solution for every electric installation. The connecting parts are fixed to the enclosures using self-tapping M6 screws, although if necessary they can be installed using M6 and M8 caged nuts **NSYCNFM6**, **NSYCNFM8**.

Combination examples	References
Standard + reinforced coupling kit	**NSYSFBK + NSYSFBKR**
19" + reinforced coupling kit	**NSYSFBK19 + NSYSFBKR**
External + reinforced coupling kit	**NSYSFBKE + NSYSFBKR**
External + quick coupling kit	**NSYSFBKE + NSYSFBKF**

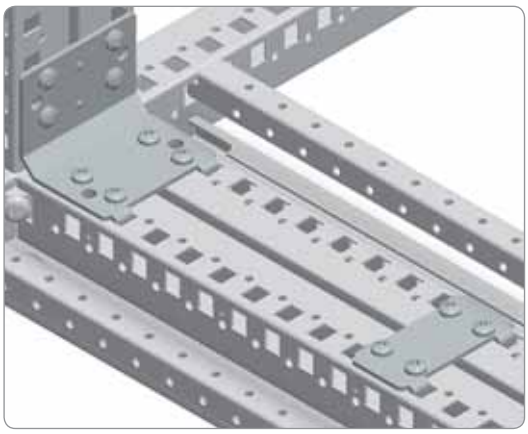
Note: maximum load under optimum conditions. See other options in the lifting and transport table page **3/56**.



> Advantage:

Multiple assembly options, adapting to all needs.

Composition accessories
Enclosure suites



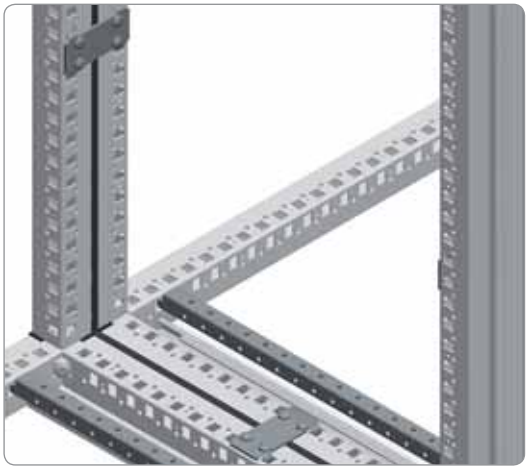
Standard coupling kit

- Used for joining enclosures side-to-side or depthwise.
- Fixing from the inside of the enclosures.
- Degree of protection: IP55.
- Material:

– Flat connectors and brackets: zinc-coated steel.
– Sealing gasket: EPDM.

Supply: 4 brackets, 2 flat connectors, sealing gasket and fixing elements.

Reference
NSYSFBK



Swing 19" rack coupling kit

- Used for joining enclosures equipped with swing 19" rack, side-to-side or depthwise.
- Fixing from the inside of the enclosures.
- Degree of protection: IP55.
- Material:

– Flat connectors: zinc-coated steel.
– Sealing gasket: EPDM.

Supply: 8 flat connectors, sealing gasket and fixing elements.

Reference
NSYSFBK19

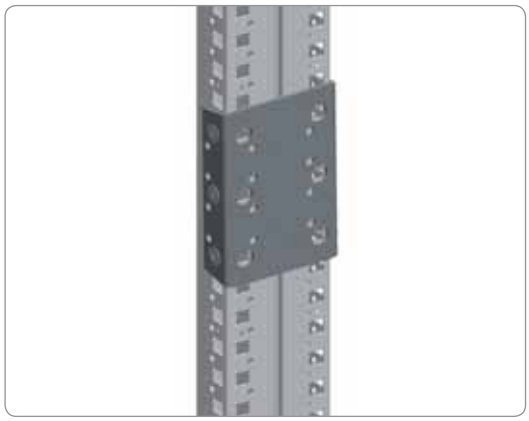
Composition accessories
Enclosure suites

Reinforced coupling

- It is used together with the **coupling kit** to reinforce the connection between 2 enclosures when they carry heavy loads.
- Fixing from the inside of the enclosures.
- Material: zinc-coated steel.

Supply: 4 reinforced connectors and fixing elements.

Reference
NSYSFBKR

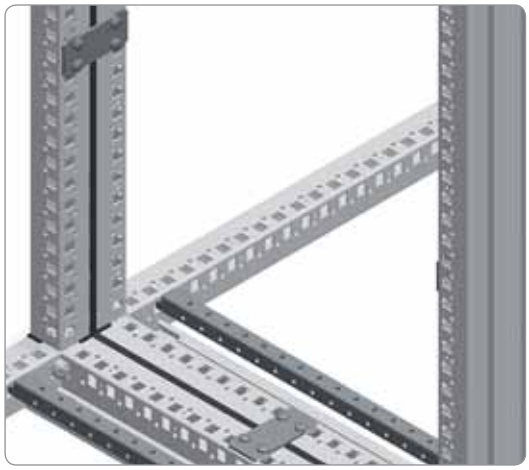


Quick coupling

- Used for quickly joining 2 enclosures.
- Fixing from the inside of the enclosures.
- Recommended for coupling enclosures in their provisional workshop location, when the required IP degree is not high.
- Degree of protection: IP40.
- Material: zinc-coated steel.

Supply: 4 flat links and fixing elements.

Reference
NSYSFBKF



Composition accessories
Enclosure suites

Kit for coupling the previous version with Spacial SF

- It is used for coupling an enclosure of a previous version (OLN or Spacial 6000) side-to-side or depthwise with a **Spacial SF** enclosure.
- Fixing from the inside of the enclosures.
- Degree of protection: IP55.
- Material:

– Flat connectors and spacers: zinc-coated steel.
– Sealing gasket: EPDM.

Supply: 4 spacers, 4 flat connectors, sealing gasket and fixing elements.

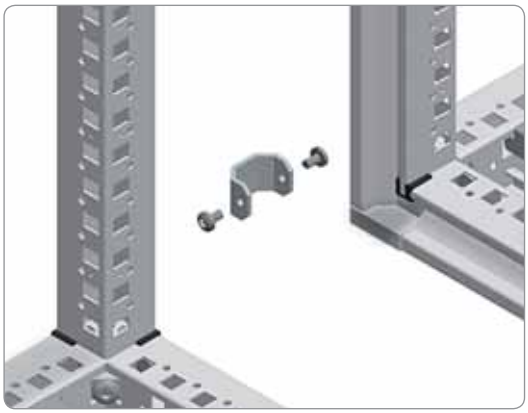
Reference
NSYSFBKSH

External coupling kit

- Allows two enclosures to be joined by their structure.
- Fixing from the outside of the enclosures.
- The mounting plate or vertical uprights fixed to the back of the enclosure prevent the assembly and dismantling of the kit.
- It can be combined with the reinforced or the quick coupling kit.
- Degree of protection: IP55.
- Material:

– External connectors: zinc-coated steel.
– Sealing gasket: EPDM.

Supply: 4 external connectors, sealing gasket and fixing elements.



Reference
NSYSFBKE

Composition accessories
Enclosure suites

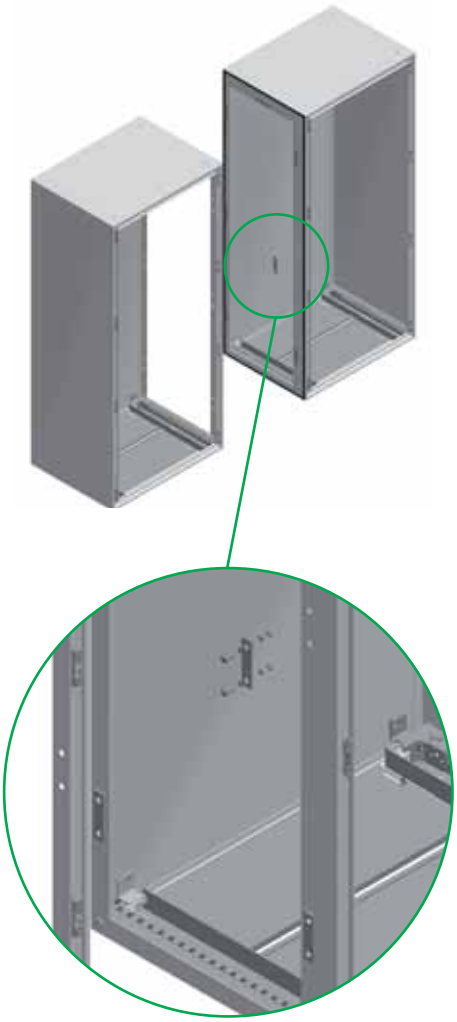
Enclosure coupling kit for Spacial SM

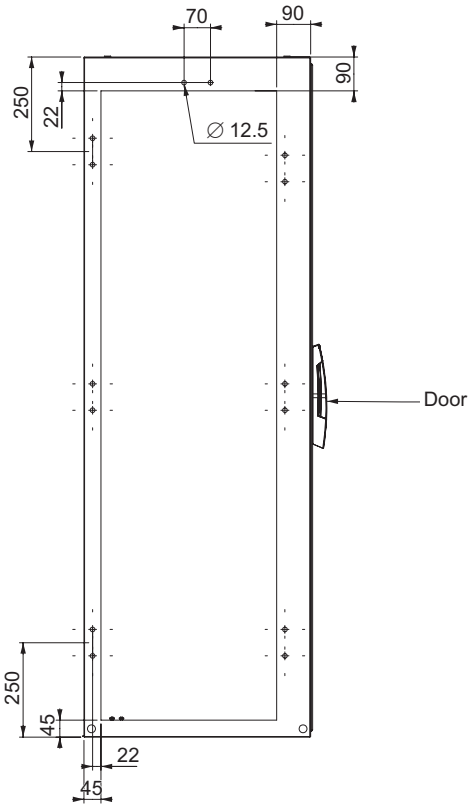
- Used for joining enclosures side-to-side.
- Enclosures fixed from the inside.
- Degree of protection: IP55.
- Material:

– 9 × 9 sealing gasket: EPDM.

Supply: 1 sealing gasket and fixing elements.

Reference
NSYSMBK

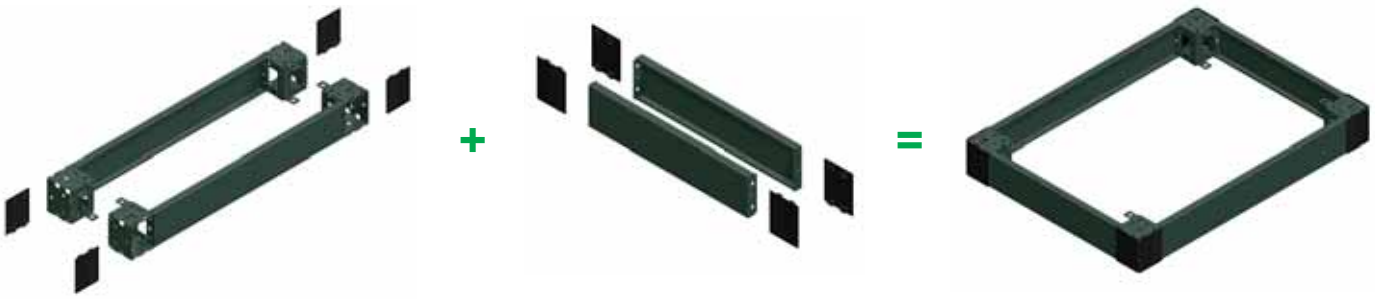




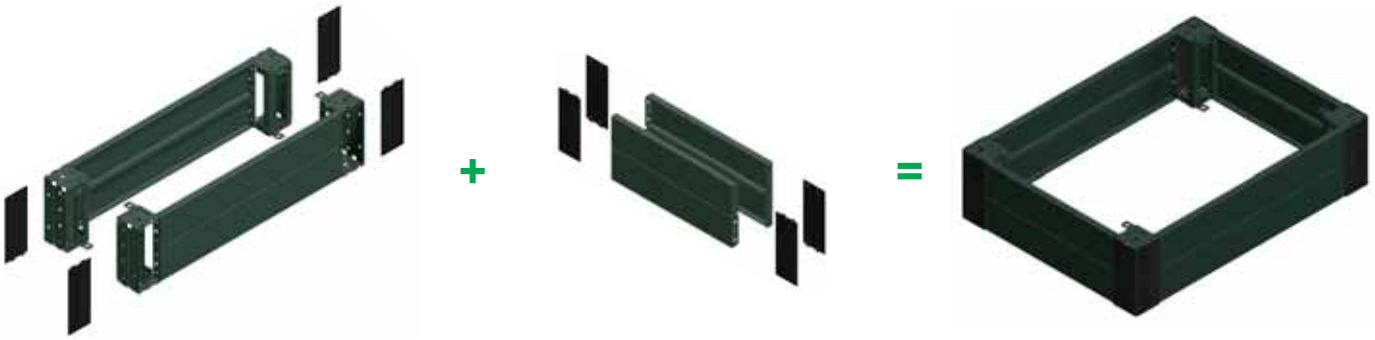
Composition accessories
Floor

Plinth in kit form

Front and rear kit + **Side panels** = **Complete plinth**



Plinth height 100 mm



Plinth height 200 mm

The complete plinth consists of two elements, one is the front and rear kit, determined by the length of the enclosure, and the other consists of the side panels, which determine the depth of the enclosure.
The number of side panels required is decided according to the desired plinth combination.

> Advantage:

– Robust design.
– The modular plinth system makes it possible to reduce the number of references in stock.

Composition accessories
Floor

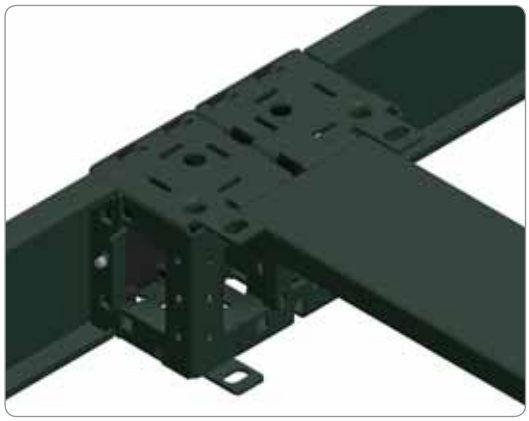
Possibility of joining plinths

❶ **The surfaces between corners are always in contact.**
They are joined by an M8 screw and nut, not included in the standard supply.

> Advantage:

Longitudinally free space for passing cables.

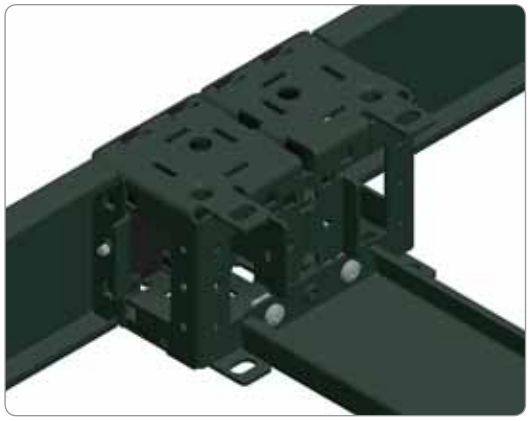
Greater rigidity of the resultant assembly unit.

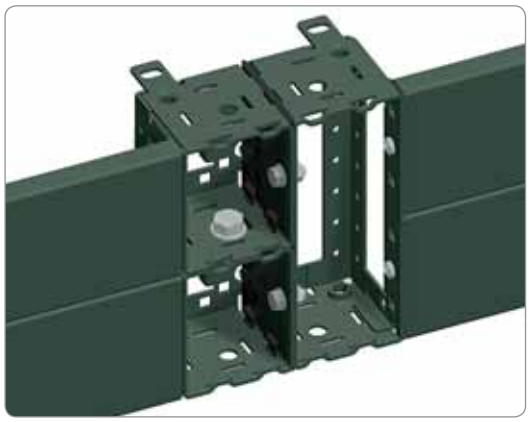


❷ By side panels, the M6 screws and caged nuts, not included in the standard supply, reference **NSYSPM6** and reference **NSYCN9M625**, which can be mounted above and/or below.

> Advantage:

Improves rigidity in the depthwise direction during transport.



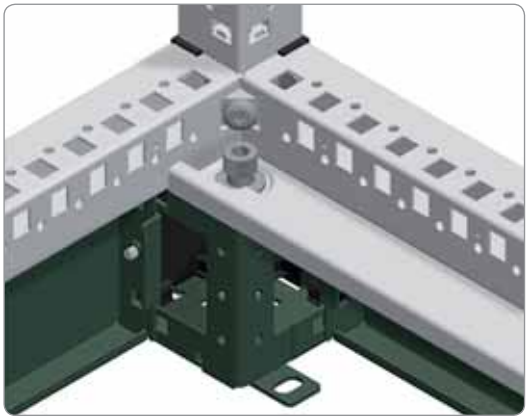


❸ **Vertical plinth assembly** by means of M12 screws and nuts, not included in the standard supply.

> Advantage:

The two heights of corners can be combined.

Composition accessories
Floor



Possibility of fixing the enclosure to the plinth

1 Fixing from the inside of the enclosure by means of an M12 screw, screwing directly into the corner of the plinth.

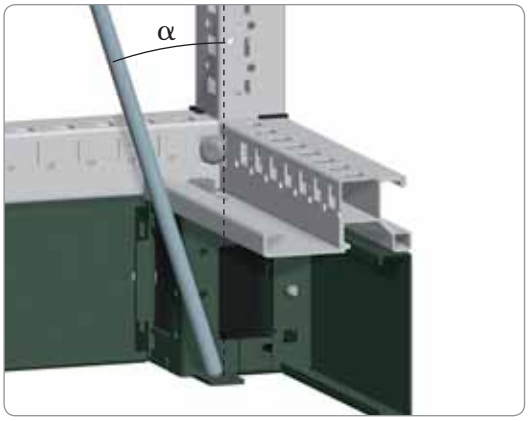
>Advantage:

Fixing convenience and speed.

2 Fixing from the outside of the enclosure with a M12 screw, screwing directly onto the vertical upright.

>Advantage:

Maximum rigidity of the enclosure-plinth assembly.



Possibility of fixing the plinth to the floor

1 Fixing from the inside of the enclosure.

The machining angle varies according to the plinth model:

Plinth height 100 mm α = 18º.
Plinth height 200 mm α = 9º

2 Fixing from the outside of the enclosure, optimum point for the rigidity of the assembly.

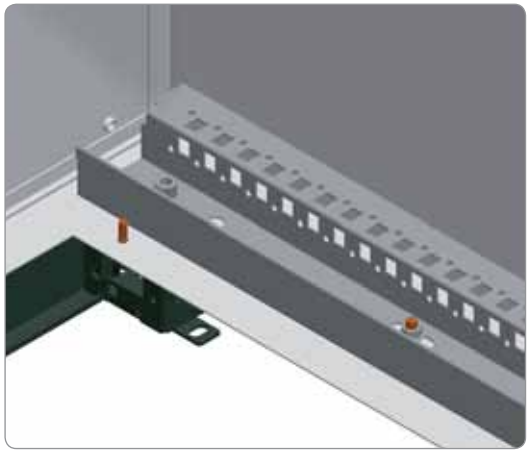
The machining angle varies according to the plinth model:

Plinth height 100 mm α = 22º.
Plinth height 200 mm α = 11º.

3 It is also possible to use floor-fixing supports, reference **NSYSGF**, to fix the corner or the panel and the corner to the floor.

The corners of the ends can be rotated in the event of needing to remove the side panels of the plinth and/or to obtain access to the fixing outside the floor, when the set is installed against the wall.

Composition accessories
Floor

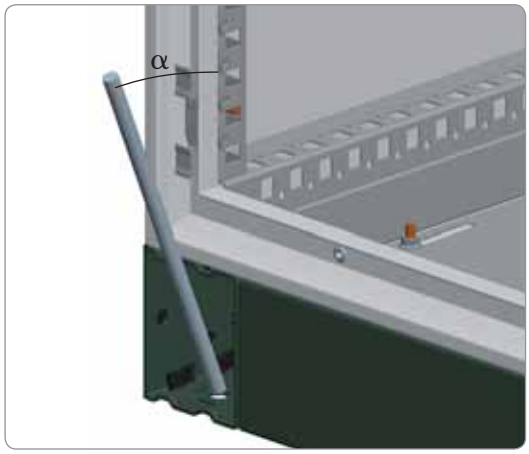


Fixing the enclosure to the plinth

Fixing from the inside of the enclosure by means of an M12 screw, screwing directly into the corner of the plinth.

> Advantage:

Fixing convenience and speed.



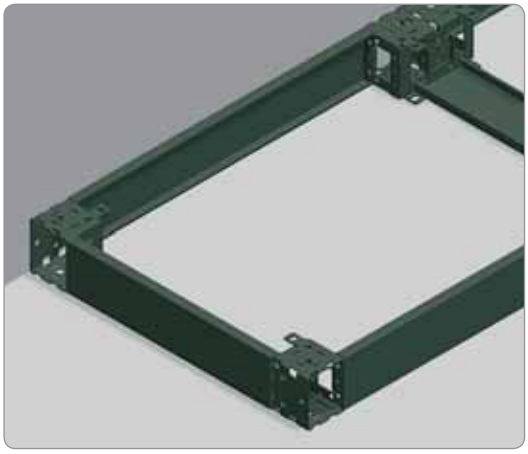
Fixing the enclosure to the ground

Fixing from the outside of the enclosure, optimum point for the rigidity of the assembly.

The machining angle varies according to the plinth model:

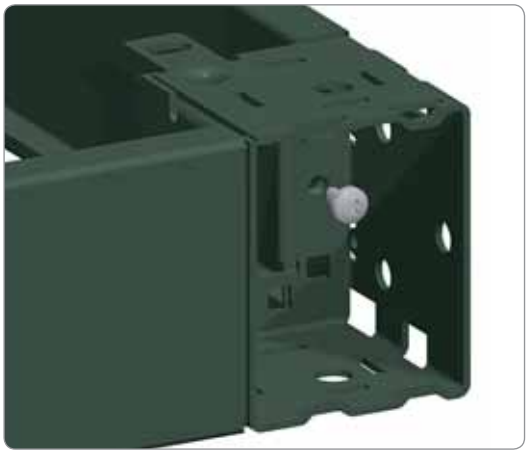
Plinth height 100 mm: $\alpha = 22°$.
Plinth height 200 mm: $\alpha = 11°$.

Composition accessories
Floor



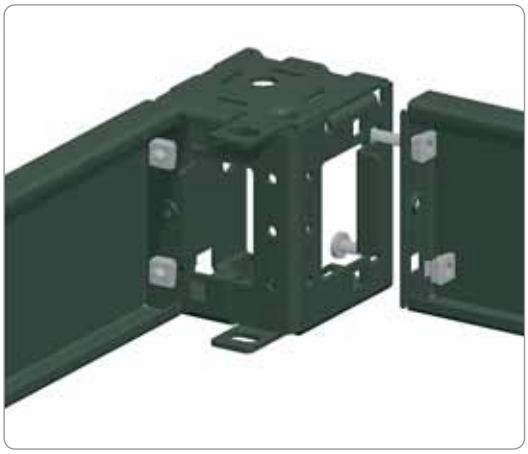
- Thanks to the design of the corners, when the enclosure is installed against the wall, the following is possible:
– To remove the side panels (turning the corner).
– To access the external fixing to the floor.

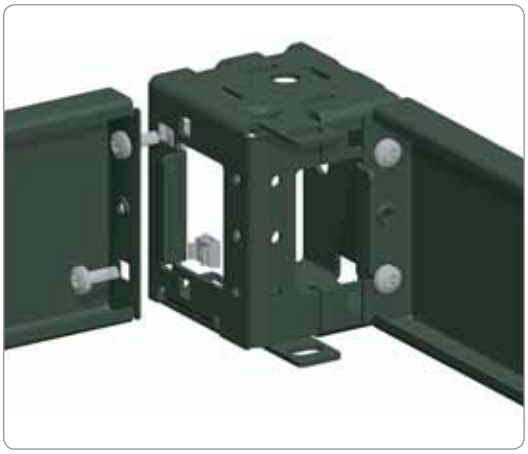
It is also possible to use floor-fixing supports, reference **NSYSGF**, to fix the corner or the panel and the corner to the floor.



Assembly of the plinth panels

The panels are fixed with an M6 screw to the corner, included in the standard supply of the side panels.
The front and rear panels are delivered mounted on the corners.



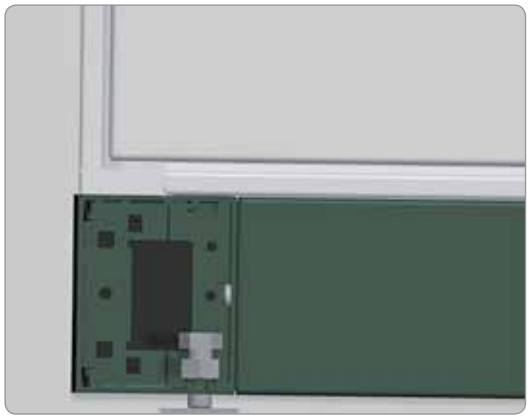


Fixing options

Fixing points can be added to the panels, mounting M6 caged nuts, reference **NSYCN9M625**, at the ends and fixing them to the corner by means of M6 screws, reference **NSYSPM6**.

The plinth can be made tamper-proof; the panels cannot be removed without accessing the inside of the enclosure. For this purpose, they are mounted on the corner with M6 caged nuts, reference **NSYCN9M625**, and the panels are fixed to the corner by means of M6 screws, reference **NSYSPM6**.

Composition accessories
Floor



Levelling the plinth

The plinth allows levelling by means of an M12 screw.

Examples of solutions

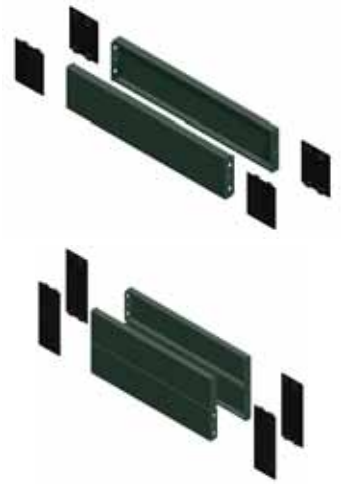
Composition accessories
Floor

Front plinth

- The front and rear of the plinth consists of 4 corners with 2 or 4 panels.
- Material: folded sheet steel, corner with a thickness of 2.5 mm.
- Finish: painted with epoxy-polyester resin, RAL 7022 grey.
- Degree of protection: IP30 of the complete plinth.
- Resistance to external mechanical impacts: IK10.
- Maximum load: 1300 kg.
- Model heights: 100 and 200 mm.

Supply:
– **Height 100 mm:** 4 corners, 2 panels (front and rear), 4 corner covers and fixing elements.
– **Height 200 mm:** 4 corners, 4 panels (2 front and 2 rear), 4 corner covers and fixing elements.

Nominal dimensions (mm)	Reference	
Width	**100 mm**	**200 mm**
300	**NSYSPF3100**	**NSYSPF3200**
400	**NSYSPF4100**	**NSYSPF4200**
600	**NSYSPF6100**	**NSYSPF6200**
800	**NSYSPF8100**	**NSYSPF8200**
1000	**NSYSPF10100**	**NSYSPF10200**
1200	**NSYSPF12100**	**NSYSPF12200**
1600	**NSYSPF16100**	**NSYSPF16200**



Plinth side panels

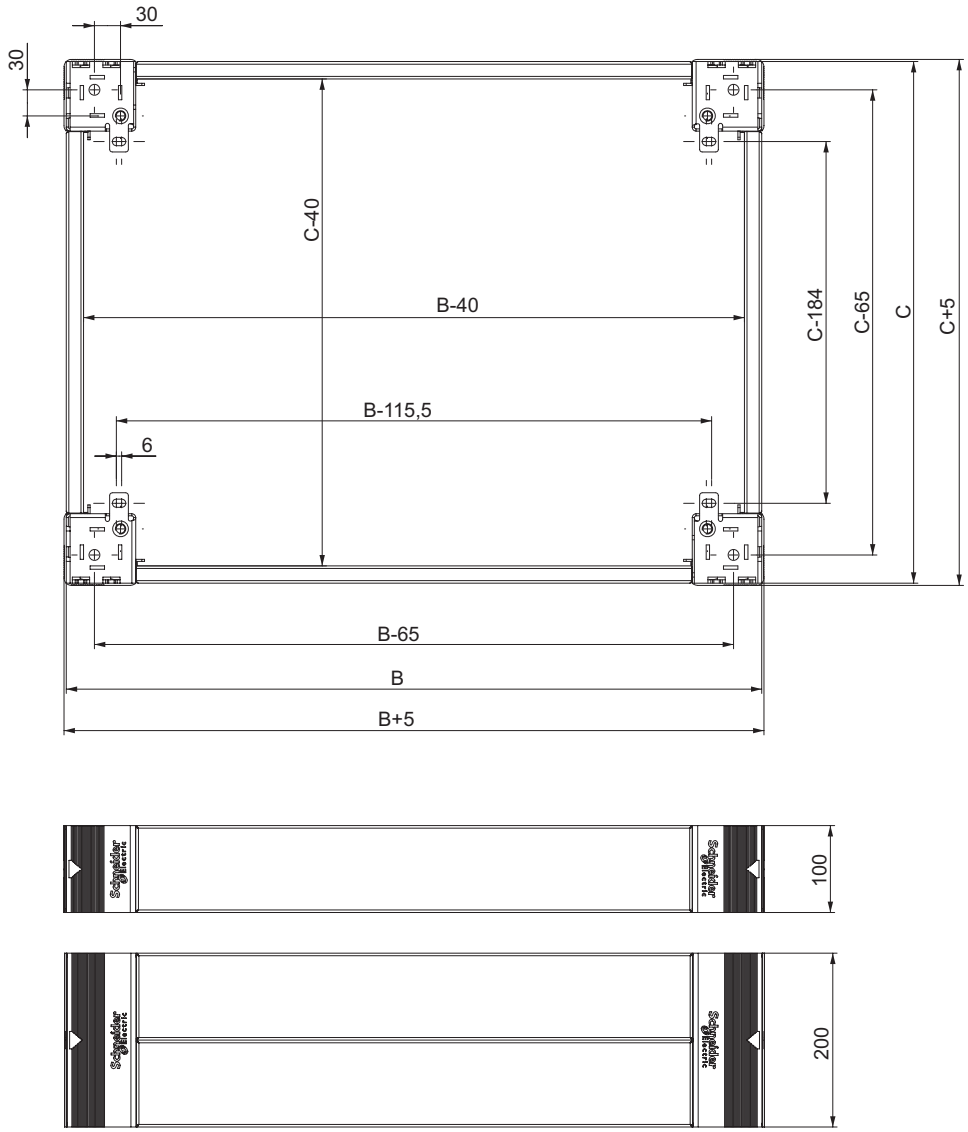
- They are fixed to the corner of the plinth by 2 fixing screws.
- Material: folded sheet steel.
- Finish: painted with epoxy-polyester resin, RAL 7022 grey.
- Degree of protection: IP30 of the complete plinth.
- Resistance to external mechanical impacts: IK10.
- Model heights: 100 and 200 mm.

Supply:
– **Height 100 mm:** 2 side panels, 4 corner covers and fixing elements.
– **Height 200 mm:** 4 side panels (height of 100 mm, 2 for each side), 4 corner covers and fixing elements.

Nominal dimensions (mm)	Reference	
Depth	**100 mm**	**200 mm**
300	**NSYSPS3100**	**NSYSPS3200**
400	**NSYSPS4100**	**NSYSPS4200**
500	**NSYSPS5100**	**NSYSPS5200**
600	**NSYSPS6100**	**NSYSPS6200**
800	**NSYSPS8100**	**NSYSPS8200**

Composition accessories
Floor

General layout of the plinth



Screws and nuts for internal fixing of the plinth panels

- Optional fixings for the panels with M6 screws and caged nuts.
- According to the position of the caged nut, the panels can be made tamper-proof. By accessing the screw, only from the inside of the enclosure. See pages **3/38** and **3/39**.
- Valid for all types of panels.

Screws and nuts for internal fixing of plinth panels		
Description	**Supply (units)**	**Reference**
Torx T30 M6 × 10 screws	50	**NSYSPM6**
M6 caged nuts	100	**NSYCN9M625**

Reference by unit. Order by multiples of 50 (Torx screws) and 100 (Caged nuts).

Composition accessories
Floor

Ventilated front plinth

- The front and rear of the ventilated plinth is made up of 4 corners with 2 front panels.
- Material: folded sheet steel, corner with a thickness of 2.5 mm.
- Finish: painted with epoxy-polyester resin, RAL 7022 grey.
- IP20.
- Resistance to external mechanical impacts: IK10.
- Maximum load: 1300 kg.
- Model height 100 mm.

Supply: height 100 mm: 4 corners, 2 ventilated panels (front and rear), 4 corner covers and fixing elements.

Nominal dimensions (mm)	Reference
Width (B)	Height 100 mm
600	**NSYSPFV6100**
800	**NSYSPFV8100**

Ventilated side panels

- They are fixed to the corner of the plinth by fixing screws.
- Material: folded sheet steel.
- Finish: painted with epoxy-polyester resin, RAL 7022 grey.
- IP20.
- They can be combined with front plinths with a height of 200 mm. In this case, 2 sets of ventilated side panels are required.

Supply: height 100 mm: 2 ventilated side panels, 4 corner covers and fixing elements.

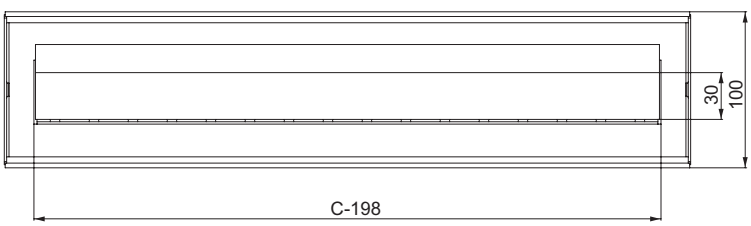
Nominal dimensions (mm)	Reference
Depth (C)	Height 100 mm
600	**NSYSPV6100**
800	**NSYSPV8100**

Panels with brush

- They allow the entry and fixing of cables inside the enclosure, through the plinth.
- Attachment to the corners of the plinth by screws.
- Material: folded sheet steel.
- Finish: painted with epoxy-polyester resin, RAL 7022 grey.
- Model heights: 100 mm.

Supply: 2 panels with brushes, 4 corner covers and fixing elements.

Nominal dimensions (mm)	Reference
Depth (C)	
600	**NSYSPB6100**
800	**NSYSPB8100**



Composition accessories
Floor

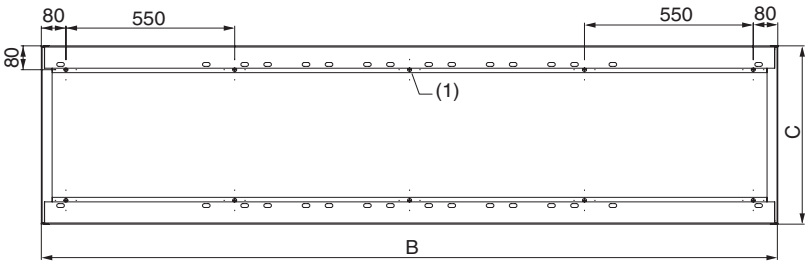
Plinth for sets

- Designed for the assembly of sets of 2 to 4 **Spacial SF** enclosures, joined on a single plinth.
- Made up of a front and rear set with a 3-mm U-shaped profile and one or two sets of side panels, also with a U-shaped profile.
- Material: folded sheet steel.
- Finish: painted with epoxy-polyester resin, RAL 7022 grey.
- Model heights: 100 and 200 mm.

Supply:
– Front plinth: 2 U-shaped profiles and fixing elements.
– Side panels:
Height 100 mm: 2 side panels and fixing elements.

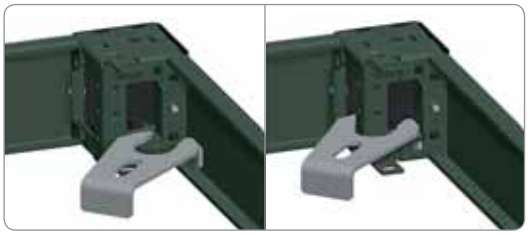
Nominal dimensions (mm)	Set front plinth reference	
Width (B)	100 mm	200 mm
1600	**NSYSPFC16100**	**NSYSPFC16200**
1800	**NSYSPFC18100**	**NSYSPFC18200**
2400	**NSYSPFC24100**	**NSYSPFC24200**

Nominal dimensions (mm)	Set side panel reference	
Depth (C)	100 mm	200 mm
400	**NSYSPC4100**	2 × **NSYSPC4100**
500	**NSYSPC5100**	2 × **NSYSPC5100**
600	**NSYSPC6100**	2 × **NSYSPC6100**
800	**NSYSPC8100**	2 × **NSYSPC8100**



(1) Only for version with width of 2400 mm.

Composition accessories
Floor

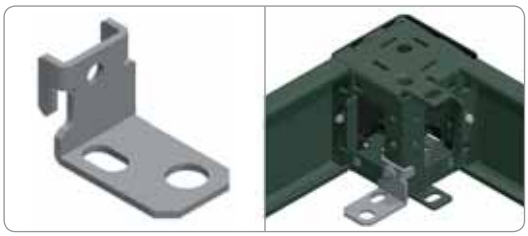


Fixing to the floor

- Piece for fixing the plinth to the floor in the event of not being able to use the drill holes made in the plinth.
- Material: zinc-coated steel.
- Thickness: 4 mm.
- M12 fixing point.

Supply: 4 pieces, fixing elements not supplied.

Reference
NSYSGF

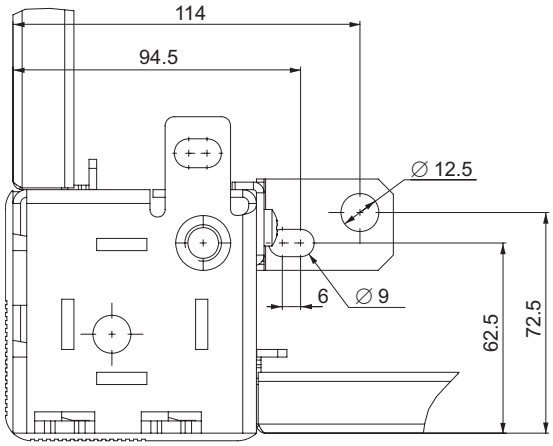


Fixing to the floor by fixing points of previous version (OLN/CMO or Spacial 6000 and 18500)

- Pieces that reproduce the floor-fixing points of the previous plinth.
- Material: zinc-coated steel.
- Thickness: 4 mm.
- M12 fixing point.

Supply: 4 pieces, fixing elements not supplied.

Reference
NSYOL6GF



Composition accessories
Floor

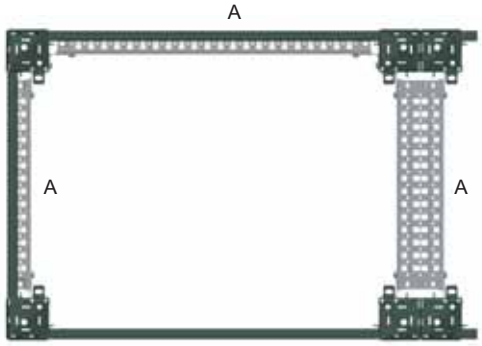
Plinth cross-rail support

- Support for fixing a cross rail inside the plinth.
- Material: zinc-coated steel.
- Thicknesses: 2 mm.
- Fixing to the corner, 100 and 200 mm, height adjustment with a pitch of 25 mm.

Supply: 12 pieces and fixing elements.

Reference by unit. Order by multiples of 12 (12, 24, 36...).

Reference
NSYSPCR



Plinth cross rails fixed in position A.

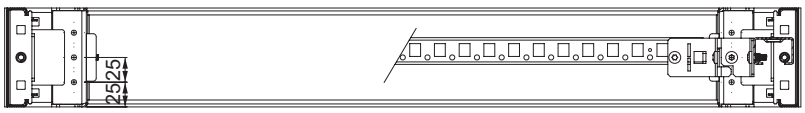
Plinth cross rails

- They are fixed across the width and/or depth between the corners of the plinth.
- The plinth cross-rail supports are required for its assembly, ref. **NSYSPCR**.
- Material: zinc-coated steel.
- They allow to set and adjust the depth of the cross rails for fixing cables or other elements.

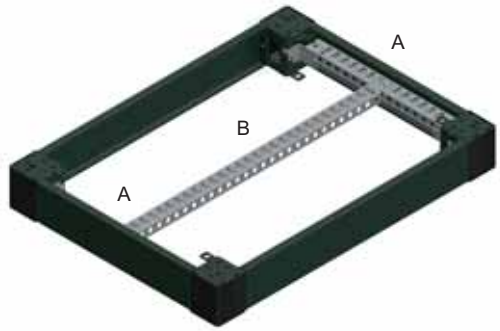
Supply: 2 cross rails and fixing elements.

Plinth cross rails fixes in position A:

Plinth cross rails		
Nominal width/depth (mm)	Cross rails 1 row (40)	Cross rails 3 rows (90)
400	NSYSUCR4030	NSYSUCR9030
500	NSYSUCR4040	NSYSUCR9040
600	NSYSUCR4050	NSYSUCR9050
800	NSYSUCR4070	NSYSUCR9070
1000	NSYSUCR4090	NSYSUCR9090
1200	NSYSUCR40110	NSYSUCR90110
1600	NSYSUCR40150	NSYSUCR90150



Composition accessories
Floor



Plinth cross rail fixes in position B.
It requires 2 cross rails in position A to be fixed.

Plinth cross rail fixed in position B

- They are fixed to the plinth cross rails, both the universal and the quick-fixing types.
- Their depth is adjustable with a pitch of 25 mm.
- See universal and quick-fixing cross rail references, page **7/36**.

Example of fixing **Spacial SF**

Composition accessories
Cable entry

Cable-gland plates

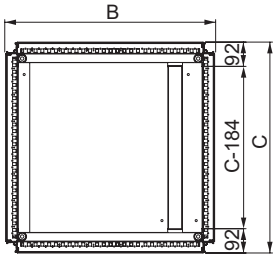
- Plates for cable entry from the bottom of the enclosure.
- Material: galvanised steel.
- Thicknesses: 1.5 mm.
- Fixing by C-shaped clip, fixed with screws, providing electrical continuity through the clip.
- Each plate has 2 drill holes with an 8-mm diameter, covered with a plug, for cases in which earthing needs to be performed by an earthing cable or braid (elements not supplied).
- Plate models:

– Plain.
– With 1 entry.
– With 2 entries.

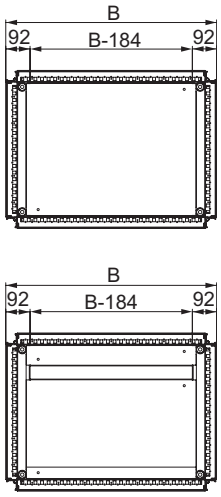
Plain cable-gland plate

- Maximum compact water/dustproof design.

Supply: plain plate and fixing elements.



Enclosures of 300 and 400 mm width.

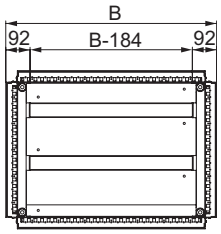


Enclosures of 600, 800, 1000 and 1200 mm width.

Cable-gland plate with 1 entry

- Facilitates the entry of cables thanks to a longitudinal opening.

Supply: plate with 1 entry; self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm (guarantees good sealing) and fixing elements.

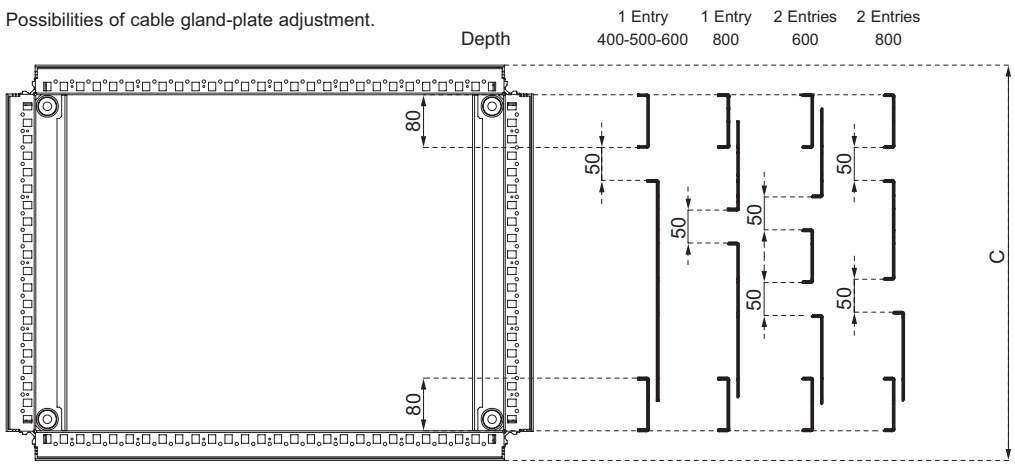


Cable-entry plate with 2 entries

- Cable entry for very deep enclosures (600 and 800 mm).
- Two longitudinal openings allowing a large number of cables through.

Supply: 1 plate with 2 entries; polyurethane adhesive gasket with cross-section of 15 × 25 mm (guarantee good sealing) and fixing elements.

Possibilities of cable gland-plate adjustment.



Composition accessories
Cable entry

Nominal SF dimensions (mm)		Reference		
Width (B)	Depth (C)	Plain	With 1 entry	With 2 entries
300	500	NSYEC35	NSYEC351	-
300	600	NSYEC36	NSYEC361	-
400	400	NSYEC44	NSYEC441	-
400	500	NSYEC45	NSYEC451	-
400	600	NSYEC46	NSYEC461	-
400	800	NSYEC48	NSYEC481	-
600	400	NSYEC64	NSYEC641	-
600	500	NSYEC65	NSYEC651	-
600	600	NSYEC66	NSYEC661	NSYEC662
600	800	NSYEC68	NSYEC681	NSYEC682
800	400	NSYEC84	NSYEC841	-
800	500	NSYEC85	NSYEC851	-
800	600	NSYEC86	NSYEC861	NSYEC862
800	800	NSYEC88	NSYEC881	NSYEC882
1000	400	NSYEC104	NSYEC1041	-
1000	500	NSYEC105	NSYEC1051	-
1000	600	NSYEC106	NSYEC1061	NSYEC1062
1000	800	NSYEC108	NSYEC1081	NSYEC1082
1200	400	NSYEC124	NSYEC1241	-
1200	500	NSYEC125	NSYEC1251	-
1200	600	NSYEC126	NSYEC1261	NSYEC1262
1200	800	NSYEC128	NSYEC1281	NSYEC1282
1600	400	NSYEC164	NSYEC1641	-
1600	500	NSYEC165	NSYEC1651	-
1600	600	NSYEC166	NSYEC1661	NSYEC1662

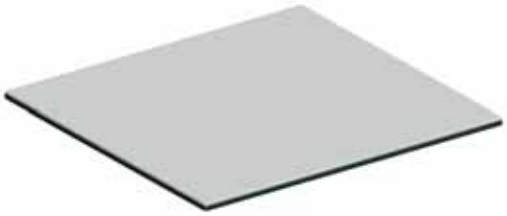
Brush-type cable-entry gasket

- For plates with 1 or 2 cable entries. The cables can have different diameters.
- Guarantees good protection against dust.
- Quick and effective installation by clipping onto the sheet.
- Width of the brush-type gasket: 25 mm.

Supply: 2 brush-type gaskets.

Spacial SF width (mm)	Reference
300	NSYBCE3
400	NSYBCE4
600	NSYBCE6
800	NSYBCE8
1000	NSYBCE10
1200	NSYBCE12
1600	NSYBCE16

Composition accessories
Cable entry



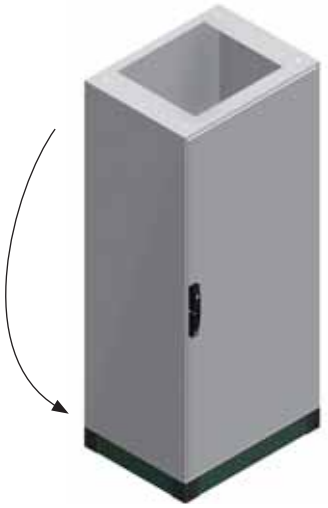
Plain cable-gland plate

- Plain cable-gland plates for compact enclosures.
- Fixing from the outside in:

– Enclosures with the cable entry at the top (enclosures rotated 180°). Compatible with the plinth.
– Enclosures with cut-out roof.

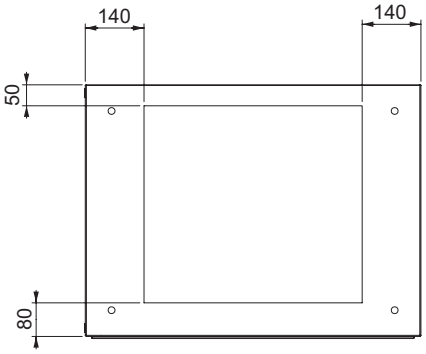
- Fixing from the inside on the base of the enclosure.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: 1 plain plate and fixing elements.



Enclosure rotated 180°.

Spacial SM Dimensions (mm)		Reference
Width	Depth	
600	300	**NSYSMEC63**
600	400	**NSYSMEC64**
600	500	**NSYSMEC65**
600	600	**NSYSMEC66**
800	300	**NSYSMEC83**
800	400	**NSYSMEC84**
800	500	**NSYSMEC85**
800	600	**NSYSMEC86**
1000	300	**NSYSMEC103**
1000	400	**NSYSMEC104**
1000	500	**NSYSMEC105**
1200	300	2 × **NSYSMEC63**
1200	400	2 × **NSYSMEC64**
1200	500	2 × **NSYSMEC65**
1200	600	2 × **NSYSMEC66**
1600	500	2 × **NSYSMEC85**
1600	600	2 × **NSYSMEC86**



Dimensions of the cut-out to be made in the roof if the enclosure is not rotated 180°.

Composition accessories
Cable entry

Brush-type cable-entry gasket

- Brush-type gasket for installation on the cable-gland plates. The cables can have different diameters.
- Guarantees good protection against dust.
- Quick and effective installation by clipping onto the sheet.
- Width of the brush gasket: 34 mm.

Supply: 2 brush-type gaskets.

Spacial SM width (mm)	Reference
600	**NSYSMBCE6**
800	**NSYSMBCE8**
1000	**NSYSMBCE10**
1200	2 × **NSYSMBCE6**
1600	2 × **NSYSMBCE8**

Composition accessories
Cable entry

Foam cable-entry gasket

- Spare gasket, made from self-extinguishing expanded polyurethane with a cross-section of 15 × 25 mm, for fixing on cable-gland plates.
- Adhesive to guarantee good sealing.

Supply: 4 strips with a length of 1 m.

Reference
NSYCEJ

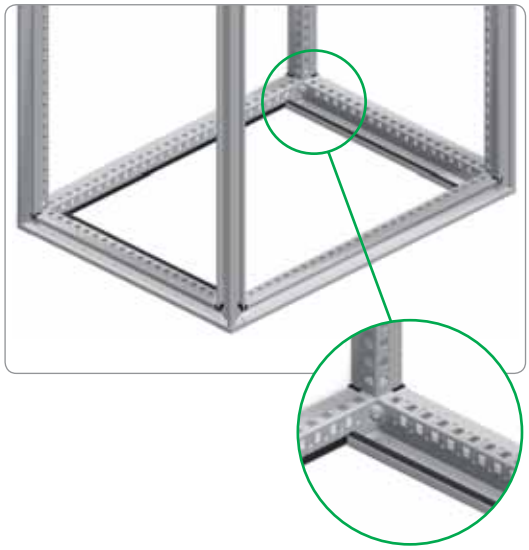
Composition accessories
Cable entry

Sealing gasket

- Sealing gasket, made from ethylene-propylene with a cross-section of 3 × 10 mm, for mounting on the perimeter of the cable-gland plates.
- Adhesive to guarantee good sealing.

Supply: 5.8-m spiral gasket.

Reference
NSYCEK



Cable-gland plate for connectors

- Plate to be used together with plates with 1 or 2 cable entries, adding or replacing one of the parts.
- The system allows the simultaneous installation of various connector-entry plates.
- Material: galvanised steel.
- Thickness: 1.5 mm.

Supply: 1 plate and fixing elements.

Spacial SF width (mm)	Number of cuts	Reference
600	2	**NSYDCE6**
800	3	**NSYDCE8**
1000	4	**NSYDCE10**
1200	4	**NSYDCE12**

Composition accessories
Lifting systems

> Advantage:

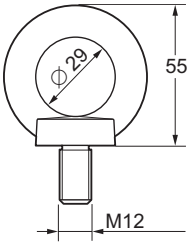
Eyebolts screwed directly into the vertical axis of the upright contribute greatly to robustness during transport.

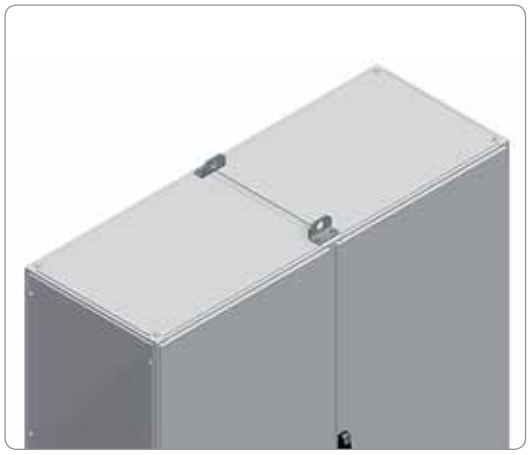
Eyebolts

- Set of M12 lifting eyebolts, which screw directly into the structure of the enclosure, in the axis of the uprights.
- Material: galvanised cast steel.
- Maximum load: 340 kg per eyebolt.

Supply: 4 eyebolts.

Reference
NSYSFEB



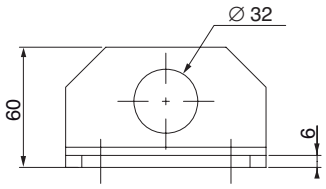


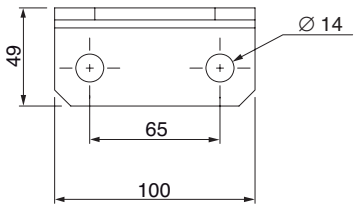
Lifting brackets

- Set of lifting and transport brackets, fixed to the structure between two coupled enclosures, in the axis of the uprights.
- Material: zinc-coated steel.
- Maximum load: see lifting and transport table, page **3/56**.

Supply: 4 brackets and fixing elements (M12 screws).

Reference
NSYSFELB





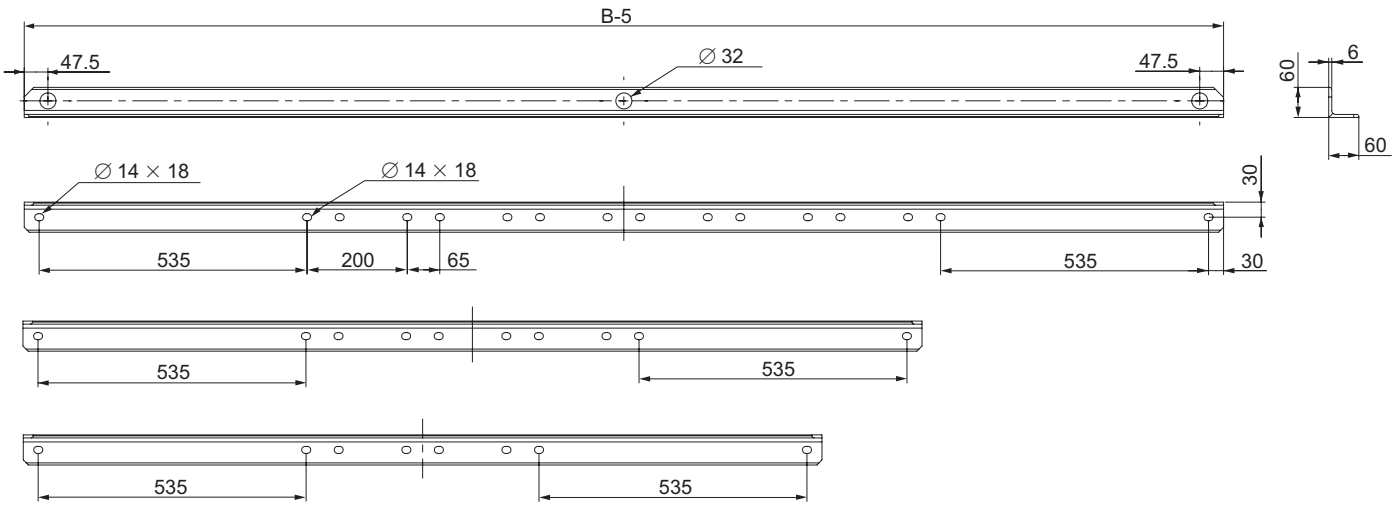
Composition accessories
Lifting systems

Lifting bar

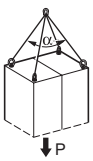
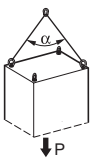
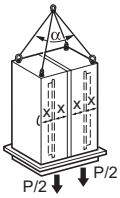
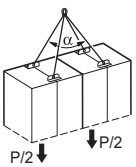
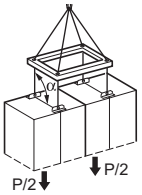
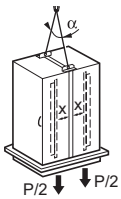
- Set of bars for lifting and transporting enclosures suites. They are fixed to the structure of the enclosure, in the axis of the uprights.
- Material: zinc-coated steel.
- Maximum load: see lifting and transport table.

Supply: 2 lifting bars and fixing elements (M12 screws).

Length (mm) (B)	Reference
1600	**NSYSFTB16**
1800	**NSYSFTB18**
2400	**NSYSFTB24**



Lifting instructions

	Eyebolts				Lifting brackets		
							X ⩽ 75 mm 
Angle	**P ⩽ (kg)**	**P ⩽ (kg)**	**P ⩽ (kg)**	**P ⩽ (kg)**	**P ⩽ (kg)**	**P ⩽ (kg)**	**P ⩽ (kg)**
45°	1160	580	-	1100	2800	-	-
60°	830	415	-	-	2800	-	1100
90°	480	240	1360	-	1100	3000	-
120°	257	-	-	-	-	-	-

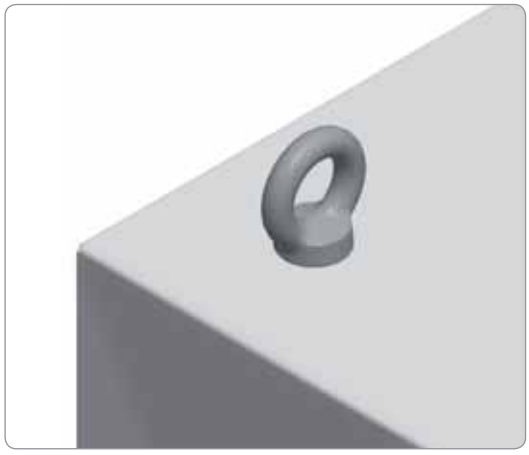
Composition accessories
Lifting systems

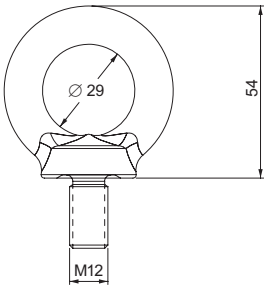
Eyebolts

- Set of M12 lifting eyebolts, fixed to the enclosure by fixing nuts.
- Material: galvanised cast steel.
- Maximum load: 340 kg per eyebolt and sling at 60°.

Supply: 4 eyebolts and 4 fixing nuts.

Reference
NSYSMEB





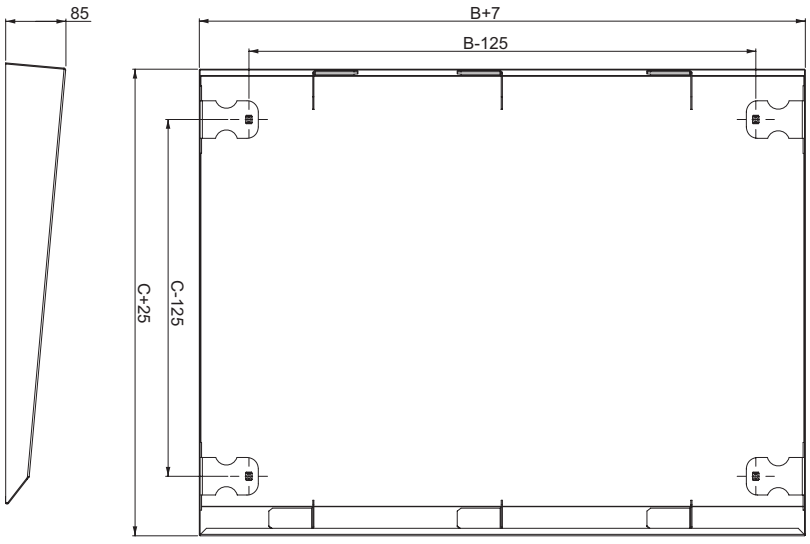
Composition accessories
Roof

Canopy

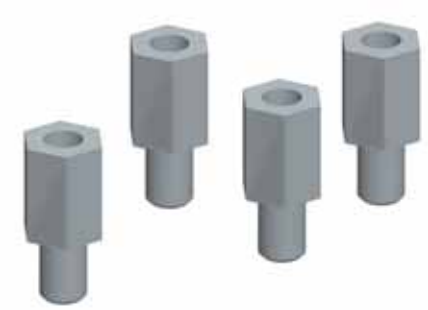
- Provides excellent protection against splashes from rainwater.
- Highly recommended for outdoor applications.
- **Spacial SF:** fixing by drill holes to be made in the roof of the enclosure.
- **Spacial SM:** fixing by drill holes already made in the roof.
- Material: galvanised steel.
- Finish: painted with polyester-epoxy resin, RAL 7035 grey.
- Not compatible with the simultaneous use of lifting elements.
- **Spacial SF:** it is possible to use a single canopy with combinations of enclosure suites (example of a 1600 mm canopy with two coupled 800-mm enclosures).

Supply: one canopy, drilling template and fixing elements.

Nominal dimensions (mm)		Reference
Width (B)	Depth (C)	
600	300	**NSYSC630**
	400	**NSYSC640**
	500	**NSYSC650**
	600	**NSYSC660**
800	300	**NSYSC830**
	400	**NSYSC840**
	500	**NSYSC850**
	600	**NSYSC860**
1000	300	**NSYSC1030**
	400	**NSYSC1040**
	500	**NSYSC1050**
	600	**NSYSC1060**
1200	300	**NSYSC1230**
	400	**NSYSC1240**
	500	**NSYSC1250**
	600	**NSYSC1260**
1600	400	**NSYSC1640**
	500	**NSYSC1650**
	600	**NSYSC1660**
1800	500	**NSYSC1850**
	600	**NSYSC1860**
2000	500	**NSYSC2050**
	600	**NSYSC2060**
2400	500	**NSYSC2450**
	600	**NSYSC2460**



Composition accessories
Roof

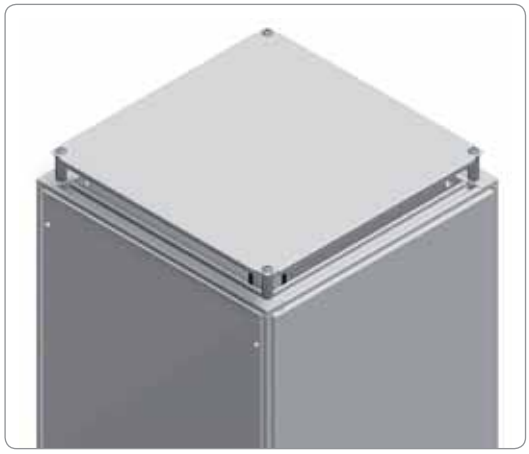


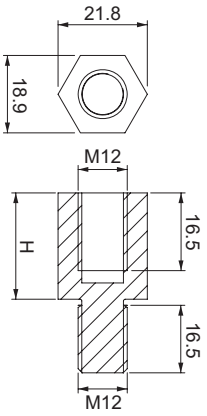
Ventilation elevators for roof

- Allows the roof to be raised, providing natural ventilation.
- They are screwed onto the structure, at the roof fixing point.
- Material: zinc-coated steel.

Supply: 4 elevators.

Roof height (mm) (H)	IP	Reference
23	20	**NSYRE26**
60	10	**NSYRE60**



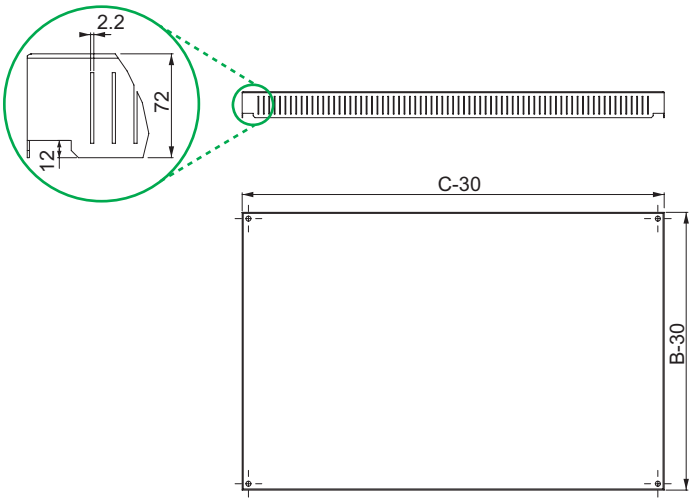


Ventilated roof

- Roof providing natural ventilation for the enclosure, with IP30 protection.
- Material: steel.
- Height: an extra 63 mm in relation to the structure.
- Finish: painted with polyester-epoxy resin, RAL 7035 grey.

Supply: one ventilated roof and four elevators.

Nominal dimensions (mm)		Reference
Width (B)	Depth (C)	
600	600	**NSYSVR606**
	800	**NSYSVR608**
800	600	**NSYSVR806**
	800	**NSYSVR808**



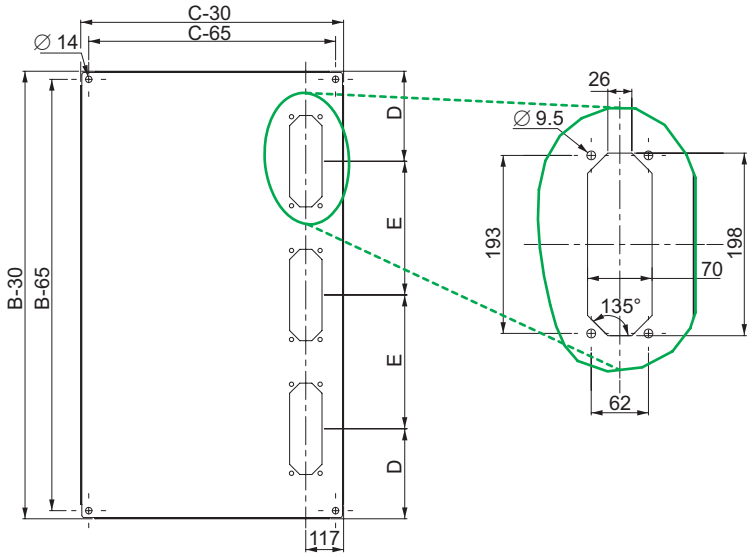
Composition accessories
Roof

FL21 cable-entry roof

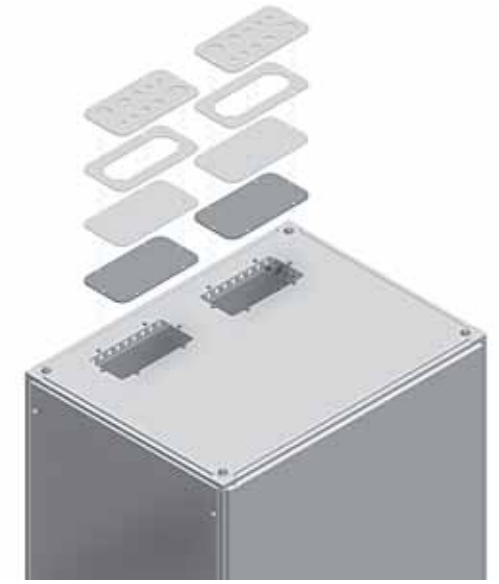
- Roof prepared for installing FL21 cable-entry plates.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one cut-out roof for the FL21 cable-entry plates.

Nominal dimensions (mm)		Centre-to-centre distance (mm)		No. of entries	Reference
Width (B)	Depth (C)	D	E		
600	500	285	-	1	**NSYSFLR65**
	600				**NSYSFLR66**
800	500	195	-	2	**NSYSFLR85**
	600				**NSYSFLR86**
1000	500	195	290	3	**NSYSFLR105**
	600				**NSYSFLR106**



Composition accessories
Roof

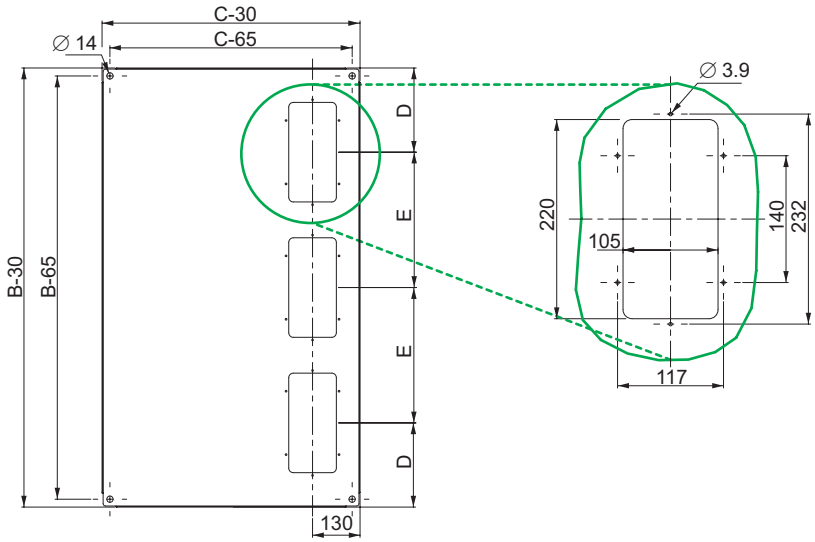


Cable-entry roof

- Roof prepared for installing cable-entry plates.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one cut-out roof for the cable-entry plates.

Nominal dimensions (mm)		Centre-to-centre distance (mm)		No. of entries	Reference
Width (B)	Depth (C)	D	E		
600	500	285	-	1	NSYSRCE650
	600				NSYSRCE660
800	500	220	-	2	NSYSRCE850
	600				NSYSRCE860
1000	500	200	285	3	NSYSRCE1050
	600				NSYSRCE1060

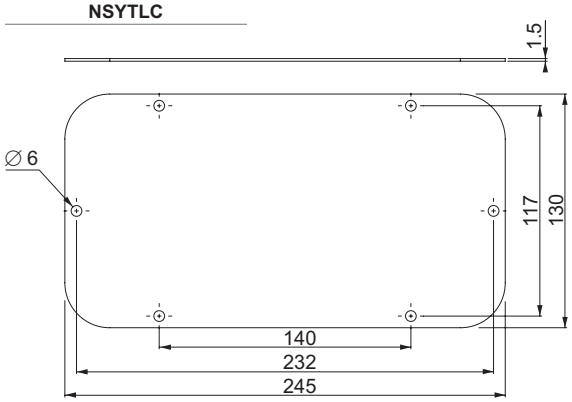


Standard cable-entry plate

- Plate with grid patterned surface with a pitch of 25 mm to facilitate perforation. Fixing by means of screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one standard cable-entry plate and fixing elements.

Reference
NSYTLC

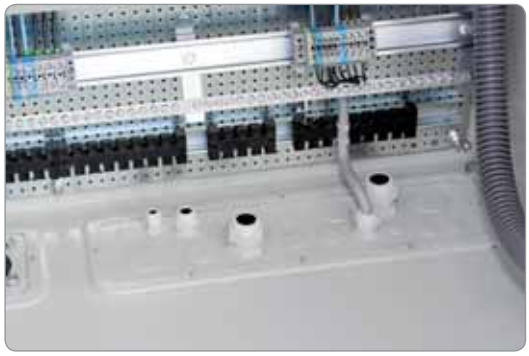


Composition accessories
Roof

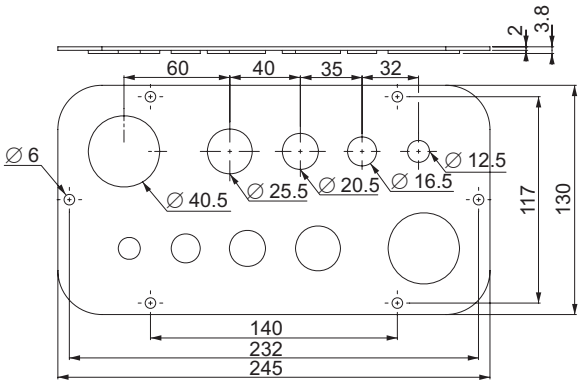
Pre-cut cable-entry plate

- Plate with pre-cut holes of different diameters. Fixing by means of screws.
- Pre-cuts:
– 2 × ∅ 12.5.
– 2 × ∅ 16.5.
– 2 × ∅ 20.5.
– 2 × ∅ 25.5.
– 2 × ∅ 40.5.
- Material: steel.
- Finish: painted with epoxy-polyester resin. RAL 7035 grey.

Supply: one pre-cut cable-entry plate and fixing elements.



Reference
NSYTLCK

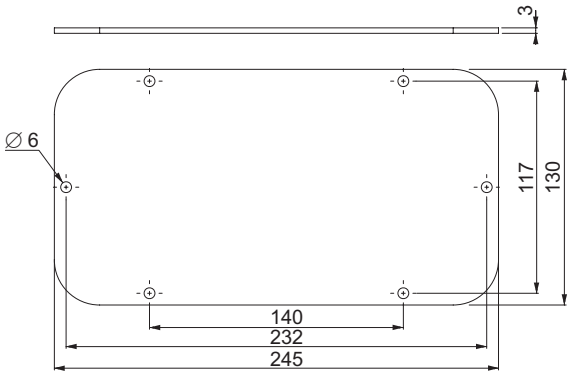


Aluminium cable-entry plate

- Plain cable-entry plate. Fixing by means of screws.
- Material: brushed aluminium.
- Thickness: 3 mm.

Supply: one aluminium cable-entry plate and fixing elements.

Reference
NSYTLCU



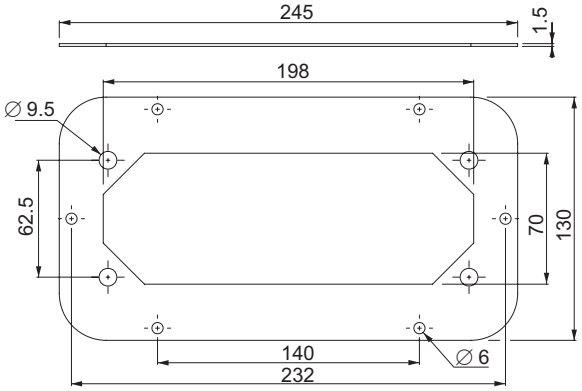
Composition accessories
Roof

Adapter for FL21 cable-entry plate

- Cut-out adapter for FL21 cable-entry plates. Fixing by means of screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one FL21 cable-entry plate and fixing elements.

Reference
NSYTLCFL

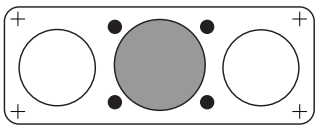


FL21 cable-entry membranes

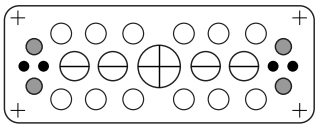
- Membrane plate for watertight cable entries made from insulating material (fire-resistance level UL94-V0).
- Direct installation in the FL21 cable-entry plate adapter.
- 4 models: plain plate and membrane plates from 7 to 35 cable entries.
- Degree of protection: IP65.
- Material: grey plastic.

Supply: membrane plate and fixing elements.

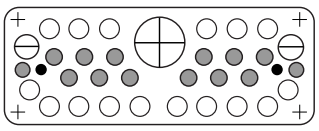
No. of cable entries	Reference
Plain	NSYAECPFLBP
7	NSYAECPFLT7
25	NSYAECPFLT25
35	NSYAECPFLT35



NSYAECPFLT7



NSYAECPFLT25



NSYAECPFLT35

Characteristics of the membranes

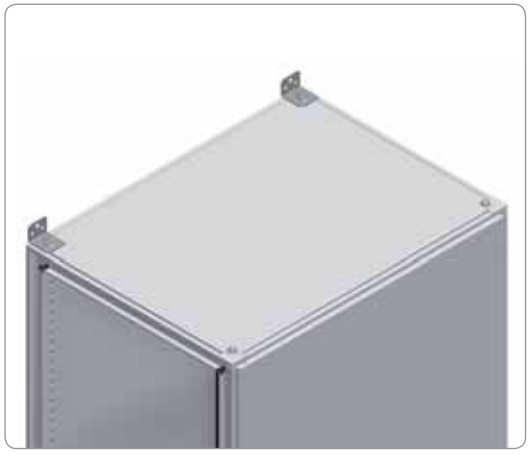
Membrane symbol	For cable ∅ (mm)	Number	IP	Another possible ∅ (mm) (1)
●	8-16	4	65	-
○	24-54	2	65	-
◉	30-60	1	65	-

Membrane symbol	For cable ∅ (mm)	Number	IP	Another possible ∅ (mm) (1)
●	5-7	4	65	-
◉	6-12	1	65	-
○	10-14	12	65	-
⊖	14-20	4	65	8-12
⊕	20-26	1	65	8-12

(1) IP54 in this use.

Membrane symbol	For cable ∅ (mm)	Number	IP	Another possible ∅ (mm) (1)
●	6-10	2	65	-
◉	8-12	14	65	-
○	10-14	16	65	-
⊖	12-18	2	65	-
⊕	17-32	1	65	-

Composition accessories
Wall-mounting

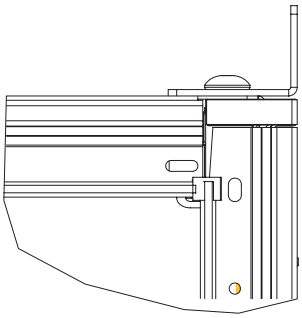


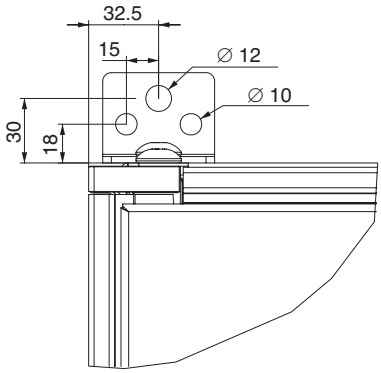
Wall-mounting support

- Supports for mounting the enclosure on the wall and preventing it from turning over.
- They cannot be used for hanging the enclosure.
- They are installed using the roof mounting screws.
- Material: zinc-coated steel.

Supply: 2 supports.

Reference
NSYSFWFIX





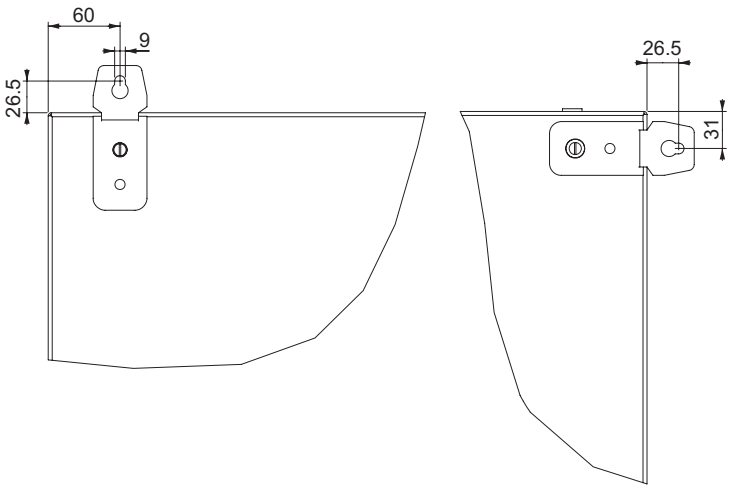
Composition accessories
Wall-mounting

Wall-mounting support

- Supports for mounting the enclosure on the wall and preventing it from turning over.
- They are installed using the drill holes in the back of the enclosure.
- Enclosure fixed from the outside.
- Material: steel.
- Finish: zinc-coated.

Supply: 2 supports.

Reference
NSYSMWFIX



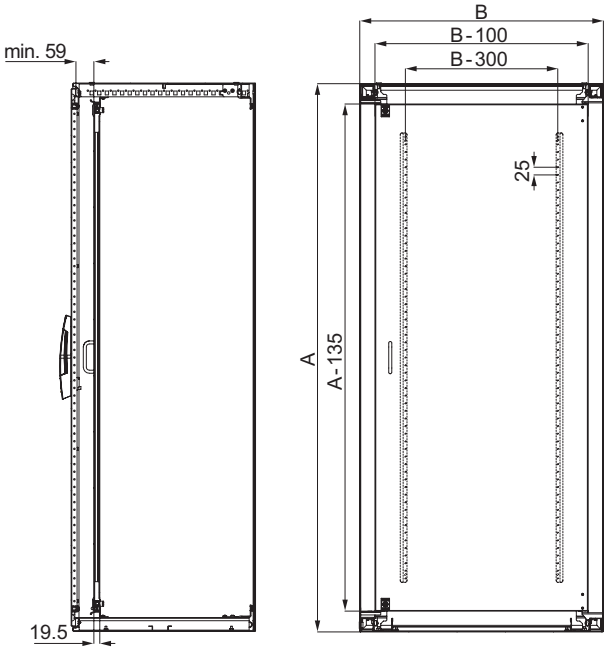
Composition accessories
Door and door accessories

Inner door

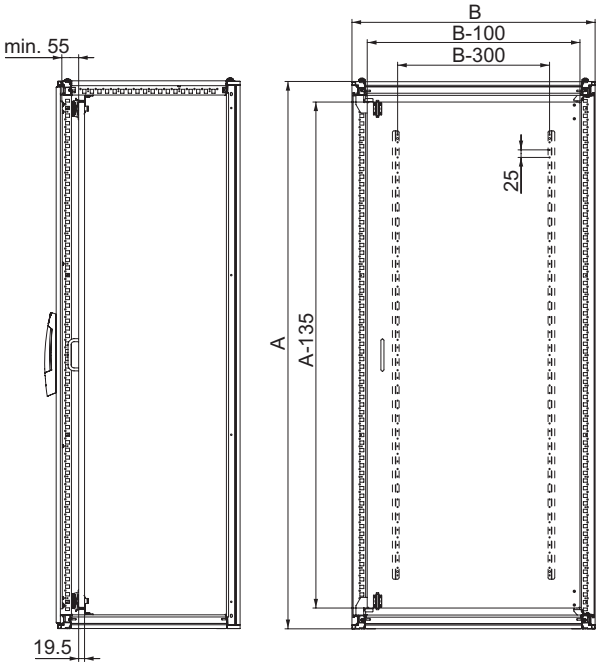
- Door for additional protection. Prevents the switchgear from being manipulated by unauthorised personnel.
- Allows the installation of switchgear mounted directly on the door.
- Mounting on the top and bottom frame of the enclosure.
- Depth adjustable with a pitch of 25 mm, from the first fixing point.
- Opening to right or left, with two locks, 3-mm double-bar, with central handle.
- Reinforcement frames on the rear, cut-outs with a 25-mm pitch, for equipping the door.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.
- Maximum acceptable load: 15 kg.

Supply: one inner door and fixing elements.

Nominal dimensions (mm)		Reference
Height (A)	Width (B)	
1600	600	**NSYID166**
	800	**NSYID168**
1800	600	**NSYID186**
	800	**NSYID188**
	1000	**NSYID1810**
2000	600	**NSYID206**
	800	**NSYID208**
	1000	**NSYID2010**
2200	600	**NSYID226**
	800	**NSYID228**



Spacial SM



Spacial SF

Composition accessories
Door and door accessories

> Advantage:

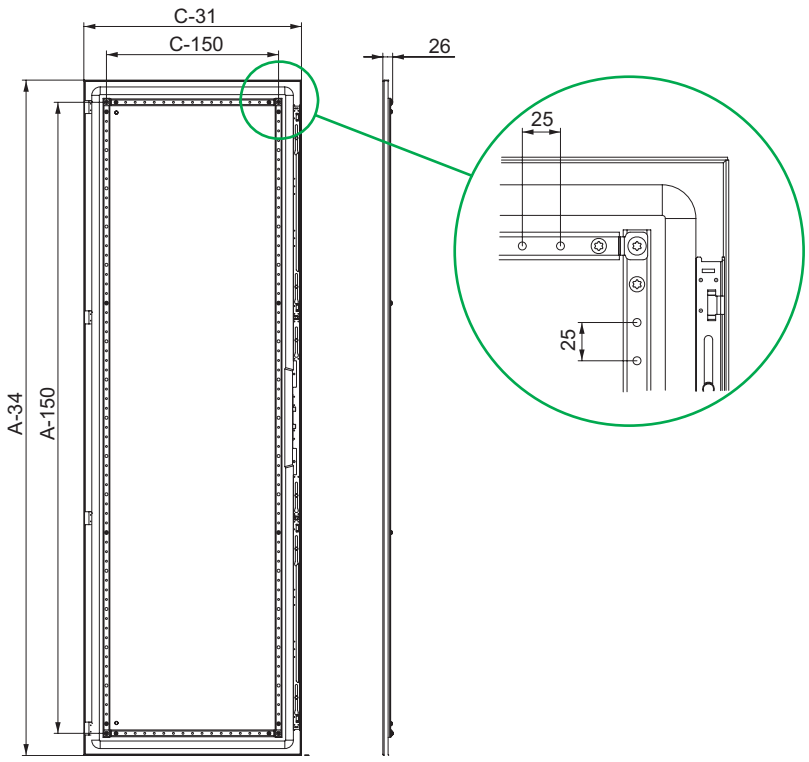
The side door is the same as the front door when the width and depth dimensions are the same.

Side door

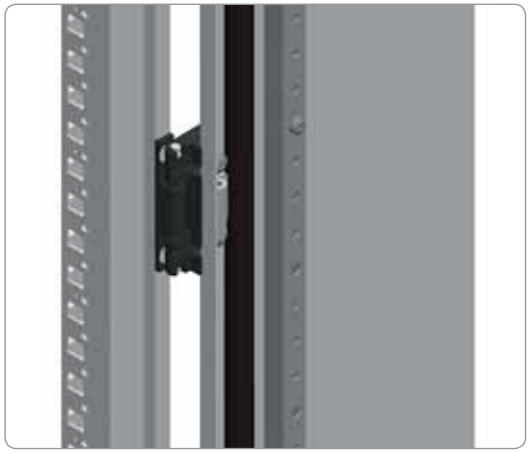
- Door for the side of the enclosure, replaces the side panel.
- Installation directly on the structure of the enclosure, opening 120°.
- Lock with handle and 5-mm double-bar insert.
- 4 locking points.
- Reinforcement frame, cut-out with a pitch of 25 mm.
- Opening to right or left.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one side door, four hinges, four catches and handle lock.

Spacial SF dimensions (mm)		Reference
Height (A)	Depth (C)	
1200	600	**NSYSFD126**
	800	**NSYSFD128**
1400	600	**NSYSFD146**
	800	**NSYSFD148**
1600	600	**NSYSFD166**
	800	**NSYSFD168**
1800	400	**NSYSFD184**
	500	**NSYSFD185**
	600	**NSYSFD186**
	800	**NSYSFD188**
2000	400	**NSYSFD204**
	500	**NSYSFD205**
	600	**NSYSFD206**
	800	**NSYSFD208**
2200	400	**NSYSFD224**
	500	**NSYSFD225**
	600	**NSYSFD226**
	800	**NSYSFD228**



Composition accessories
Door and door accessories

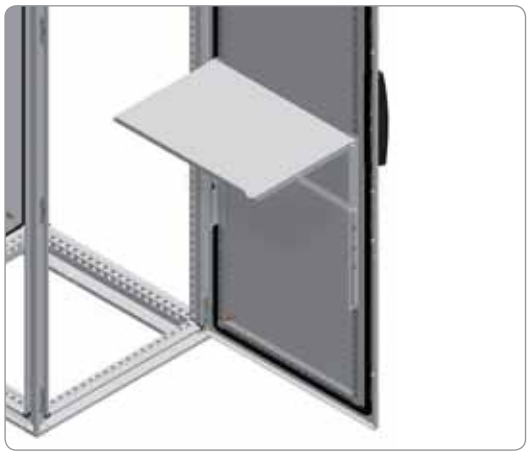


180° hinge

- Hinge with opening of 180°.
- Intended to replace the 120° hinges installed as standard.
- They are compatible with the transparent door and can be installed even with enclosure suites.
- Material: aluminium and zamak.
- Maximum load: 60 kg on the door.
- Finish: painted RAL 9005 black.

Supply: 4 hinges, template for making the drill holes and fixing elements.

Model	Reference
RAL 9005 black	**NSYSH180**

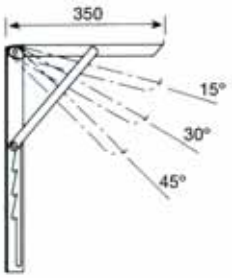


Folding support tray

- Adjustable horizontal support for laptop computers, documents or any other element.
- Installation on the reinforcement frame of the door.
- Can also be installed on the door cross rails, see page **7/30**.
- Adjustable depth with a pitch of 25 mm.
- In enclosures with a width of 1,000 mm, it is possible to install any size using the door cross rail with reference **NSYSDCR10**.
- 4 positions: 45°, 60°, 75° and 90°.
- Material: steel.
- Thickness: 1.5 mm.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.
- Maximum load: 30 kg.

Supply: one folding support tray and fixing elements.

Spacial Dimensions (mm) Width	Reference
500	**NSYSDT5**
600	**NSYSDT6**
800	**NSYSDT8**



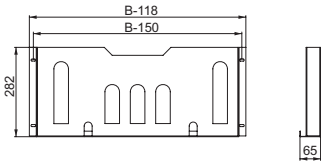
Composition accessories
Door and door accessories

Metal document pocket

- Direct mounting on the reinforcement frame of the door.
- Adjustable depth with a pitch of 25 mm.
- Material: steel.
- Finish: painted with polyester-epoxy resin, RAL-7035 grey.

Supply: one metal document pocket and fixing elements.

Spacial Dimensions (mm) Width (B)	Reference
600	**NSYSDP6M**
800	**NSYSDP8M**

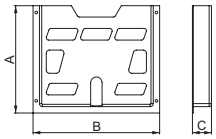


Plastic document pocket

- Attachment by adhesive tape.
- Formats: A5 and A4.
- Material: polystyrene (PS), RAL 7035 grey.

Supply: one plastic document pocket.

Document format (mm)	A	B	C	Reference
A5	174	188	22	**NSYDPA5**
A4	234	278	22	**NSYDPA4**
A4	234	278	40	**NSYDPA44**
A3	258	476	35	**NSYDPA3**



Door-centring caster

- Allows the door to be raised when closing.
- Direct mounting on the reinforcement frame.
- Maximum load: 60 kg.

Supply: one centring roller and fixing elements.

Reference
NSYSDRC

Composition accessories
Locking system

> Advantage:
Easy opening.

Handle for shape inserts and cylindrical barrels

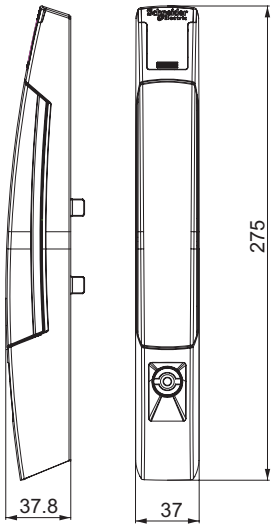
- Handle lock allowing the door to be opened: with a single movement.
- Standard handle for the entire range of **Spacial SF** and **Spacial SM** enclosures; does not include the insert when ordered as an accessory.
- Easy and quick installation of inserts without needing screws.
- Allows the installation of shape inserts and cylindrical barrels.
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Easy fixing by means of screws.
- Space reserved for enclosure identification, 21 × 27 mm, protected by a label frame.
- Material:

– Handle: polyamide 6 with 30% fibreglass, RAL 9005 black.
– Label frame: polycarbonate.

- UV resistant.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK10.

Supply: standard handle and fixing elements (insert not included).

Reference
NSYSFHS1



Composition accessories
Locking system

Shape inserts and cylindrical barrels

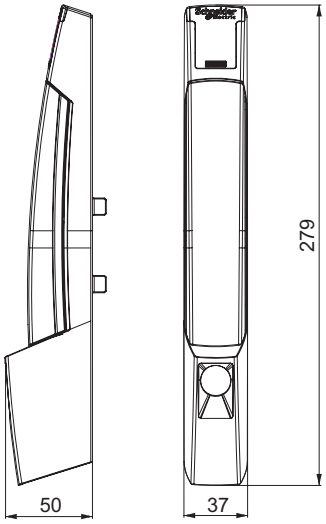
Shape inserts	Reference
6-mm square insert	**NSYINS61**
Female 6-mm square insert	**NSYINS6G1**
7-mm square insert	**NSYINS71**
8-mm square insert	**NSYINS81**
Female 8-mm square insert	**NSYINS8G1**
8-mm square insert with slot	**NSYINS8H1**
6.5-mm triangular insert	**NSYINT61**
7-mm triangular insert	**NSYINT71**
8-mm triangular insert	**NSYINT81**
9-mm triangular insert	**NSYINT91**
10-mm triangular insert	**NSYINT101**
10-mm keyless hexagonal insert	**NSYINH31**
3-mm double-bar insert	**NSYINDB31**
5-mm double-bar insert	**NSYINDB51**
Daimler Benz insert	**NSYINBENZ1**
Fiat insert	**NSYINFIAT1**
Keyless USA slot insert	**NSYINUSA1**
Keyless 2 × 4 slot insert	**NSYIN241**
Crown insert	**NSYINCW1**

Push button	Reference
Push button	**NSYINPULS1**

> For installing shape inserts and cylindrical barrels in handle types DIN, KABA and ASSA (ref. **NSYSFHD2**), see adapter (ref. **NSYLADP**) page **3/73**.

Cylindrical barrels	Reference
405E key lock	**NSYIN405E1**
421E key lock	**NSYIN421E1**
455 key lock	**NSYIN4551**
1242E key lock	**NSYIN1242E1**
1332E key lock	**NSYIN1332E1**
2124E key lock	**NSYIN2124E1**
2131A key lock	**NSYIN2131A1**
2132A key lock	**NSYIN2132A1**
2331A key lock	**NSYIN2331A1**
2433A key lock	**NSYIN2433A1**
2452E key lock	**NSYIN2452E1**
3113A key lock	**NSYIN3113A1**
3122E key lock	**NSYIN3122E1**
3123A key lock	**NSYIN3123A1**
3133A key lock	**NSYIN3133A1**
3422E key lock	**NSYIN3422E1**
3432E key lock	**NSYIN3432E1**
EDF1300 key lock	**NSYINF1301**
EDF1400 key lock	**NSYINF1401**
Michelin 8079 keyless lock	**NSYINICHEL8791**
Michelin 8133 keyless lock	**NSYINICHEL8131**
Michelin 8376 keyless lock	**NSYINICHEL8371**
E1 keyless lock	**NSYINE11**

Composition accessories
Locking system



Handle for insert types DIN, KABA, ASSA

- Easy-opening handle lock: requires a single movement.
- The inserts are easily and quickly mounted without any screws and allow the installation of profiled DIN, KABA and ASSA locks.
- To install shape inserts or cylindrical barrels, it is necessary to add adapter ref. **NSYLADP**.
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Mounting on the door by means of screws.
- Space reserved for enclosure identification, 21 × 27 mm, protected by a label frame.
- Material:

– Handle: polyamide 6 with 30% fibreglass, RAL-9005 colour.
– Label frame: polycarbonate.

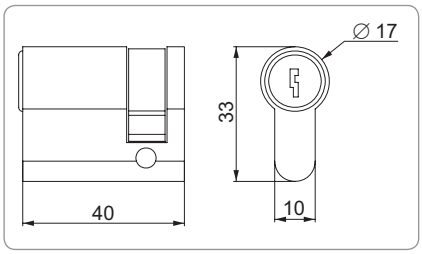
- UV resistant.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK10.

Supply: one handle for DIN, KABA and ASSA inserts and fixing elements (insert not included).

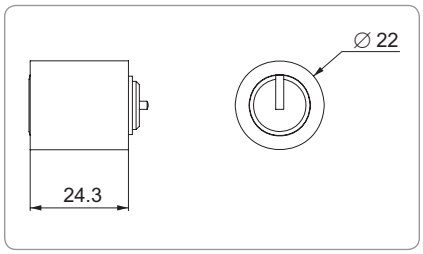
Reference
NSYSFHD2

Lock system: DIN, KABA and ASSA		Reference
	Adapter for DIN cylinder	**NSYINDIN2**
	Adapter for KABA cylinder (1)	**NSYINKBA2**
	Adapter for ASSA cylinder	**NSYINASSA2**
	1242E key lock	**NSYIN1242E2**
	Reinforced key lock	**NSYINKR2**
	JIS key lock	**NSYINKJIS2**
	FAC key lock	**NSYINKFAC2**

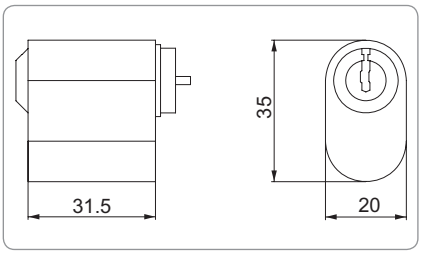
(1) Adapter for receiving the KABA8, KABA20 and KABA start cylinders.



Insert dimensions for DIN adapters.

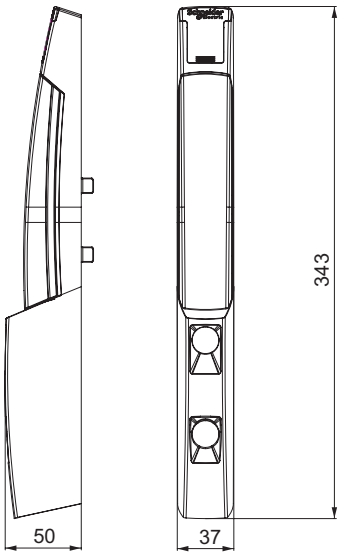


Insert dimensions for KABA adapters.



Insert dimensions for ASSA adapters.

Composition accessories
Locking system



Double-insert handle

- Easy-opening handle lock: requires a single movement. Allows two inserts to be installed in the same lock.
- To install shape inserts or cylindrical barrels, it is necessary to add adapter ref. **NSYLADP**.
- The handle can perform the "AND" and "OR" functions. The elements for performing these functions are supplied with the handle.

– "AND" function: one insert blocks the activation of the other insert.
– "OR" function: either insert can release the handle.

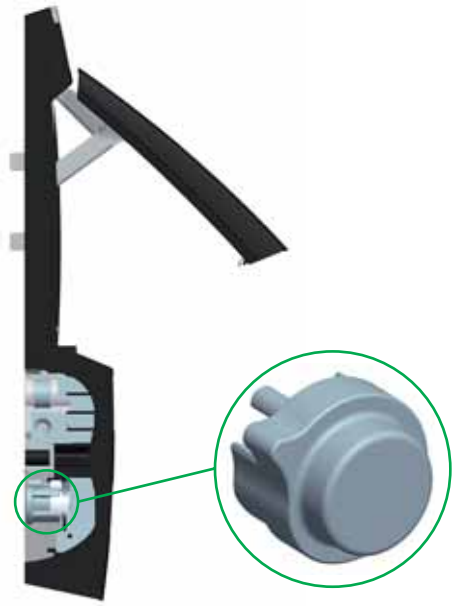
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Mounting on the door by means of screws.
- Space reserved for enclosure identification, 21 × 27 mm, protected by a label frame.
- Material:

– Handle: polyamide 6 with 30% fibreglass, RAL 9005 colour.
– Label frame: polycarbonate.

- UV resistant.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK10.

Supply: one double-insert handle, elements for performing the "AND" and "OR" functions and fixing elements (insert not included).

Reference
NSYSFHD3



Adapter for shape inserts and cylindrical barrels

- Plastic adapter for installing shape inserts and cylindrical barrels in handle lock types DIN, KABA, ASSA.

Supply: 1 unit.

- See shape inserts and cylindrical barrels on page **3/71**.
- See insert types DIN, KABA, ASSA on page **3/72**.

Reference
NSYLADP

Composition accessories
Locking system

Padlock locking

- Padlock locking system, for installation in all the handles of the **Spacial SF** and **Spacial SM** enclosures.
- Bolt with 7.5-mm drill hole.

Supply: one cut-out handle, bolt for padlock and bolt fixing screw.

Reference
NSYBLKH123

CNOMO kit

- Locking system to be installed on the central locking bar of the door. It works as a locking bar immobiliser, preventing the handle from closing while the door is still open.
- It is compatible with all handle lock versions, except the flat lock and the small flat lock.

Supply: one mechanism, 6.5-mm triangular insert, key and fixing elements.

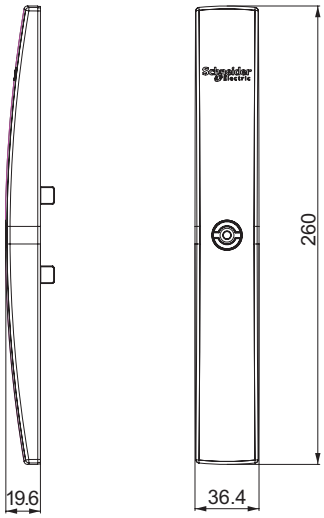
Reference
NSYCNOH123

Composition accessories
Locking system

Flat escutcheon lock

- Optional flat escutcheon lock. Replaces the handle lock.
- The symmetric design of the locking system makes it easy to change the opening direction of the door, right/left. Mounting on the door by means of screws.
- Possibility of changing the turning direction of the insert.
- Material: polyamide 6 with 30% fibreglass, RAL 9005 black.
- UV resistant.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK10.

Supply: flat lock, shape insert, key and fixing elements.



Models		Reference
	Flat lock + screwdriver slot, 2-mm groove	NSYSFLOCK24
	Flat lock + 8-mm triangular insert	NSYSFLOCKT8
	Flat lock + 7-mm triangular insert	NSYSFLOCKT7
	Flat lock + 6.5-mm triangular insert	NSYSFLOCKT6
	Flat lock + 8-mm female square insert	NSYSFLOCKSG8
	Flat lock + 8-mm square insert	NSYSFLOCKS8
	Flat lock + 7-mm square insert	NSYSFLOCKS7
	Flat lock + 6-mm square insert	NSYSFLOCKS6
	Flat lock + 5-mm double-bar insert	NSYSFLOCKDB5

Applications

3

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Prisma Plus application 3/121

Automobile application 3/136

Compartimentalised enclosure
Composition accessories

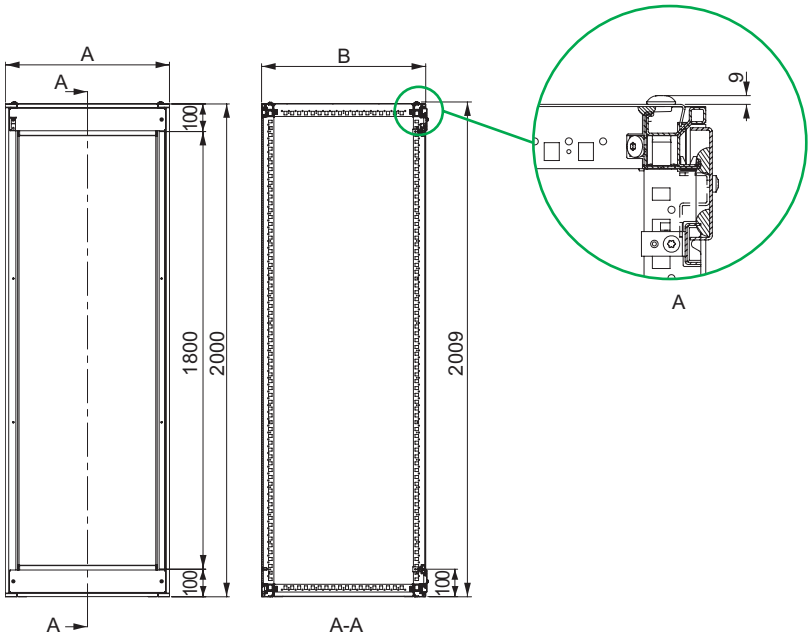
Compartmentalised enclosure application

- The compartimentalised enclosure separates the various working areas, restricting their access.
- The closed compartments make it possible:

– To insulate the control of a device mechanically and electrically.
– To reduce the destructive effects of a short-circuit.

Composition

- Structure: top and bottom frame and vertical uprights.
- Fixed panels: top and bottom, to allow modularity.
- 2 intermediate crossbars.
- Removable roof.
- External fixing rear panel.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.



External dimensions (mm)			Useful height for doors (mm)	Reference
Height	Width (B)	Depth (C)		
2000	600	600	1800	**NSYSF20660M**
		800	1800	**NSYSF20680M**
	800	600	1800	**NSYSF20860M**
		800	1800	**NSYSF20880M**

Enclosure cladding accessories, see page **3/78**.

Equipment support accessories, see page **3/85**.

Optional composition accessories, see page **3/36**.

Compartimentalised enclosure
Composition accessories

Standard side panels

External fixing

- Set of 2 side panels fixed to the outside of the enclosure.
- Captive screws.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two side panels with external fixing, supplied with sealing gasket.

Spacial SF dimensions (mm)		Reference
Height	Depth	
2000	600	**NSY2SP206**
	800	**NSY2SP208**

Plinth

- See composition accessories: floor, page **3/36**.
- Model heights: 100 and 200 mm.

Front plinth

Supply:
– **Height 100 mm:** 4 corners, 2 panels (front and rear), 4 corner covers and fixing elements.
– **Height 200 mm:** 4 corners, 4 panels (2 front and 2 rear), 4 corner covers and fixing elements.

Plinth side panels

Supply:
– **Height 100 mm:** two side panels, four corner covers and fixing elements.
– **Height 200 mm:** four side panels (height of 100 mm, 2 for each side), four corner covers and fixing elements.

Spacial SF Dimensions (mm)		Front plinth reference (mm)		Plinth side panel reference (mm)	
Width	Depth	100	200	100	200
600	600	**NSYSPF6100**	**NSYSPF6200**	**NSYSPS6100**	**NSYSPS6200**
	800			**NSYSPS8100**	**NSYSPS8200**
800	600	**NSYSPF8100**	**NSYSPF8200**	**NSYSPS6100**	**NSYSPS6200**
	800			**NSYSPS8100**	**NSYSPS8200**

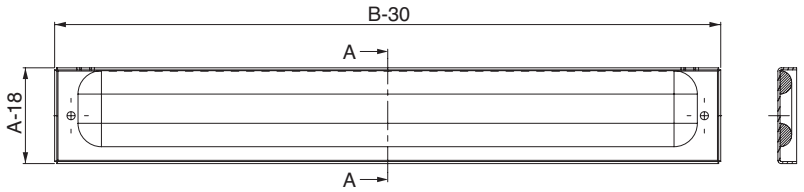
Compartimentalised enclosure
Composition accessories

Fixed panel for modularity

- Panel fixed to the structure of the enclosure by means of screws.
- Recommended for enclosure kits.
- It is installed at the top and bottom of the enclosure, to obtain the modularity required to install partial doors.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two panels and fixing elements.

Spacial SF dimensions (mm)		Reference
Height (A)	Width (B)	
100	600	**NSYMFP16**
	800	**NSYMFP18**
300	600	**NSYMFP36**
	800	**NSYMFP38**

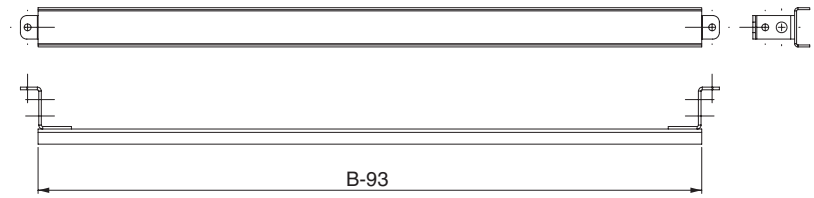


Intermediate crossbar

- Crossbar with direct fixing to the structure.
- It is mounted between partial doors or between doors and control desk, guaranteeing good sealing.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 1 crossbar and fixing elements.

Spacial SF Dimensions (mm)	Reference
Width (B)	
600	**NSYMIC6**
800	**NSYMIC8**



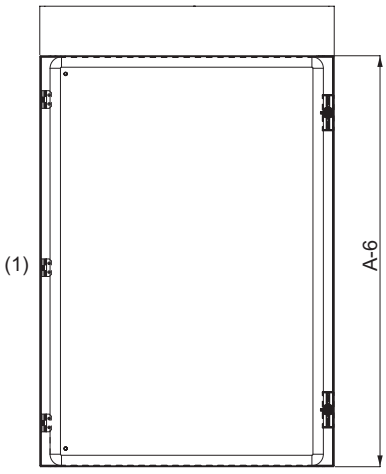
Compartimentalised enclosure
Composition accessories

Partial doors

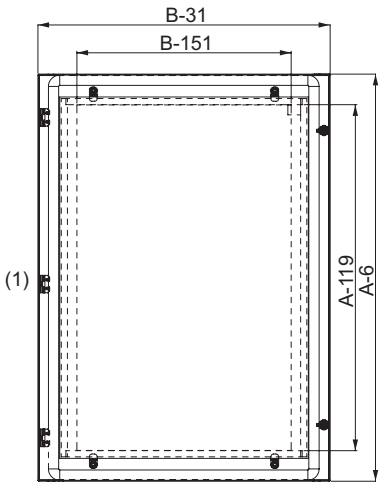
- Two partial door versions:
  – Plain partial door.
  – Transparent partial door with Securit® glass.
- They are fixed to the uprights of the structure by means of hinges.
- Locking system with small flat escutcheon, made from polyamide 6 with 30% fibreglass, RAL-9005 black, with 3 mm double-bar metal insert.
- 1 locking point for doors with heights of 200 and 400 mm, and 2 locking points for doors with heights of 600 to 1000 mm.
- Opening to the right or left.
- 2 vertical reinforcement frames, cut-out with a pitch of 25 mm; except doors with a height of 200 mm.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: partial door, hinges and fixing elements.

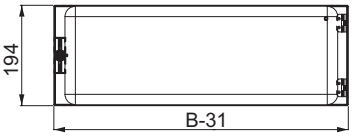
Spacial SF dimensions (mm)		Plain partial door reference	Transparent partial door reference
Height (A)	Width (B)		
200	600	**NSYMPD26**	**NSYMPD26T**
400		**NSYMPD46**	**NSYMPD46T**
600		**NSYMPD66**	**NSYMPD66T**
800		**NSYMPD86**	**NSYMPD86T**
1000		**NSYMPD106**	**NSYMPD106T**
200	800	**NSYMPD28**	**NSYMPD28T**
400		**NSYMPD48**	**NSYMPD48T**
600		**NSYMPD68**	**NSYMPD68T**
800		**NSYMPD88**	**NSYMPD88T**
1000		**NSYMPD108**	**NSYMPD108T**



Heights from 400 to 1000 mm.
(1) 3 hinges in 1000 mm height

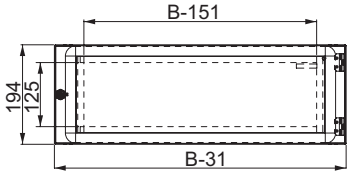


Heights from 400 to 1000 mm.
(1) 3 hinges in 1000 mm height



Height 200 mm

Plain partial door.



Height 200 mm

Transparent partial door.

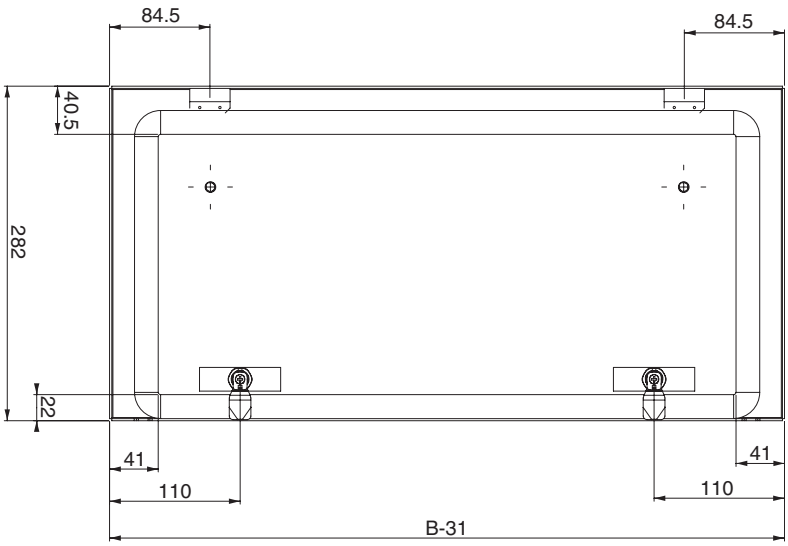
Compartimentalised enclosure
Composition accessories

Folding panels

- Horizontal panel, hinged at the top.
- Guarantees protection of the sets of bars.
- Opening angle: 90°.
- It is installed together with partial doors to create the modularity of the enclosure.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Locking system with two small flat escutcheons, made from polyamide 6 with 30% fibreglass, RAL 9005 black, with 3-mm double-bar insert.

Supply: one folding panel, hinges and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width (B)	
300	600	**NSYCDP36**
	800	**NSYCDP38**



Compartimentalised enclosure
Composition accessories

Partial door for folding panel

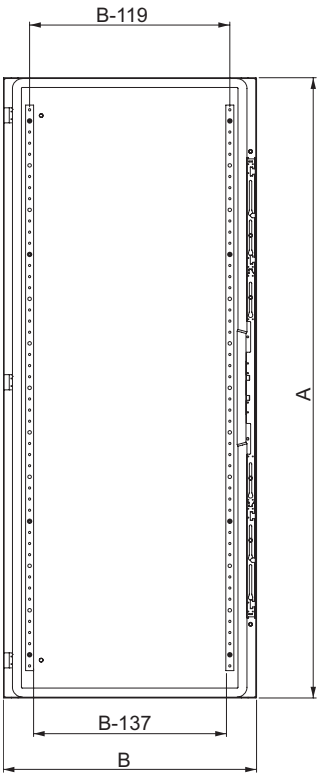
- Can be combined with folding panels and with the rest of the partial doors.
- Plain partial doors with handle lock with 5-mm double-bar insert.
- 4 locking points and 2 or 3 hinges according to the height:

– 2 hinges, heights of 1200 and 1400 mm.
– 3 hinges, height of 1600 mm.

- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: one partial door, hinges and catches of the locking system.

Nominal dimensions (mm)		Plain partial door reference
Height (A)	Width (B)	
1200	600	**NSYMPD126**
1400		**NSYMPD146**
1600		**NSYMPD166**
1200	800	**NSYMPD128**
1400		**NSYMPD148**
1600		**NSYMPD168**



Compartimentalised enclosure
Composition accessories

Drilling template

- Guide for drilling the vertical uprights, prior to installing the partial doors.
- It can be reused.
- Material: zinc-coated steel.

Supply: one template.

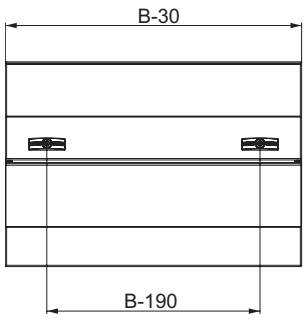
Reference
NSYMDT

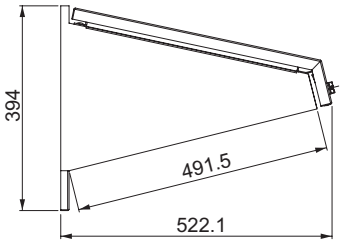
Control desk

- Support for human-machine dialogue.
- It is fixed directly to the structure of the enclosure and can be inserted the same as the partial doors.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Locking system with small flat escutcheons, made from polyamide 6 with 30% fibreglass, RAL 9005 black, with 3-mm double-bar metal insert.

Supply: one control desk and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width (B)	
400	600	NSYMCOD264
	800	NSYMCOD284





Compartimentalised enclosure
Composition accessories

Locks

- Locks to replace the 3-mm double-bar lock supplied with the partial doors, folding panel and control desk.
- Models:

– Transformation of lock with shape inserts, triangular 6.5 mm and square 6 mm.
– Lock with 2233X key for partial doors.
– Lock with 2233X key for folding panel and control desk.

Supply:
– One lock with shape inserts, triangular 6.5 mm and square 6 mm: metal body, shape insert and safety washer.
– One lock with 2233X key for partial doors: metal body, insert, bolt, safety washer and key.
– One lock with 2233X key, exclusive for folding panel and control desk: metal body, insert, special bolt, safety washer and key.

Description	Reference
Lock with 6.5-mm triangular insert for control desk and partial, hinged door	**NSYMLT6**
Lock with 6-mm square insert for partial door, folding panel and control desk	**NSYMLS6**
Lock with 2233X key for partial door	**NSYML23**
Lock with 2233X key for folding panel and control desk	**NSYMLCD23**

Examples of composition accessories

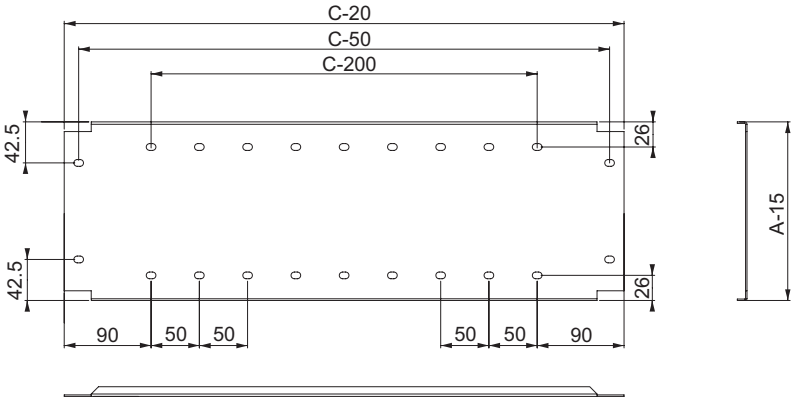
Compartimentalised enclosure
Mounting accessories

Side partitions

- Side partitions which guarantee good insulation of the compartments.
- Direct fixing on the structure of the enclosure.
- Material: galvanised steel.

Supply: two side partitions and fixing elements.

Nominal dimensions (mm)		Reference
Height (A)	Depth (C)	
200	600	**NSYMSC26**
	800	**NSYMSC28**
400	600	**NSYMSC46**
	800	**NSYMSC48**

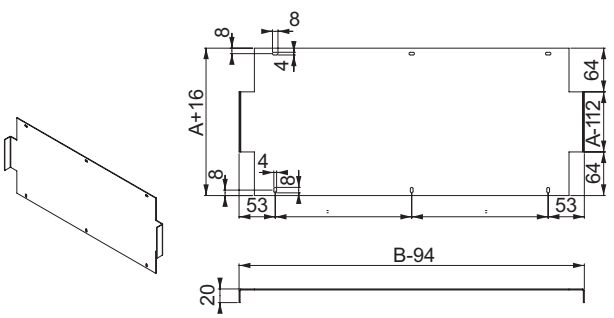


Rear partitions

- Rear enclosing plates for forming modules, also allowing the installation of equipment.
- They are installed at the rear of the partition tray.
- Material: galvanised steel.

Supply: 1 rear partition and fixing elements.

Nominal dimensions (mm)		Reference
Height (A)	Width (B)	
200	600	**NSYMBC26**
400		**NSYMBC46**
600		**NSYMBC66**
800		**NSYMBC86**
1000		**NSYMBC106**
200	800	**NSYMBC28**
400		**NSYMBC48**
600		**NSYMBC68**
800		**NSYMBC88**
1000		**NSYMBC108**



Compartimentalised enclosure
Mounting accessories

Fixing kit

- Provide the fixing of the mounting plate.
- They are fixed to the side enclosing plates.
- Models:

– Fixed: allow adjustment with a pitch of 50 mm.
– Adjustable: allow continuous adjustment for depths of 600 and 800 mm.

- Material: zinc-coated steel.

Supply: four units and fixing elements.

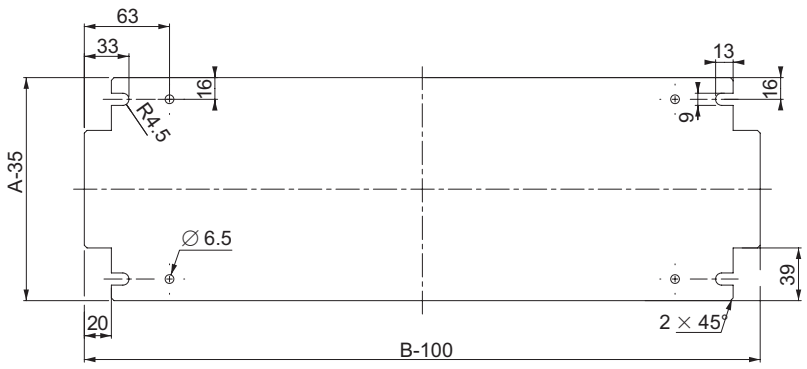
Model	Nominal dimensions (mm)	Reference
	Depth	
Fixed	-	**NSYCFIX**
Adjustable	600	**NSYCFIX6**
Adjustable	800	**NSYCFIX8**

Mounting plate

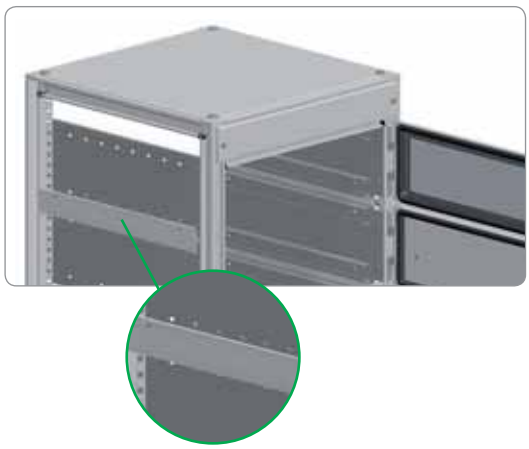
- Plate for fixing elements.
- It is mounted fixed on the fixing kit, with ref. **NSYCFIX**, or with adjustable depth with ref. **NSYCFIX6** or **NSYCFIX8**.
- Material: galvanised steel.

Supply: one mounting plate.

Nominal dimensions (mm)		Reference
Height (A)	Width (B)	
200	600	**NSYMP26**
400		**NSYMP46**
600		**NSYMP66**
800		**NSYMP86**
1000		**NSYMP106**
200	800	**NSYMP28**
400		**NSYMP48**
600		**NSYMP68**
800		**NSYMP88**
1000		**NSYMP108**



Compartimentalised enclosure
Mounting accessories

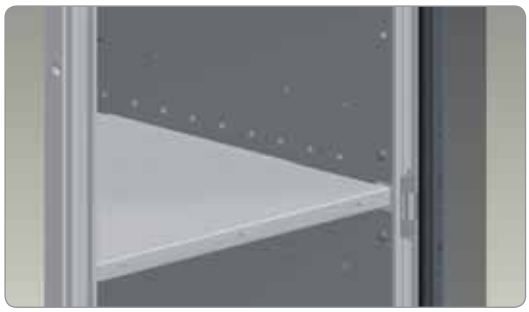


Side enclosing plate

- Plate to be installed between the side partitions, achieving full enclosure of the module.
- It is fixed to the side partition from the outside of the enclosure.
- Material: galvanised steel.

Supply: one side enclosing plate and fixing elements.

Spacial SF Dimensions (mm)	Reference
Depth	
600	**NSYCMOD6**
800	**NSYCMOD8**



Partition tray

- Guarantees horizontal insulation of the modules.
- It is fixed to the front frame, supported by the side partitions.
- Material: galvanised steel.

Supply: one partition tray and fixing elements.

Spacial SF dimensions (mm)		Reference
Width	Depth	
600	400	**NSYSTR64**
	500	**NSYSTR65**
800	400	**NSYSTR84**
	500	**NSYSTR85**

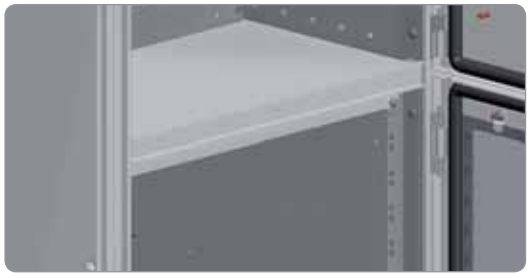
Compartimentalised enclosure
Mounting accessories

Tray crossbar

- To be installed between partial doors separated with a partition tray.
- It is fixed to the partition tray by screws.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: one tray crossbar and fixing elements.

Spacial SF Dimensions (mm) Width	Reference
600	**NSYTRG6**
800	**NSYTRG8**



Partial 19" fixed rack

- Designed for coupling to enclosures with a width of 600 mm.
- Direct fixing to the structure, in front position.
- Maximum load: 2 kg/u.
- Material: zinc-coated steel.

Supply: two racks, two horizontal escutcheons and fixing elements.

Enclosure height (mm)	No. of units	Reference
200	3	**NSYCRCKP3**
400	7	**NSYCRCKP7**
600	12	**NSYCRCKP12**
800	16	**NSYCRCKP16**
1000	21	**NSYCRCKP21**
1200	25	**NSYCRCKP25**

Compartimentalised enclosure
Mounting accessories

Examples of mounting accessories

PC rack

Technical characteristics

- Enclosure designed to protect computer equipment installed in industrial environments.
- Degree of protection IP55, or IP40 with hinged keyboard.
- Available in two heights: 1600 and 1800 mm.

Composition

- Structure: top and bottom frame and vertical uprights.
- Partial front doors opening to the right, made from steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Models:

– Partial door for PC screen, with Securit® anti-glare glass.
– Plain partial door for CPU (enclosures with height of 1800 mm).
– Hinged plain door for keyboard.
– Plain partial door for optional installation of A4 printer support.

- Plain rear door, made from steel painted with epoxy-polyester resin, textured RAL 7035 grey. Reversible opening direction (right or left).
- Locking system with flat escutcheon, made from polyamide 6 with 30% fibreglass, RAL 9005 black, with 5-mm double-bar insert for the plain rear door, and small flat escutcheon with 3-mm double-bar insert for the partial front doors.
- Roof and side panels fixed from the inside, made from steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Cable-gland plate with 1 entry.

Certifications

- BV, DNV, UL*, CUL.
  *1, 12, 12K.

Spacial SF PC rack dimensions (mm)			No. of compartments	Reference
Height (A)	Width (B)	Depth (C)		
1600	600	600	3	**NSYSF16660PC**
		800	3	**NSYSF16680PC**
1800		600	4	**NSYSF18660PC**
		800	4	**NSYSF18680PC**

Detail of screen compartment.

Detail of CPU and keyboard compartment with tray.

> Advantage:

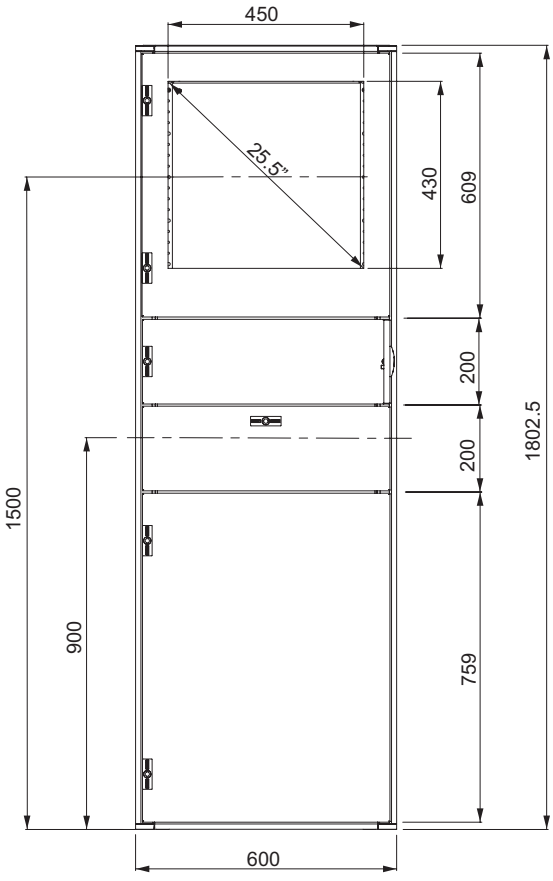
Security. The roof and panels, fixed from the inside, prevent access by unauthorised personnel.

PC rack

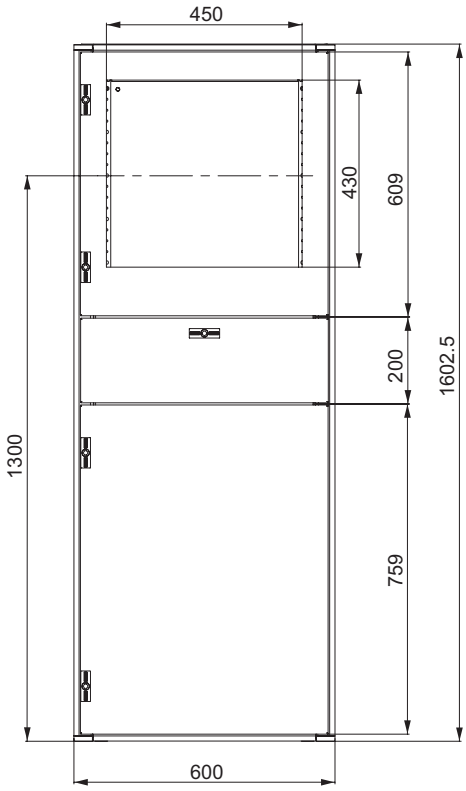
Locks

Detail of 3-mm DB lock on partial door.

Detail of 5-mm DB lock on rear door.



PC rack with a height of 1800 mm.



PC rack with a height of 1600 mm.

PC rack
Composition accessories

Plinth

- See composition accessories: floor, page **3/36**.
- Model heights: 100 and 200 mm.

Front plinth

Supply:
– **Height 100 mm:** four corners, two panels (front and rear), four corner covers and fixing elements.
– **Height 200 mm:** four corners, four panels with a height of 100 mm (two front and two rear), four corner covers and fixing elements.

Plinth side panels

Supply:
– **Height 100 mm:** two side panels, four corner covers and fixing elements.
– **Height 200 mm:** four side panels with a height of 100 mm (two for each side), four corner covers and fixing elements.

Spacial SF Dimensions (mm)		Front plinth reference (mm)		Plinth side panel reference (mm)	
Width	Depth	100	200	100	200
600	600	NSYSPF6100	NSYSPF6200	NSYSPS6100	NSYSPS6200
600	800			NSYSPS8100	NSYSPS8200

Locks for partial doors

- Locks to replace the 3-mm double-bar lock supplied with the partial doors.
- Models:

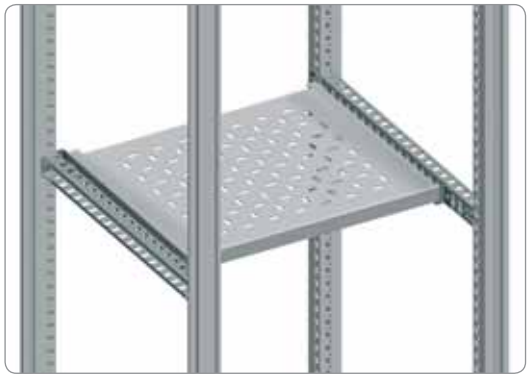
– Transformation of lock with shape inserts, triangular 6.5 mm and square 6 mm.
– Lock with 2233X key for partial doors.
– Lock with 2233X key, exclusive for hinged keyboard door.

Supply:
– Lock with shape inserts, triangular 6.5 mm and square 6 mm: metal body, shape insert and safety washer.
– Lock with 2233X key for partial doors: metal body, insert, bolt, safety washer and key.
– Lock with 2233X key, exclusive for hinged keyboard door: metal body, insert, special bolt, safety washer and key.

Description	Reference
One lock with 6.5-mm triangular insert for partial and hinged door	NSYMLT6
One lock with 6-mm square insert for partial and hinged door	NSYMLS6
One lock with 2233X key for partial door	NSYML23
One lock with 2233X key for hinged keyboard door	NSYMLCD23

PC rack
Composition accessories

Tray installed on the structure


Tray installed on cross rails

> Advantage:
Withstands loads of up to 150 kg.

Fixed tray

- Tray with option for direct fixing to the structure if the tray is the same size as the enclosure and on cross rails if it is smaller.
- Depth adjustable with a pitch of 25 mm in this case.
- Provided with cut-outs for improving air circulation inside.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.
- Acceptable load: 150 kg, evenly distributed.
- Tray height: 30 mm.

Supply: one fixed tray and fixing elements.

Spacial SF dimensions (mm)		Tray dimensions (mm)	Reference
Width	Depth		
600	400	482 × 290 × 30	**NSYFXT6040**
	500	482 × 390 × 30	**NSYFXT6050**
	600	482 × 490 × 30	**NSYFXT6060**
800	400	682 × 290 × 30	**NSYFXT8040**
	500	682 × 390 × 30	**NSYFXT8050**
	600	682 × 490 × 30	**NSYFXT8060**

Telescopic rails fixed to the structure

Telescopic rails fixed to cross rails

Telescopic rails

- The telescopic rails can be installed directly on the structure of the enclosure or on cross rails.
- The installation of a telescopic tray consists of the following:
– 1 fixed tray.
– 2 telescopic rails (fixed directly to the structure).
- End-of-travel stop of the rails in open and closed position.
- Material: zinc-coated steel.
- Acceptable load: 50 kg, evenly distributed.

Supply: two telescopic rails and fixing elements.

Spacial SF Dimensions (mm)	Reference
Depth	
400	**NSYTTG40**
500	**NSYTTG50**
600	**NSYTTG60**

PC rack
Mounting accessories

Tray cross rails

- Cross rails that allow the installation of fixed trays and telescopic rails. Quick-fixing and universal cross rails, see page **7/36**.

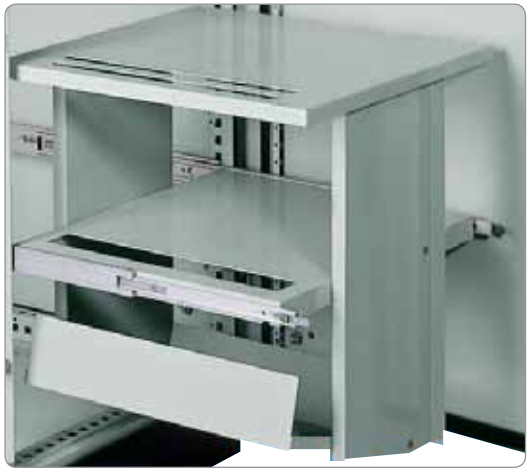
Spacial SF Dimensions (mm)	Universal cross rail reference	Quick cross rail reference
Depth	40 mm (1 row)	40 mm (1 row)
400	**NSYSUCR4040**	**NSYSQCR4040**
500	**NSYSUCR4050**	**NSYSQCR4050**
600	**NSYSUCR4060**	**NSYSQCR4060**
800	**NSYSUCR4080**	**NSYSQCR4080**

Handle for telescopic trays

- Handle designed for easy extraction of the sliding trays.
- Material: polyamide 6 (black).

Supply: two units and fixing elements.

Reference
NSY1TH



Printer support

- Support for placing an A4 printer, with area reserved for paper.
- Fixed directly to the structure of the enclosure, with a depth of 600 mm. For a depth of 800 mm, it can be installed with 40-mm (1 row) universal or quick-fixing cross rails, see page **7/38**.
- Material: steel painted RAL 7035 grey.

Supply: one printer support and fixing elements.

Reference
NSYPSA4

Electronic application

Suitable metal enclosure for electronic applications

Enclosure prepared for the installation of standard 19" racks in professional telecommunication, voice, data and electronic facilities, by means of 19" fixed and swing racks, see page **3/105**.

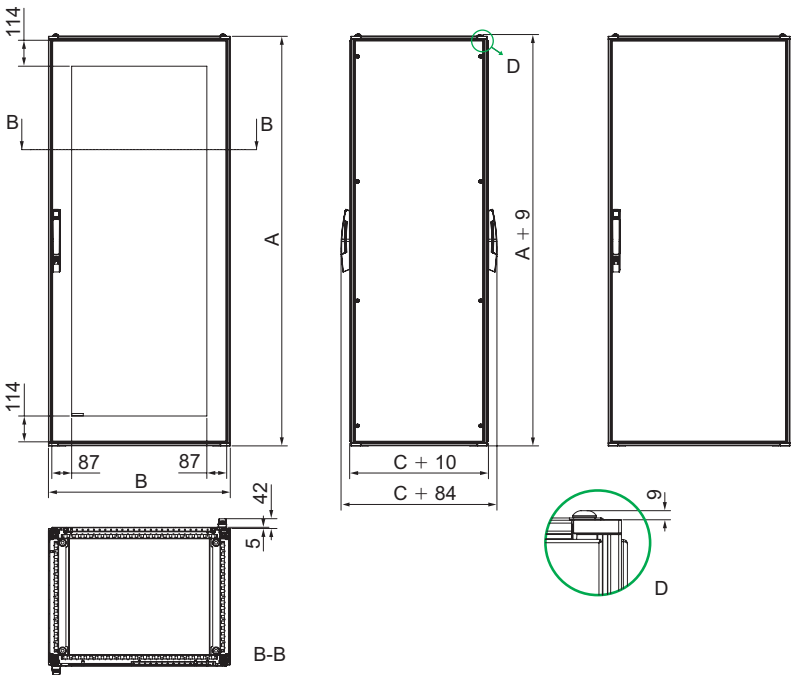
Composition

- Structure: top and bottom frame and vertical uprights.
- Transparent front door, made from sheet steel, painted with epoxy-polyester resin, textured RAL 7035 grey, with Securit® glass.
- Plain rear door, made from sheet steel, painted with epoxy-polyester resin, textured RAL 7035 grey:
- Standard locking system with handle and 5-mm double-bar insert.
- Removable roof.
- External fixing side panels, made from sheet steel, painted with epoxy-polyester resin, textured RAL 7035 grey, double folded to increase their rigidity with captive fixing screws that reduce installation time.
- In enclosures with widths of 600 and 800 mm, it is possible to install fixed or swing racks, to be ordered separately.

Certifications

- BV, DNV, UL*, CUL.
  *1, 12, 12K.

Spacial SF electronic application enclosure dimensions (mm)			Reference
Height (A)	Width (B)	Depth (C)	
1200	600	600	**NSYSF12660E**
		800	**NSYSF12680E**
	800	600	**NSYSF12860E**
		800	**NSYSF12880E**
2000	600	600	**NSYSF20660E**
		800	**NSYSF20680E**
	800	600	**NSYSF20860E**
		800	**NSYSF20880E**
		1000	**NSYSF208100E**
2200	600	600	**NSYSF22660E**
		800	**NSYSF22680E**
		1000	**NSYSF226100E**
	800	600	**NSYSF22860E**
		800	**NSYSF22880E**
		1000	**NSYSF228100E**



Electronic application
Composition accessories

Plinth

- See composition accessories: floor, page **3/36**.
- Model heights: 100 and 200 mm.

Front plinth

Supply:
– **Height 100 mm:** four corners, two panels (front and rear), four corner covers and fixing elements.
– **Height 200 mm:** four corners, four panels (two front and two rear), four corner covers and fixing elements.

Plinth side panels

Supply:
– **Height 100 mm:** two side panels, four corner covers and fixing elements.
– **Height 200 mm:** four side panels (height of 100 mm, two for each side), four corner covers and fixing elements.

Spacial SF Dimensions (mm)		Front plinth reference (mm)		Side panel plinth reference (mm)	
Width	Depth	100	200	100	200
600	600	NSYSPF6100	NSYSPF6200	NSYSPS6100	NSYSPS6200
	800			NSYSPS8100	NSYSPS8200
	1000			NSYSPS10100	NSYSPF10200
800	600	NSYSPF8100	NSYSPF8200	NSYSPS6100	NSYSPS6200
	800			NSYSPS8100	NSYSPS8200
	1000			NSYSPS10100	NSYSPF10200

Ventilated front plinth

Supply:
– **Height 100 mm:** four corners, two ventilated panels (front and rear), four corner covers and fixing elements.

Ventilated plinth side panels

Supply:
– **Height 100 mm:** two ventilated side panels, four corner covers and fixing elements.

Spacial SF dimensions (mm)		Ventilated front plinth reference	Ventilated plinth side panel reference
Width	Depth	100 mm	
600	600	NSYSPFV6100	NSYSPV6100
	800		NSYSPV8100
800	600	NSYSPFV8100	NSYSPV6100
	800		NSYSPV8100

Electronic application
Composition accessories

Cable-gland plates

- See composition accessories: cable gland, page **3/49**.
- Models: plain plates, with one entry and two entries.

Plain cable-gland plate

Supply: One plain plate and fixing elements.

Cable-gland plate with 1 entry

Supply: one plate with one entry, self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm, which guarantees good sealing, and fixing elements.

Cable-gland plate with 2 entries

Supply: one plate with two entries, self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm, which guarantees good sealing, and fixing elements.

Nominal dimensions (mm)		Reference		
Width	Depth	Plain	With 1 entry	With 2 entries
600	600	**NSYEC66**	**NSYEC661**	**NSYEC662**
	800	**NSYEC68**	**NSYEC681**	**NSYEC682**
	1000	**NSYEC610**	**NSYEC6101**	**NSYEC6102**
800	600	**NSYEC86**	**NSYEC861**	**NSYEC862**
	800	**NSYEC88**	**NSYEC881**	**NSYEC882**
	1000	**NSYEC810**	**NSYEC8101**	**NSYEC8102**

Ventilated cable-gland plates

- Plates for cable entry from the bottom of the enclosure.
- Material: galvanised steel.
- Thickness: 1.5 mm.
- Fixing by C-shaped clip, fixed with screws, providing electrical continuity through the clip.
- Each plate has a hole with an 8-mm diameter, covered with a plug, for cases in which earthing needs to be performed by an earthing cable or braid (elements not supplied).

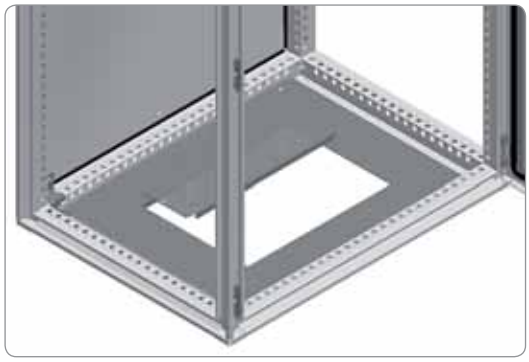
Supply: one ventilated plate with one entry, self-extinguishing polyurethane adhesive gasket with cross-section of 15 × 25 mm, and fixing elements.

Nominal dimensions (mm)		Reference
Width	Depth	
600	600	**NSYECV661**
	800	**NSYECV681**
	1000	**NSYECV6101**
800	600	**NSYECV861**
	800	**NSYECV881**
	1000	**NSYECV8101**

Electronic application
Composition accessories

Enclosure width 600 mm

Enclosure width 800 mm



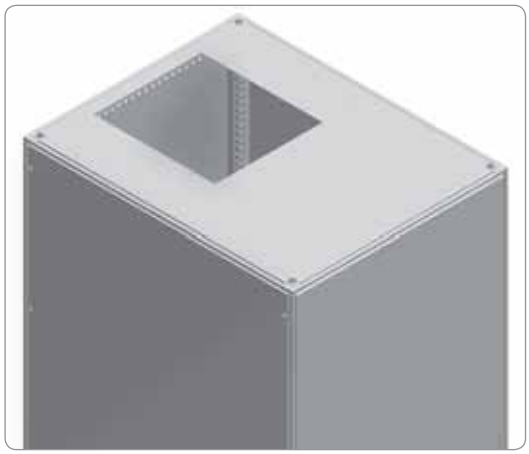
Cable-gland support for CaSys plates

- Support for cable entry from the bottom of the enclosure.
- Allows the installation of CaSys cable-gland accessories.
- Material: galvanised steel.
- Thicknesses: 1.5 mm.
- Fixing by C-shaped clip, fixed with screws, providing electrical continuity through the clip.
- The CaSys plates are fixed by C-shaped clips to the enclosures with a width of 600 mm, and by screws directly to the support in the enclosures with a width of 800 mm.

Supply:
– Enclosure width 600 mm: two plates and fixing elements.
– Enclosure width 800 mm: one support and fixing elements.

Nominal dimensions (mm)		Reference
Width	Depth	
600	600	**NSYCECS66**
	800	**NSYCECS68**
	1000	**NSYCECS610**
800	600	**NSYCECS86**
	800	**NSYCECS88**
	1000	**NSYCECS810**

Electronic application
Composition accessories

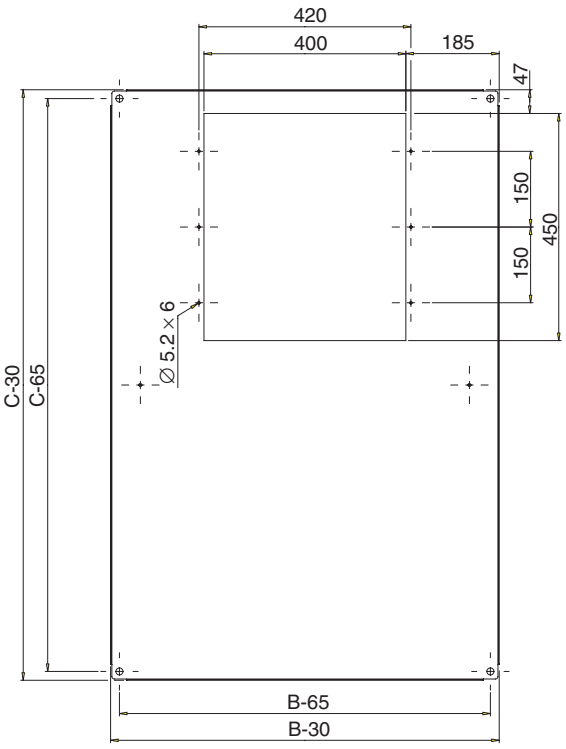


Roof for CaSys plates

- Roof prepared for installing CaSys roof accessories.
- Suitable for enclosures with widths of 600 and 800 mm.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one roof with central cut-out and side pre-cuts (width 800 mm).

Spacial SF dimensions (mm)		Reference
Width (B)	Depth (C)	
800	600	**NSYSRSYS86**
	800	**NSYSRSYS88**
	1000	**NSYSRSYS810**



Plain top roof plate

- Removable plate made from folded sheet steel.
- Option of installing roof elevators for aeration, ref. **NSYEX206**, and cable glands.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one plain top roof plate and fixing elements.

Reference
NSYTSPC450

Electronic application
Composition accessories

Top roof plate with brush gasket

- Removable folded sheet-steel plate, equipped with a gasket with cable-gland brush.
- Optional installation of roof elevators for aeration, ref. **NSYEX206**, and cable-gland plates.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one top roof plate with brush gasket and fixing elements.

Reference
NSYTSP450

Cut-out top roof plate

- Removable plate made from folded sheet steel.
- Optional installation of roof elevators for aeration, ref. **NSYEX206**, cable-gland plates and fans.
- Material: steel painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one cut-out top roof plate and fixing elements.

Reference
NSYTSPV450

Roof plate elevators for aeration

- Columns with a height of 20 mm.
- Fixing between the roofplate and the roof.

Supply: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

Reference
NSYEX206

Plain cable-gland plate

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Material: galvanised steel.

Supply: one plain cable-gland plate and fixing elements.

Reference
NSYEC440

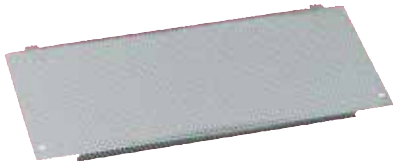
Electronic application
Composition accessories

Cable-gland plate with brush

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Material: galvanised steel.

Supply: one cable-gland plate with brush and fixing elements.

Reference
NSYECP440



Self-ventilated cable-gland plate

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Material: galvanised steel.

Supply: one self-ventilated cable-gland plate and fixing elements.

Reference
NSYECAV440

Ventilation plate with cut-outs and with or without fans, 120 mm

- Fixing on the outside of the roof.
- Can be combined with other types of cable-gland plates.
- Supplied with 2 or 3 fans, each of which has an output capacity of 170 m³/h, 220 V-50/60 Hz, installed and wired to a terminal strip. A 2-m power cord is supplied connected.
- Sound level: 34 dB (A).

Supply: one cable-gland plate with or without fans, 2-m power cord (version with fans) and fixing elements.

Description	Reference
No fans, 3 positions	NSYECVT3440
With 3 fans	NSYECVT3V440
No fans, 2 positions	NSYECVT2440
With 2 fans	NSYECVT2V440

Cable-gland filter

- To be mounted on the cable-gland plate with or without fan or on the self-ventilated cable-gland plate.

Supply: one mounting support, colour RAL-9011, and filter.

Reference
NSYFECVT440

Electronic application
Composition accessories

Spare cable-gland filter

- Spare filter.

Supply: five units.

Reference
NSYCEFILS

Examples of possible combinations of cable-gland plates for the roof

Spacial SF dimensions (mm)		Combination 1	Combination 2
Width	Depth		
600/800	600		
	800		
	1000		

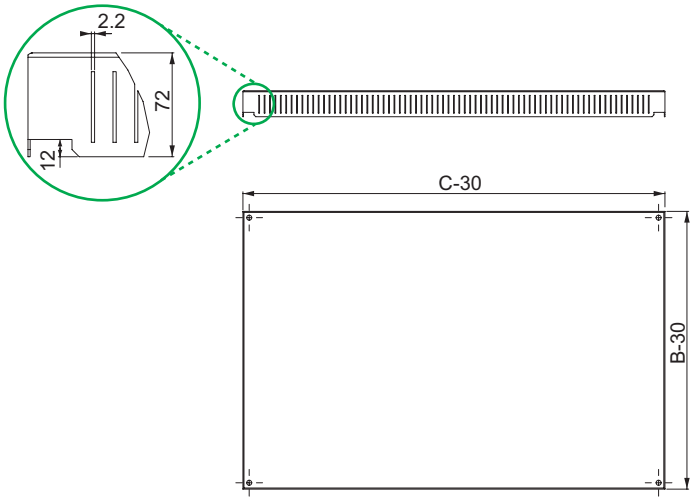
Electronic application
Composition accessories

Ventilated roof

- Roof for providing natural ventilation for the enclosure, with IP30 protection.
- Material: steel.
- Height: an extra 63 mm in relation to the structure.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey.

Supply: one ventilated roof and fixing elements.

Nominal dimensions (mm)		Reference
Width (B)	Depth (C)	
600	600	**NSYSVR606**
	800	**NSYSVR608**
800	600	**NSYSVR806**
	800	**NSYSVR808**



Electronic application
Composition accessories

Ventilated door for 19" racks

- Door designed to achieve natural ventilation of the enclosure.
- Installation on enclosures with a width of 800 mm, equipped with centred fixed or swing racks.
- Opening of 120°.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.
- Standard locking system with handle and 5-mm double-bar insert.

Supply: one ventilated door for racks.

Nominal dimensions (mm)		Single ventilated door reference	Double ventilated door reference
Height	Width		
1200	600	**NSYPCVD126**	**NSYPCV2D126**
	800	**NSYPCVD128**	**NSYPCV2D128**
1400	800	**NSYPCVD148**	**NSYPCV2D148**
1600	800	**NSYPCVD168**	**NSYPCV2D168**
1800	800	**NSYPCVD188**	**NSYPCV2D188**
2000	600	**NSYPCVD206**	**NSYPCV2D206**
	800	**NSYPCVD208**	**NSYPCV2D208**
2200	600	**NSYPCVD226**	**NSYPCV2D226**
	800	**NSYPCVD228**	**NSYPCV2D228**

Transparent door for off-centre racks

- Transparent door for installation in enclosures with off-centre 19" racks.
- Shows only the devices mounted on the 19" rack.
- Opening of 120°.
- Lock with handle and 5-mm double-bar insert, four locking points.

– 2 points, heights of 1200 and 1400 mm.
– 4 points, heights of 1600 to 2200 mm.

- Door stop profile.
- Opening to the right or left.
- Width of the glass 485 mm, off-centre by 77 mm.
- Material: steel and Securit® glass.
- Finish: painted with epoxy-polyester resin, RAL 7035 grey, textured.

Supply: one off-centre transparent door.

Nominal dimensions (mm)		Reference
Height	Width	
1200	800	**NSYED128T**
1400		**NSYED148T**
1600		**NSYED168T**
1800		**NSYED188T**
2000		**NSYED208T**
2200		**NSYED228T**

Electronic application
Mounting accessories

19" fixed rack

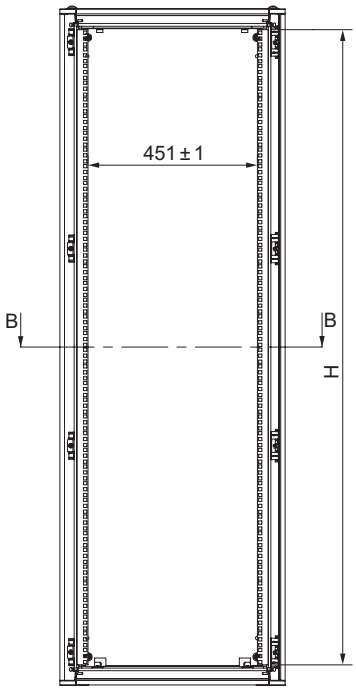
- Rack designed for installation in enclosures with a width of 600 mm.
- **Spacial SF:** Direct fixing on the structure of the enclosures.

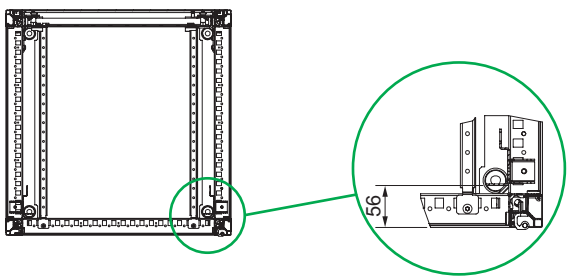
– For installation on enclosures with a width of 800 mm, use the 19" fixed-rack support brackets.
– To reinforce the rigidity of the uprights in enclosures with a width of 800 mm, it is advisable to use the central fixing kit, for enclosure heights above 1800 mm, ref. **NSYRCK19KIT**.

- **Spacial SM:** fixing on the top/bottom adjustment rails.
- Adjustable depth with a pitch of 25 mm.
- Maximum load: 400 kg.
- Material: zinc-coated steel.

Supply: two uprights and fixing elements.

Nominal dimensions (mm) Height	No. of units (H)	Reference
1200	24	**NSYRCK24**
1400	29	**NSYRCK29**
1600	33	**NSYRCK33**
1800	38	**NSYRCK38**
2000	42	**NSYRCK42**
2200	47	**NSYRCK47**





B-B

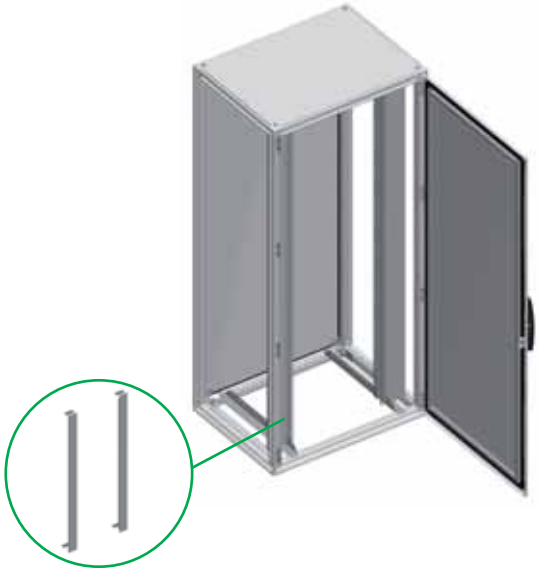
Electronic application
Mounting accessories

Support brackets for 19" fixed rack with a width of 800 mm

- Support brackets for coupling the fixed rack to enclosures with a width of more than 600 mm.
- They allow the depth of the fixed rack to be adjusted with a pitch of 25 mm.
- Maximum load: 400 kg.
- Material: zinc-coated steel.

Supply: four support brackets and fixing elements.

Nominal dimensions (mm)	Reference
Depth	
600	**NSYRCKS6**
800	**NSYRCKS8**

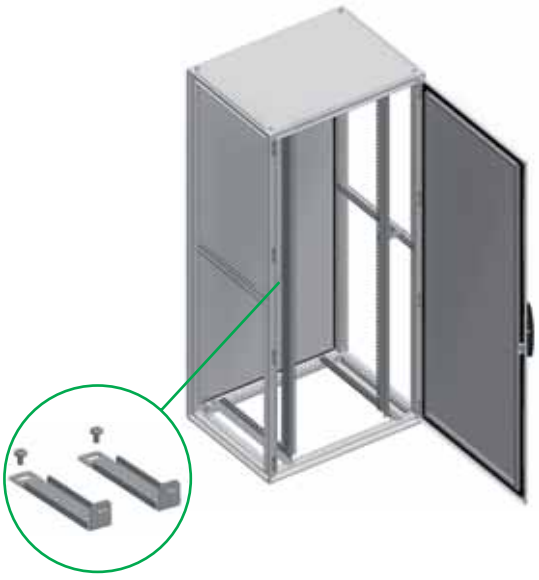


Side plates of the centred fixed rack for a width of 800 mm

- Side plates for coupling to the fixed rack in enclosures with a width of 800 mm.
- Direct installation on the rack by screws.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two side plates and fixing elements.

Nominal dimensions (mm)		Reference
Height	Width	
1200	800	**NSYRC12**
1400		**NSYRC14**
1600		**NSYRC16**
1800		**NSYRC18**
2000		**NSYRC20**
2200		**NSYRC22**



Central fixing kit

- To reinforce the rigidity of the 19" fixed racks in enclosures with a width of 800 mm.
- Fixing to the enclosure by cross rails or light cross rails installed depthwise. See page **7/39**.
- Material: zinc-coated steel.

Supply: two supports and fixing elements.

Reference
NSYRCK19KIT

Electronic application
Mounting accessories

(1)

Partial 19" fixed rack

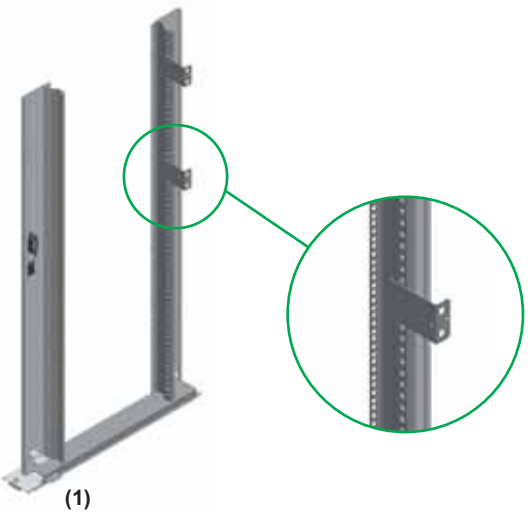
- Rack designed for coupling in enclosures with a width of 600 mm.
- Installation options (**Spacial SF**):
– Installation at the top front of the enclosure, no cross rails needed (image 1).
– Depth adjustment of the cross rails: two cross rails need to be installed, see page **7/36**.
– For installation at any other height, four depth cross rails are required (image 2).
- Installation options (**Spacial SM**):
– At the top of the enclosure (image 1): install two depth cross rails, see cross rails on page **7/31**.
– At another height (image 2): install four cross rails for depthwise installation.
– Depthwise installation of the cross rails. Installation of the vertical adaptation profile and the 40-mm universal cross rail (1 row) in vertical position, in the position closest to the back.
- Adjustable depth with a pitch of 25 mm.
- Maximum load: 2 kg/U.
- Material: zinc-coated steel.

Supply: two uprights and fixing elements.

Rack height (mm)	No. of units	Reference
200	4	**NSYRCKP4**
400	8	**NSYRCKP8**
600	12	**NSYRCKP12**
800	17	**NSYRCKP17**
1000	21	**NSYRCKP21**
1200	26	**NSYRCKP26**

(2)

Electronic application
Mounting accessories



(1)

> Advantage:

It is possible to adjust the height with the rack installed and loaded.

19" swing racks for 800 mm enclosures

- Racks prepared for direct coupling to enclosures with a width of 800 mm.
- **Spacial SF:** fixing to the structure of the enclosure.
- **Spacial SM:** fixing on the top/bottom adjustment rails.
- Can be moved depthwise with a pitch of 25 mm.
- Maximum load: 3 kg/U.
- Maximum opening: 120° (possibility of opening to 180° using 180° hinges).
- Reversible opening direction: left/right.
- Handle opening system with ball lock.
- Maximum equipment installation depth:

Off-centre 19" swing rack:
– 120° = 470 mm.
– 180° = 425 mm.
Centred 19" swing rack:
– 120° = 390 mm.
– 180° = 345 mm.

- **Spacial SF:** multiple installation options in enclosures with a width of more than 800 mm (1000, 1200 or 1600 mm), by using universal or quick-fixing cross rails, see page **7/36**.
- **Spacial SM:** option for installing the racks in enclosures with a width of 1600 mm by using universal or quick cross rails, see page **7/36**.
- Components:

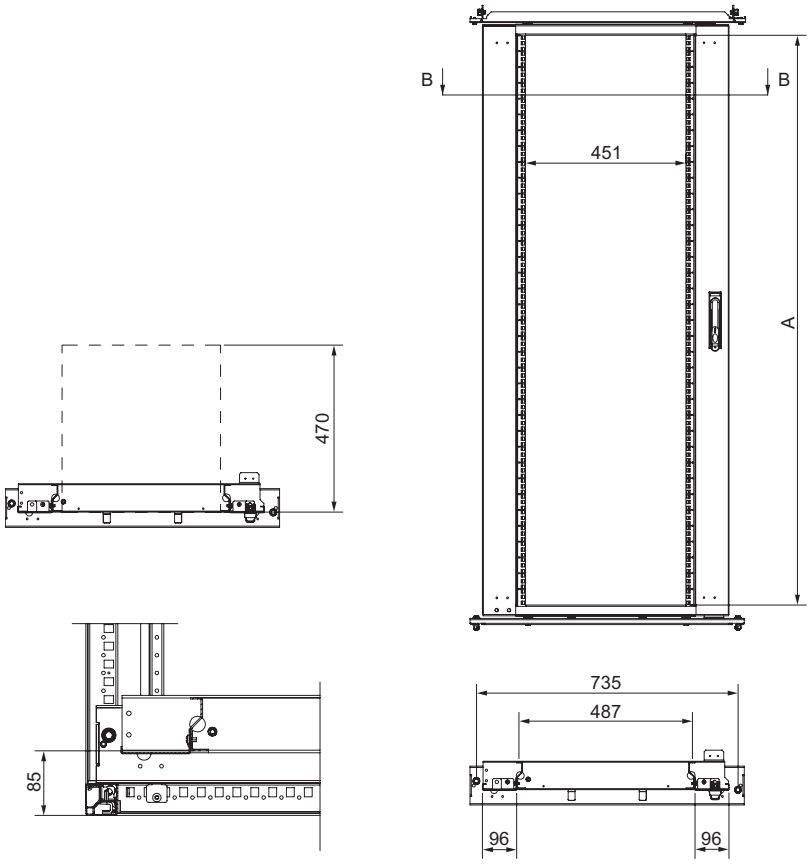
– Zinc-coated steel central structure.
– Side plate made from steel painted with epoxy-polyester resin, textured RAL 7035 grey. Fixed to the central structure by screws.

- The cross rail of the double-folded rack increases the installation options.
- Rear fixing uses self-tapping M6 screws, and side fixing is possible by means of quick-installation accessories (image 1).
- Lateral adjustment is possible with the rack installed and loaded.

Supply:
– Off-centre 19" swing rack: hinged rack, 800-mm swing rack supports, side lid with ball-lock handle and fixing elements.
– Centred 19" swing rack: swing rack, 800-mm swing rack supports, side plates with ball-lock handle and fixing elements.

Nominal dimensions (mm)		No. of units	Off-centre 19" hinged rack reference	Centred 19" hinged rack reference
Height (A)	Width (B)			
1400	800	27	**NSYRSW27**	**NSYRSWC27**
1600		31	**NSYRSW31**	**NSYRSWC31**
1800		36	**NSYRSW36**	**NSYRSWC36**
2000		40	**NSYRSW40**	**NSYRSWC40**
2200		45	**NSYRSW45**	**NSYRSWC45**

Electronic application
Mounting accessories



180° hinge

- Hinge for installation on centred and off-centre 19" swing racks.
- Allows the swing rack to be opened to 180°.
- Fixing by M8 screws directly to the swing rack.
- Maximum equipment installation depth:
  – Off-centre 19" swing rack: 425 mm.
  – Centred 19" swing rack: 345 mm.
- Material: zamak 5.

Supply: two hinges and fixing elements.

Reference
NSYRSWH180

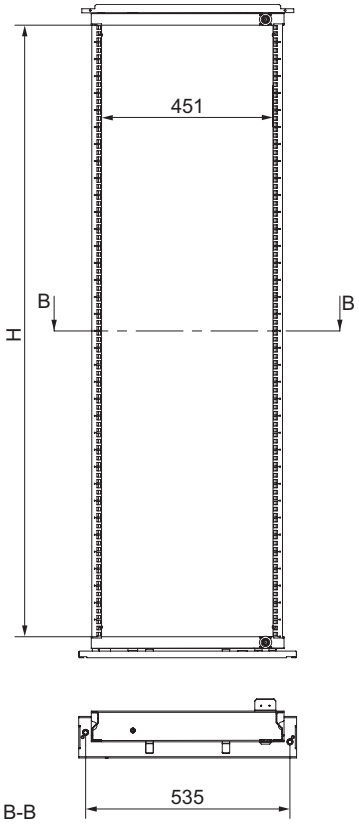
Electronic application
Mounting accessories

19" swing rack with no panels

- To be coupled to enclosures with widths of 600 and 800 mm.
- In both cases, it is required the use of 19" swing rack support, ref. **NSYRSW6** or **NSYRSW8**, see page **3/111**.
- **Spacial SF:** fixing to the enclosure structure at any height using supports for 19" swing racks.
- **Spacial SM:** fixing to the enclosure on the top/bottom adjustment rails using supports for 19" swing racks.
- Can be moved depthwise with a pitch of 25 mm.
- Maximum load: 3 kg/U.
- Maximum opening: 120°.
- Maximum equipment installation depth: 180 mm, in enclosures with a width of 600 mm.
- **Spacial SF:** multiple installation options in enclosures with a width of more than 800 mm (1000, 1200 and 1600 mm), by using universal or quick cross rails, see page **7/36**, in addition to the 19" swing rack support.
- **Spacial SM:** option for installing two racks in enclosures with widths of 1200 and 1600 mm.
- For enclosures with a width of 1200 mm, top/bottom adjustment rails are necessary, in addition to the 19" swing rack support.
- Material: zinc-coated steel.
- Reversible opening direction: left/right.
- Locking system, top and bottom, with 5-mm double-bar key.

Supply: one 19" swing rack with no panels.

Nominal dimensions (mm)		No. of units	Reference
Height (A)	Width (B)		
1400	600/800	27	**NSYRSW627**
1600		31	**NSYRSW631**
1800		36	**NSYRSW636**
2000		40	**NSYRSW640**
2200		45	**NSYRSW645**



Electronic application
Mounting accessories

19" swing rack support

- Support for coupling the 19" swing rack in enclosures with widths of 600 and 800 mm in off-centre position.
- Rack installation in centred and off-centre position.
- Adjustable depth with a pitch of 25 mm.
- Material: steel painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: 2 supports and fixing elements.

Nominal dimensions (mm)	Reference
Width	
600	**NSYRSWS6**
800	**NSYRSWS8**

Electronic application
Mounting accessories

Examples of alternatives for 19" swing racks

19" swing rack in enclosure with a width of 600 mm.

Off-centre 19" swing rack in enclosure with a width of 800 mm.

Centred 19" swing rack in enclosure with a width of more than 800 mm.

Electronic application
Mounting accessories

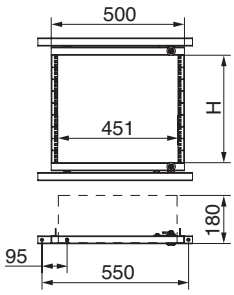
Partial 19" swing rack

- Rack for coupling to enclosures with widths of 600 and 800 mm.
- In enclosures with a width of 800 mm, the rack can be installed centred or off-centre.
- **Spacial SF:** Fixing to the highest position of the enclosure by means of supports for partial 19" swing rack.
- **Spacial SM:** Fixing to the highest position of the enclosure by means of supports for partial 19" swing rack and vertical adaptation profiles.
- For height or depth adjustment, with a pitch of 25 mm, it is necessary to use two 65-mm (2 rows) universal cross rails and a 19" multiple bracket, ref. **NSYMBR19**; and for moving depthwise and up or down, four cross rails are required. See universal cross rails, page **7/36**.
- **Spacial SM:** to install the depthwise cross rails, the vertical adaptation profile and two 40-mm universal cross rails (1 row) are required, installed vertically in the back of the enclosure.
- Maximum load: 2 kg/u.
- Maximum opening: 120°.
- Material: zinc-coated steel.
- Reversible opening direction: left/right.
- Locking system, top and bottom, with 5-mm double-bar key.
- Maximum equipment installation depth: 180 mm, in enclosures with a width of 600 mm.

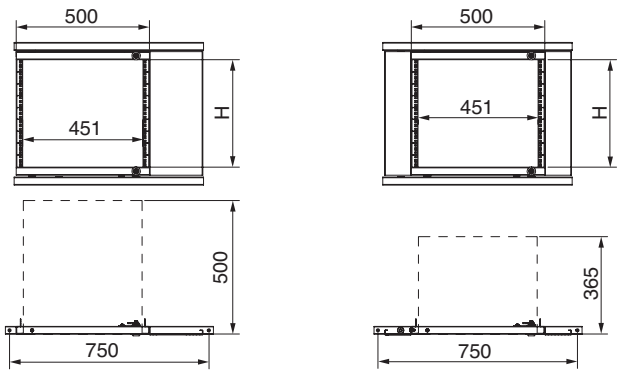
Supply: one partial 19" swing rack.

Rack height (mm)	Nominal dimensions (mm)	No. of units (H)	Reference
	Width (B)		
355	600/800	6	**NSYRSWP6**
468		9	**NSYRSWP9**
601		12	**NSYRSWP12**
735		15	**NSYRSWP15**
868		18	**NSYRSWP18**
1002*		21	**NSYRSWP21**

*Optional installation in enclosures with height of 1200 mm.

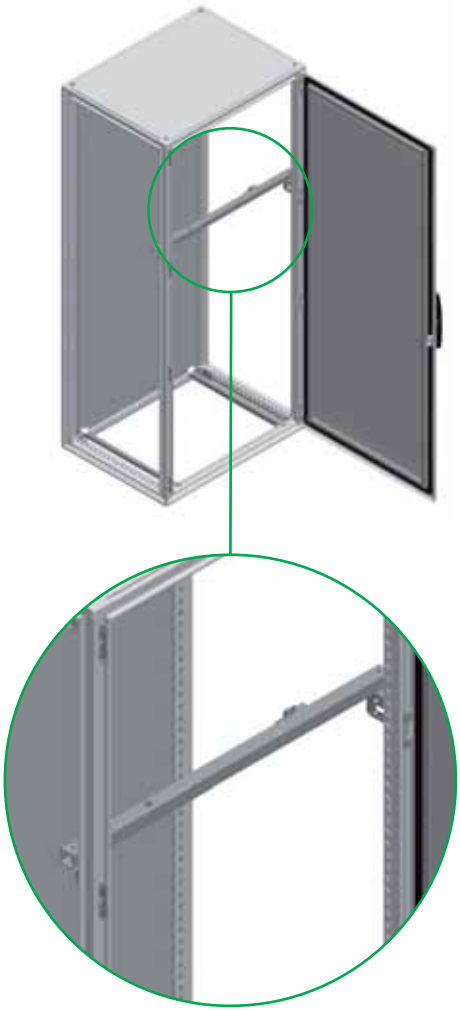


Partial 19" swing rack for enclosures with a width of 600 mm.



Partial 19" swing rack, off-centre and centred, for enclosures with a width of 800 mm.

Electronic application
Mounting accessories



Partial 19" swing rack support

- Supports for coupling the partial swing rack to enclosures with widths of 600 and 800 mm.
- Installation of the rack in centred or off-centre position, for enclosures with a width of 800 mm.
- **Spacial SF:** direct fixing to the structure.
- **Spacial SM:** fixing to the enclosure by means of the vertical adaptation profile, page **7/34**.
- Height or depth adjustment, with a pitch of 25 mm, by two 65-mm (2 rows) universal cross rails and a 19" multiple bracket, ref. **NSYMBR19**.
- Material: zinc-coated steel.

Supply: two supports and fixing elements.

Nominal dimensions (mm)	Reference
Width	
600	**NSYRSWSP6**
800	**NSYRSWSP8**

19" multiple bracket

- Bracket for fixing 65-mm universal cross rails (2 rows), depthwise, to position the partial 19" swing rack in any direction, up and down and/or depthwise.
- Material: zinc-coated steel.

Supply: four brackets and fixing elements.

Reference
NSYMBR19

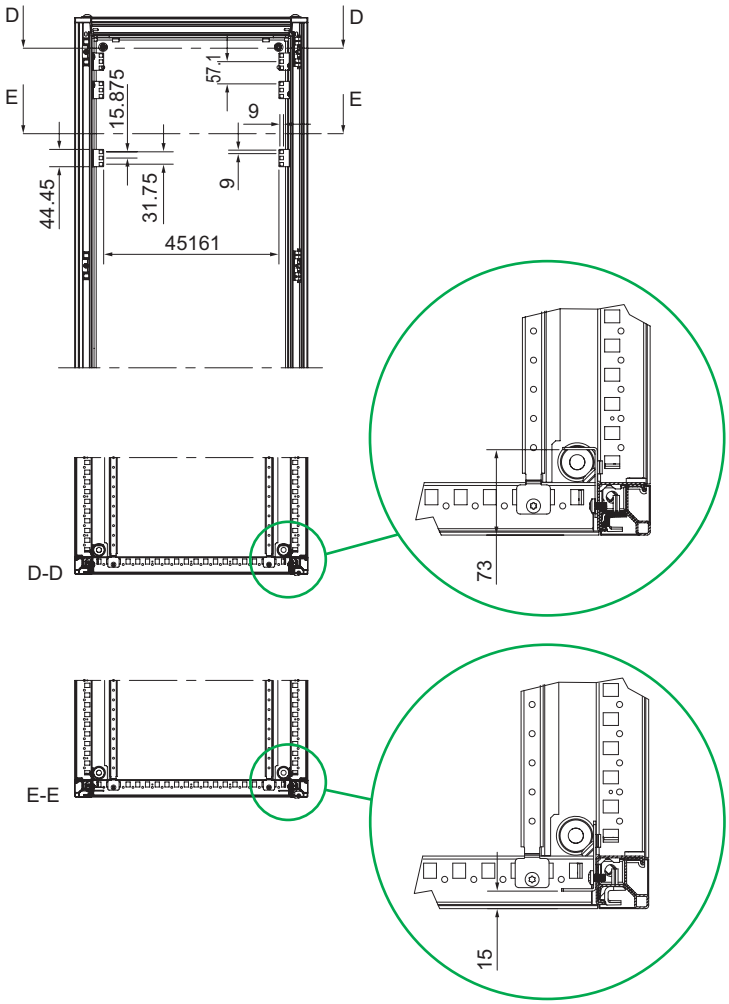
Electronic application
Mounting accessories

1 U / 3 U support

- Support prepared for installing equipment 1 U or 3 U high.
- Designed with quick locking for easy installation.
- **Spacial SF:** direct fixing to the structure.
- **Spacial SM:** fixing to the enclosure by means of the vertical adapter section, page **7/34**.
- Material: zinc-coated steel.

Supply: four 1 U/3 U supports (2 units right and 2 units left) and fixing elements.

Reference
NSYRC1U



19" rack rail

- Rails for installation on fixed or swing racks.
- Direct fixing on the structure of the enclosure, by quick locking.
- Maximum load: 15 kg.
- Material: zinc-coated steel.
- Thickness: 1.2 mm.

Supply: two rails and fixing elements.

Reference
NSYGB140

Electronic application
Mounting accessories

Rear cable-guide support

- Supports used for installation on the rear of the swing racks.
- Suitable for fixing cable-guide accessories.
- Allow vertical fixing of cable ducts:
- Adjustable depth with a pitch of 44.45 mm.
- Material: zinc-coated steel.

Supply: two cable-guide supports, crossbar and fixing elements.

Service depth (mm)	Reference
150	**NSYRCSUP15**
250	**NSYRCSUP25**

Fixing of cable ducts on 19" racks

- Allows vertical fixing of cable ducts for cable guide.
- Service depth: 150 mm.
- Fixed by quick locking to the 19" rack profile.
- Material: zinc-coated steel.

Supply: three units and fixing elements.

Reference
NSYRCDFIX

Electronic application
Door accessories

120° mechanical door stop

- Door stop for installation on the swing racks.
- Direct fixing to the rack support and the 19" rack.
- Maximum opening: 120°.

Supply: one mechanical door stop and fixing elements.

Reference
NSYRCDR12

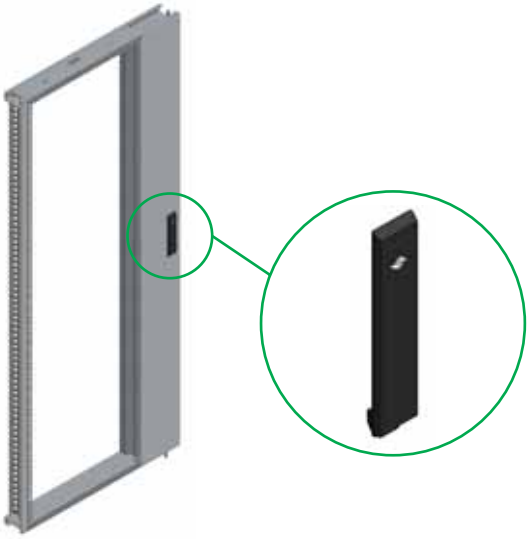
180° pneumatic door stop

- Door stop for installation on the swing racks installed with 180° hinges.
- **Spacial SF:** fixing to the base of the structure and to the rack.
- **Spacial SM:** direct fixing to the rack support and to the 19" rack.
- Maximum opening: 180°.

Supply: one pneumatic door stop and fixing elements.

Reference
NSYRCDR18

Electronic application
Door accessories



Flat escutcheon for swing 19" rack

- Flat escutcheon with 5-mm double-bar insert lock, for installation on swing 19" racks.

Supply: one flat escutcheon, 5-mm double-bar insert and fixing elements.

Reference
NSYRCLOCK

Switch for swing 19" rack

- Switch for direct fixing on the bottom or top support of the swing rack.
- M20 connection.
- Open + closed contact, 10 A/500 V.

Supply: one 19" rack switch and fixing elements.

Reference
NSYRCINT

Fixing elements for 19"

- Elements required for fixing switchgear on 19" racks, made up of:

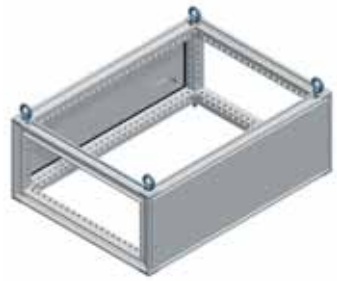
– Screws.
– Washers.
– Nuts.

Supply: 50 units of each.

Reference by unit. Order by multiples of 50 (50, 100, 150...).

Thread type	Reference
M5	NSYGFR95M55
M6	NSYGFR95M65

Power distribution
Power distribution accessories

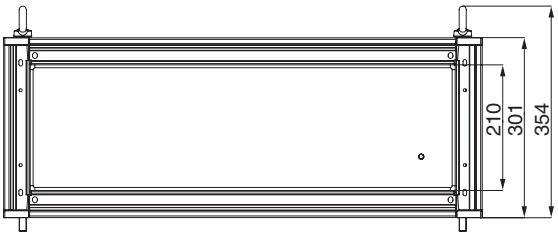


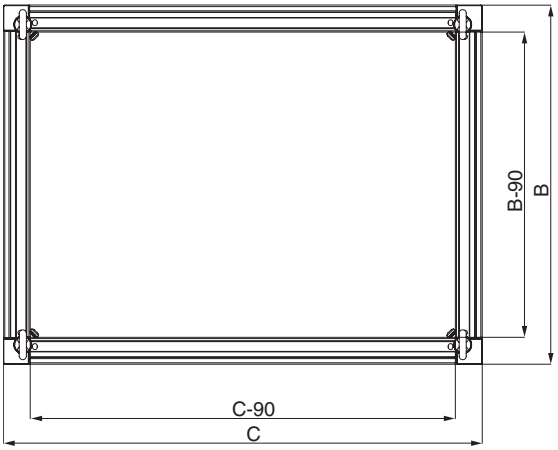
Top busbar chamber

- Chamber which protects and supports the sets of horizontal bars.
- Enables new switchgear by tapping and isolates the sets of bars from the rest of the equipment.
- It is only installed at the top of the enclosure.
- Degree of protection: IP55.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply:
– One structure of the busbar chamber as a kit.
– Two front panels.
– Four eyebolts.
– One sealing gasket.

Nominal dimensions (mm)			Reference
Height (A)	Width (B)	Depth (C)	
300	300	500	NSYTBC335
		600	NSYTBC336
	400	500	NSYTBC345
		600	NSYTBC346
		800	NSYTBC348
	600	500	NSYTBC365
		600	NSYTBC366
		800	NSYTBC368
	800	500	NSYTBC385
		600	NSYTBC386
		800	NSYTBC388
	1000	500	NSYTBC3105
		600	NSYTBC3106
		800	NSYTBC3108
	1200	500	NSYTBC3125
		600	NSYTBC3126
		800	NSYTBC3128





Power distribution
Power distribution accessories

Side panels for the busbar chamber

- Set of two side panels for coupling with the busbar chamber.
- Captive screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply: two side panels and fixing elements.

Nominal dimensions (mm)		Reference
Height	Depth	
300	500	**NSYSPBC35**
	600	**NSYSPBC36**
	800	**NSYSPBC38**

Side busbar chamber

- Protects and supports the sets of vertical bars.
- Enables new switchgear by tapping and isolates the sets of bars from the rest of the equipment.
- It can be installed on either of the two sides of the enclosure.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.

Supply:
– One structure of the busbar chamber.
– One roof.
– One rear panel.
– One door with handle (5-mm DB lock).

Nominal dimensions (mm)			Reference
Height	Width	Depth	
1800	400	400	**NSYSF18440**
		500	**NSYSF18450**
		600	**NSYSF18460**
2000	300	500	**NSYSF20350**
		600	**NSYSF20360**
	400	400	**NSYSF20440**
		500	**NSYSF20450**
		600	**NSYSF20460**
		800	**NSYSF20480**
2200	400	600	**NSYSF22460**

Spacial SF for Prisma Plus P system

The Spacial SF range includes specific enclosure models for installing the Prisma Plus P system: functional units and vertical and horizontal busbars.
The panels are subject to type tests according to standard IEC 61439-2.
Partition types: forms 2 and 3 thanks to the components of the Prisma Plus P system.

RAL 7035 grey, IP 55, IK 10.
Specific finishes and colours are available on demand using our customisation service.

The offer consists of:
- Steel suitable enclosures, height 2000 mm.
- Width 700 mm for installing Prisma P functional units and width 300 mm for installing cable ducting or vertical busbars.
- Depths 500 and 600 mm for panels up to 1600 A.
- Depth 800 mm for panels up to 3200 A or connection of devices by the rear.

To create mixed power distribution and automation panels, the Spacial SF enclosures for Prisma Plus P system can be coupled with standard Spacial SF enclosures and therefore use the universal mounting accessories.

Note: The standard Spacial SF 400mm width can also be used for cable ducting.

Electrical characteristics

The installation of devices with the Prisma Plus P system for Spacial SF allows the installation of low-voltage equipment compliant with standards IEC 50298, IEC 62262 and IEC 61439-2 and having the following characteristics:
- Rated insulation voltage of the main busbar: 1000 V.
- Rated operational current: In 3200 A.
- Rated peak withstand current: Ipk: 187 kA.
- Rated short-time withstand current: Icw 85 kA eff/1 s.
- Frequency: 50/60 Hz.

Mechanical characteristics

- Galvanised-steel framework.
- Sheet-steel panels, painted with epoxy-polyester resin, textured finish, RAL 7035 grey.
- The panels can be removed.
- The frameworks can be coupled side-to-side or back-to-back.
- IP 55.
- IK 10 (IK 08 for glazed doors).

Configured

Specific

Specific finishes and colours, please contact us.

Spacial SF for Prisma Plus P system
Composition accessories

W = 300 mm.

Enclosure depth 500

W = 700 mm.

Enclosure depth 600 or 800

Technical characteristics

These Spacial SF enclosures have been designed specially for installing the Prisma Plus P system: functional units and busbars. Height: 2000 mm.
IP 55 and IK 10 enclosures for the plain-door version or IK 08 for the glazed-door version.

The enclosures are available with 3 depths:
- 500 and 600 mm for panels up to 1600 A;
- 800 mm for panels up to 3200 A or connection by the rear.

The enclosures with width 700 mm support direct installation of Prisma Plus P system functional in white - RAL 9001.

The enclosures with width 300 mm can be used as cable ducts or for the installation of a flat busbar.

The bar compartment can be positioned on the right or on the left.
Bar compartments can be coupled side-to-side and back-to-back.

The enclosures with width 700 mm are compatible with all existing Prisma Plus P system functional units, except prefabricated connections, see Prisma Plus catalogue.

The enclosures with width 700 mm consist of:
- 2 frames (top and bottom with screwed roof);
- 4 vertical uprights;
- 4 adapter uprights (enclosure depth 500);
- 2 adapter uprights and 2 intermediate uprights (enclosure depths 600 and 800);
- Screwed rear panel.
- Plain or glazed door.

And can be coupled side-to-side and back-to-back.

The enclosures with width 300 mm consist of:
- 2 frames (top and bottom with screwed roof);
- 4 vertical uprights;
- Screwed rear panel;
- Plain door.

The Linergy busbar can only be installed in lateral position with depth 500 mm. Add the set of 2 Prisma Plus P system functional uprights **NSYSFPA**.

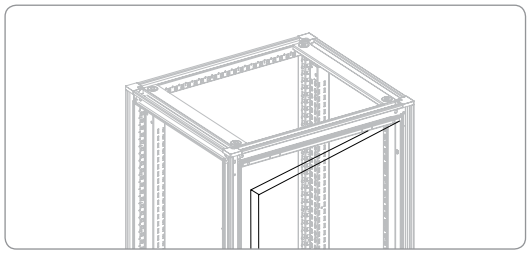
The enclosures are supplied assembled, without lateral panels.

All Spacial SF enclosures for Prisma Plus P system can be coupled with Spacial SF enclosures with the same depth.

Height	Depth	Width			Set of 2 lateral panels
		300 Plain door	700 Plain door	700 Glazed door	
2000	500	**NSYSF20350**	**NSYSFP20750**	**NSYSFP20750T**	**NSY2SP205**
	600	**NSYSF20360**	**NSYSFP20760**	**NSYSFP20760T**	**NSY2SP206**
	800	**NSYSF20380**	**NSYSFP20780**	**NSYSFP20780T**	**NSY2SP208**

Use the earth cables to guarantee the earth connection of the side panels.

Spacial SF for Prisma Plus P system
Accessories



Prisma Plus hinged support frame

Hinged support frame for cover plates with width 700 mm.
- Reversible, opening to right/left.
- Colour: white - RAL 9001.
- Locking at 2 points by 1/4 turn nuts.
- Installed on enclosures with width 700 mm.
- Mandatory for installing Prisma Plus Functional units.

Reference
08566

Plinths

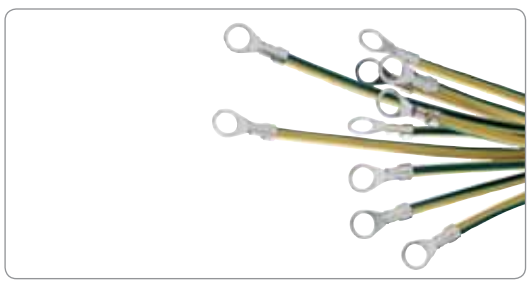
The plinths are available in 2 heights: 100 and 200 mm. They can be combined to obtain heights of 300 mm, 400 mm or more.
The complete plinth comprises two assemblies:
- The front and rear panels, with the 4 corners;
- 2 side panels.

Width	Depth	Plinth H 100 mm		Plinth H 200 mm	
		Front/rear panels	Side panels	Front/rear panels	Side panels
300	500	NSYSPF3100	NSYSPS5100	NSYSPF3200	NSYSPS5200
	600		NSYSPS6100		NSYSPS6200
	800		NSYSPS8100		NSYSPS8200
700	500	NSYSPF7100	NSYSPS5100	NSYSPF7200	NSYSPS5200
	600		NSYSPS6100		NSYSPS6200
	800		NSYSPS8100		NSYSPS8200

Cable-gland plate

Galvanised-steel plates for cable entry by the bottom of the enclosures, thickness 1.5 mm.
Fixing by C-shaped clips fixed by screws ensuring electrical continuity.
Plate with 1 entry: self-extinguishing polyurethane adhesive seal, rectangular section of 15 × 25 mm and fixing elements.

Width	Depth	Reference
300	500	NSYEC351
	600	NSYEC361
	800	NSYEC381
700	500	NSYEC751
	600	NSYEC761
	800	NSYEC781



Earth cables

- Essential to guarantee the earthing of the side panels, roof and door.
- Material: brass and copper alloy terminal, green and yellow PVC insulating sheath.
- Composition: 10 earth cables, to be ordered by multiples of 10 (nuts and washers not included).

Length (mm)	Cut (mm²)	Terminal ∅ (mm)	Reference
160	6	8.3	NSYEL166D8
350	25	8.3	NSYEL3525D8

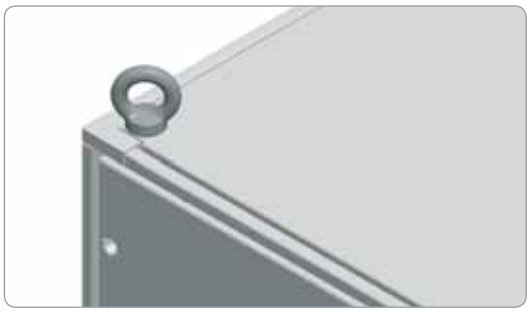
Spacial SF for Prisma Plus P system
Accessories

Side panels

External fixing

- Set of 2 side panels fixed from the outside of the enclosure.
- Captive screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.
- Supply: 2 side panels fixed from the outside and fixing elements.

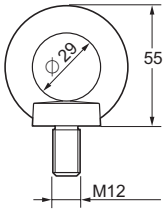
Nominal dimensions (mm)		Reference
Height	Depth	
2000	500	**NSY2SP205**
	600	**NSY2SP206**
	800	**NSY2SP208**

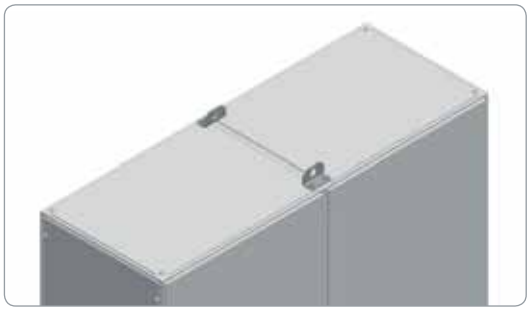


Eyebolts

Set of 4 moulded galvanised-steel M12 eyebolts for direct screwing in the framework of the enclosure, in line with the uprights.

Reference
NSYSFEB

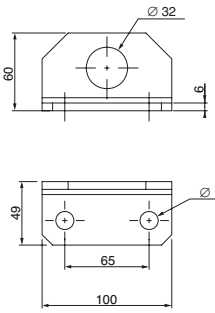




Lifting brackets

Set of 4 zinc-coated steel transport brackets for fixing to the framework, spanning two coupled enclosures, in line with the uprights.

Reference
NSYSFELB



Coupling kit

For side to side or back to back* coupling of 2 enclosures:
- Fixing from the inside of the enclosure.
- Protection degree: IP 55.
- Material:

– Flat links: zinc-coated steel.
– Sealing gasket: EPDM.

Reference
NSYSFBK19

* Back to back associations must be shipped individually.

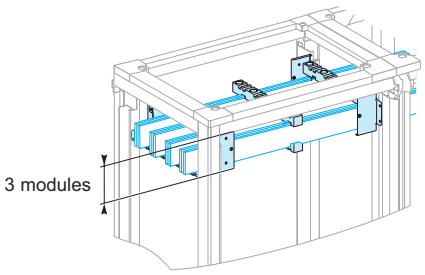
Spacial SF for Prisma Plus P system
Horizontal busbars up to 1600 A

Busbar configuration

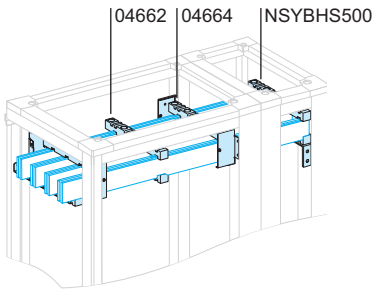
The bars are supported by insulating supports fixed to the framework.
The tables on this page show:
- The number and section of the bars to be used according to the permissible current level of the busbar;
- The number of bar supports to be installed in each type of framework, according to:

– The section of the bars
– The rated short-time withstand current Icw.

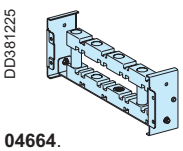
For further information on configuring the busbar, see page **3/128**.
The busbar takes up 3 Prisma modules of 50 mm each.



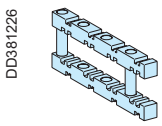
Busbar selection



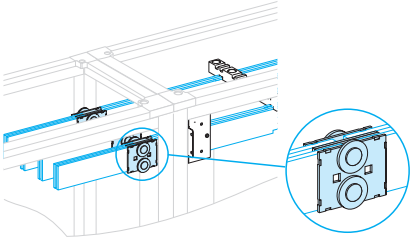
Fixed support and mobile support.



04664.



04662.



Connection.

Number and section of the copper bars

Permissible current level (A) IP55	No. bars/phase
750	1 bar, 60 × 5
900	1 bar, 80 × 5
1250	2 bars, 60 × 5
1600	2 bars, 80 × 5

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Number of supports

Framework width (mm)	Bar section (mm)	No. of Icw supports (kA eff/1 s)				
		≤ 15	≤ 25	≤ 30	≤ 40	≤ 50
700	1 bar, 60 × 5	2			3	
	1 bar, 80 × 5					
	2 bars, 60 × 5					
	2 bars, 80 × 5					
300	All sections	1			2	

Flat bars with width 2000 mm

Type of bar	Reference
Plain copper bar, 60 × 5	**04536**
Plain copper bar, 80 × 5	**04538**

Bar supports

2 compulsory fixed supports for frameworks with width 700 and 1 compulsory support for frameworks with width 300. If more supports are required, complete them using mobile supports.

Busbar centre-to-centre distance (mm)	Enclosure W700 Depth 500	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800
	75	75	75	75
Fixed support for horizontal bars	**04664**	**NSYBHS500**	**NSYBHS600**	**NSYBHS800**
Mobile support (additional)	**04662**	**04662**	**04662**	**04662**

Connections

Connections		Reference
1 connection for bars	Width 60 mm	**04640**
	Width 80 mm	**04641**

Note: When installed at the bottom of the enclosure, the busbar must be partitioned.

Spacial SF for Prisma Plus P system
Horizontal busbars up to 3200 A

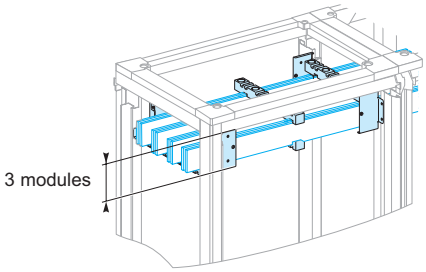
Busbar configuration

The bars are supported by insulating supports fixed to the framework.
The tables on this page show:
- The number and section of the bars to be used according to the permissible current level of in the busbar;
- The number of bar supports to be installed in each type of framework, according to:

– The section of the bars.
– The rated short-time withstand current Icw.

For further information on configuring the busbar, see page **3/128**.

The busbar takes up 3 Prisma modules of 50 mm each.



Number and section of the copper bars

Permissible current level (A) IP55	No. bars/phase
1080	1 bar, 50 × 10
1250	1 bar, 60 × 10
1600	1 bar, 80 × 10
1850	2 bars, 50 × 10
2000	2 bars, 60 × 10
2500	2 bars, 80 × 10
2900	2 bars, 100 × 10

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Number of supports (centre-to-centre distance: 75 mm)

Framework width (mm)	Bar section (mm)	No. of Icw supports (kA eff/1 s)							
		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
700	1 bar, 50 × 10	2			3			4	
	1 bar, 60 × 10								
	1 bar, 80 × 10								
	2 bars, 50 × 10								
	2 bars, 60 × 10								
	2 bars, 80 × 10								
	2 bars, 100 × 10								
300	All sections	1				2			

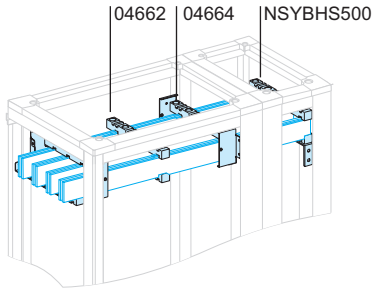
Number of supports (centre-to-centre distance: 115 mm)

Framework width (mm)	Bar section (mm)	No. of Icw supports (kA eff/1 s)							
		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
700	1 bar, 50 × 10	2		3			4		
	1 bar, 60 × 10								
	1 bar, 80 × 10								
	2 bars, 50 × 10								
	2 bars, 60 × 10								
	2 bars, 80 × 10								
	2 bars, 100 × 10								
300	All sections	1				2			

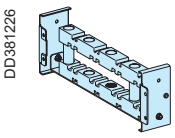
Spacial SF for Prisma Plus P system

Horizontal busbars up to 3200 A

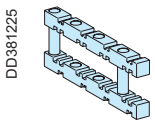
Busbar choice



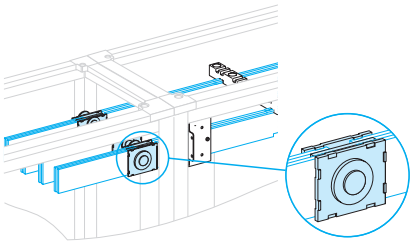
Fixed support and mobile support.



04664.



04662.



Flat bars with width 2000 mm

Type of bar	Reference
Plain copper bar, 50 × 10	**04545**
Plain copper bar, 60 × 10	**04546**
Plain copper bar, 80 × 10	**04548**
Plain copper bar, 100 × 10	**04550**

Bar supports

2 compulsory fixed supports for frameworks with width 700 and 1 compulsory fixed support for frameworks with width 300. If more supports are required, complete them using mobile supports.

Busbar centre-to-centre distance (mm)	Bar width	Enclosure W700	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800
		75	75	75	75
Fixed support for horizontal bars	⩽80 mm	**04664**	**NSYBHS500**	**NSYBHS600**	**NSYBHS800**
	>80 mm	**04664 +04671**	**NSYBHS500 +04671**	**NSYBHS600 +04671**	**NSYBHS800 +04671**
Mobile support (additional) for bars	⩽80 mm	**04662**	**04662**	**04662**	**04662**
	>80 mm	**04662 +04671**	**04662 +04671**	**04662 +04671**	**04662 +04671**

Busbar centre-to-centre distance (mm)	Bar width	Enclosure W700 Depth 800	Enclosure W300 Depth 800
		115	115
Fixed support for horizontal bars	⩽80 mm	**NSYBHS800L**	**NSYBHS800L**
	>80 mm	**NSYBHS800L +04671**	**NSYBHS800L +04671**
Mobile support (additional) for bars	⩽80 mm	**04678**	**04678**
	>80 mm	**04678 +04671**	**04678 +04671**

Connections

Connections		Reference
1 connection for bars	Widths 50 and 60 mm	**04640**
	Widths 80 and 100 mm	**04641**

Note: When installed at the bottom of the enclosure, the busbar must be partitioned.

Spacial SF for Prisma Plus P system

Linergy vertical busbars up to 3200 A, depth 500 mm

Busbar configuration

The table on this page shows:
- The reference of the aluminium profiles to be used according to the permissible current level of the busbar.
- The number of supports to be used according to the rated short-time withstand current (Icw in kA eff/1 s).

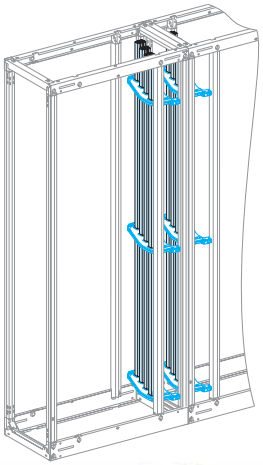
Beyond 1600 A, the busbar is doubled in two bar compartments, side-by-side.

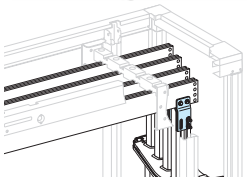
In this case, it is compulsory to install 3 equipotential links between the busbars.

- The support is identical, regardless of the current-carrying capacity.

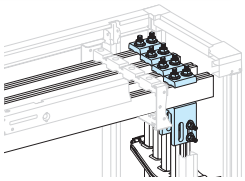
Linergy rail	Reference of 1 rail	Permissible current level (A) at 35 °C for panel	No. of supports according to the rated short-time withstand currents Icw (kA eff / 1 s)							
		IP > 31	≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
Single busbar										
Linergy 630	**04502**	590	3							
Linergy 800	**04503**	760								
Linergy 1000	**04504**	950								
Linergy 1250	**04505**	1170				4	5			
Linergy 1600	**04506**	1480							7	8
Double busbar										
Linergy 2000	**04504** × 2	1820	2 × 3				2 × 4		2 × 5	
Linergy 2500	**04505** × 2	2260								
Linergy 3200	**04506** × 2	2920								

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel. The bottom support can also be used to wedge the bars. Each reference consists of 1 rail.





04635 connection to horizontal bars, thickness 5 mm.



04636 connection to horizontal bars, thickness 10 mm.

Busbar selection

Linergy rail with width 1670 mm, section 32.5 × 42.5 mm.
Choice of references: see table below.

630 A rail, ref. **04502**

800 A rail, ref. **04503**

1000 A rail, ref. **04504**

1250 A rail, ref. **04505**

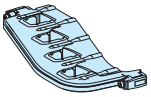
1600 A rail, ref. **04506**

Bar support and adapter upright

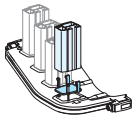
- To install a Linergy busbar in a 300-mm sheath, depth 500 mm, it is necessary to add the adapter uprights.
- The Linergy bar supports are delivered with class 8.8 fixings.

Description	Reference
Adapter upright, batch of 2	**NSYSFPA**
Linergy bar support	**04651**

The busbar is installed in suitable enclosures with width 700 mm and depth 500 mm.



Bar support installed



Each rail is delivered with one stop to be on the bottom support

Connection to a horizontal busbar

It connects a horizontal busbar (thickness 5 or 10 mm) to a Linergy lateral busbar. It is delivered with fixings.

Connection (1)		Reference
to horizontal bars, thickness 5 mm	1000 A connection conductor	**04634**
	1600 A connection conductor	**04635**
to horizontal bars, thickness 10 mm	connection conductor for horizontal bar width ≤ 80 mm	**04636**
	connection conductor for horizontal bar width > 80 mm	**04636 + 04642**

(1) References **04634**, **04635** and **04636** are delivered as a unit: 1 link per phase.

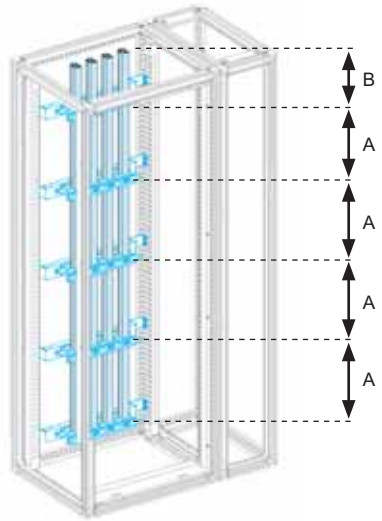
Spacial SF for Prisma Plus P system

Linergy rear busbars up to 1600 A

Busbar configuration

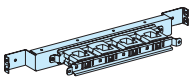
The table on this page shows:
- The reference of the profiles to be used according to the permissible current level of the busbar.
- The number of supports to be used according to the rated short-time withstand current (Icw in kA eff/1 s).

The busbar is installed in enclosures with width 700 mm, depth 500 mm.
- The support is identical, regardless of the current-carrying capacity.

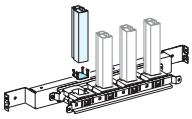


Busbar up to 1600 A (30 kA SCC and 40 kA).
The bottom support can also be used to wedge the bars.

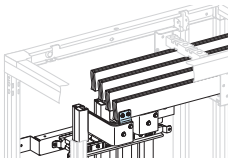
B = max. 387.5 mm
A = max. 350 mm



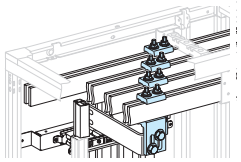
Bar support.



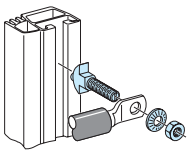
Each bar is delivered with one stop to be installed on the bottom support (vertical wedging).



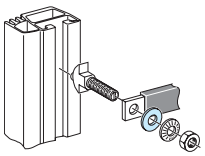
04635 connection with horizontal bars, thickness 5 mm.



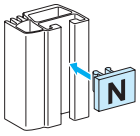
04636 connection with horizontal bars, thickness 10 mm.



Linergy bolts (screw + nut + contact washer).



Flat washers.

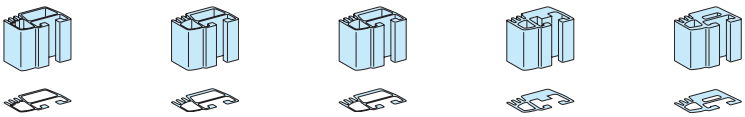


Linergy rail	Reference of 1 rail	Permissible current level (A) at 35 °C for panel	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)			
		IP > 31	≤ 25	≤ 30	≤ 40	≤ 50
Linergy 630	**04502**	590	3			
Linergy 800	**04503**	760		4		
Linergy 1000	**04504**	950			5	
Linergy 1250	**04505**	1170				7
Linergy 1600	**04506**	1480				

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel. The bottom support can also be used to wedge the bars. Each reference consists of 1 rail.

Busbar selection

Linergy rail with width 1670 mm, 32.5 w 42.5-mm section.
Choice of references: see table below.



630 A rail, ref. **04502**

800 A rail, ref. **04503**

1000 A rail, ref. **04504**

1250 A rail, ref. **04505**

1600 A rail, ref. **04506**

Bar support

- A stop for the bottom support also allows the bars to be wedged.
- Delivered with class 8.8 fixings.

Bar support	Reference
for Linergy rear busbar	**04652**

Connection to a horizontal busbar

For connecting a horizontal busbar (thickness 5 or 10 mm) and a Linergy rear vertical busbar.

Connection (2)		Reference
to horizontal bars, thickness 5 mm		**04635 (1)**
to horizontal bars, thickness 10 mm	horizontal bars, width ≤ 80 mm	**04636 (1)**
	horizontal bars, width > 80 mm	**04636 + 04642 (1)**

(1) A part of the link must be made using insulated flexible bars.
(2) References **04635** and **04636** are delivered as a unit: 1 link per phase.

Linergy accessories

Linergy screws (3)

Batch of 20 Linergy M8 bolts (20 screws + 20 nuts + 20 contact washers)	Reference
Width = 25 mm (to connect flexible bars and lugs)	**04766**
Width = 39 mm (to connect copper bars)	**04767**

(3) The 8.8 screws slide along the rail and immobilise at the desired location.

Flat washers

Batch of 20 M8 flat washers		Reference
steel	outer diameter 20 mm	**04772**
	outer diameter 24 mm	**04773**
	outer diameter 28 mm	**04774**
brass	outer diameter 20 mm (i 25v lug connection on Linergy)	**04775**

Identification

Set of 12 phase identifiers	Reference
12 clip-on supports + N, L1, L2, L3, PE, PEN labels	**04794**

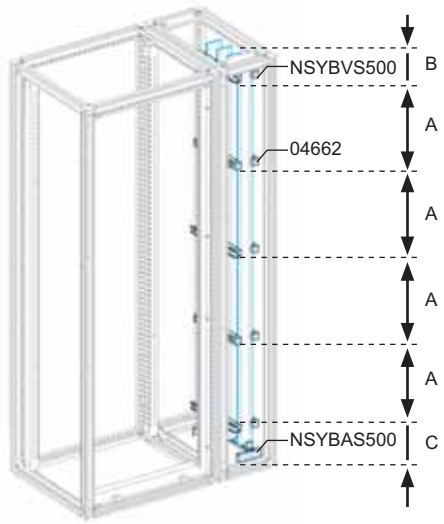
Spacial SF for Prisma Plus P system

Vertical busbars up to 1600 A
Flat bars, thickness 5 mm

Busbar configuration

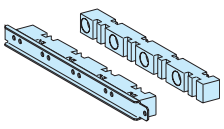
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars are resting against a bottom support.
The table on this page shows:

- The number and section of the bars to be used according to the permissible current level of the busbar.
- The number of bar supports to be installed in an enclosure according to the rated short-time withstand current (Icw).

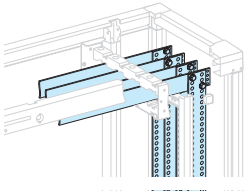


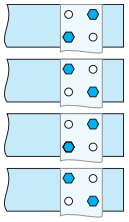
Busbar with Icw 30 kA eff/1 s.
The bars are supported by 3 fixed supports (compulsory) and 2 mobile supports.

B = max. 100 mm
A = max. 350 mm
C = max. 87.5 mm



Mobile bar support **04662.**





Separation required between bar coupling points to guarantee the insulation distances.

Number of copper bars and supports

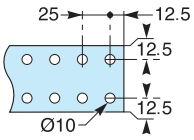
Permissible current level (A) for panel	No. of bars/phase and section (mm)	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)				
IP > 31		15	≤ 25	≤ 30	≤ 40	≤ 50
750	1 bar, 60 × 5	3	5	5	5	7
900	1 bar, 80 × 5					
1250	2 bars, 60 × 5					
1600	2 bars, 80 × 5					

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Busbar selection

Flat bars with width 1675 mm

Perforated copper bar	Reference
60 × 5 mm	**04516**
80 × 5 mm	**04518**



Bar supports: fixing directly on framework of 300-mm duct

3 fixed supports are compulsory for supporting the bars. If more than 3 supports are required, use the mobile supports (additional).

Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Fixed support for lateral flat busbar	**NSYBVS500**	**NSYBVS600**	**NSYBVS800**	**NSYBVS800L**
Mobile support (additional)	**04662**	**04662**	**04662**	**04678**

Bar wedging

The bottom support allows the bars to be installed and positioned. It does not count as a bar support.

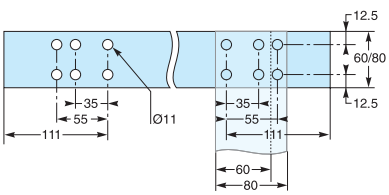
Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Bottom support for lateral flat busbar	**NSYAS500**	**NSYAS600**	**NSYAS800**	**NSYAS800L**

Note: When connecting 5-mm flat bars to a horizontal busbar, references **NSYAS•00** are not required.

Connection to a horizontal busbar, thickness 5 mm

Direct connection (centre-to-centre distance 75 mm)

For a busbar centre-to-centre distance of 75 mm, the bars must be completely overlapped.



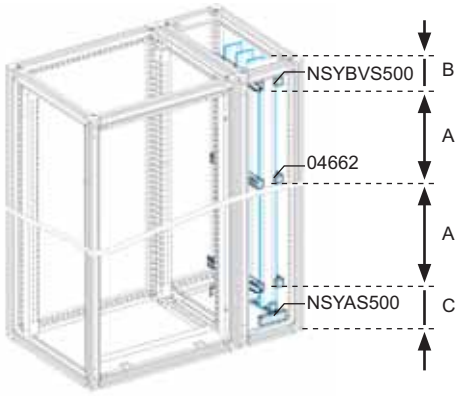
Drilling dimensions for the horizontal bars, thickness 5 mm.

Spacial SF for Prisma Plus P system

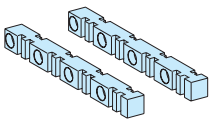
Vertical busbars up to 3200 A
Flat bars, thickness 10 mm

Busbar configuration

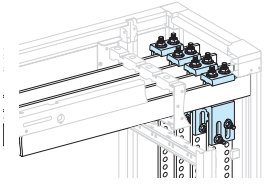
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars are resting against a bottom support.
The table on this page shows:
- The number and section of the bars to be used according to the permissible current level of the busbar;
- The number of bar supports to be installed in an enclosure according to the rated short-time withstand current (Icw).



Single busbar ≤ 1600 A (IP ≤ 31).



Mobile bar support **04662.**



Number of copper bars and supports

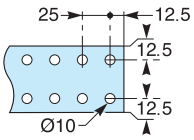
Permissible current level (A) for panel		No. of bars/phase and section (mm)	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)							
IP ≤ 31	IP > 31		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
Single busbar										
1200	1080	1 bar, 50 × 10	3		5		7		9	
1400	1250	1 bar, 60 × 10								
1800	1600	1 bar, 80 × 10								
2050	1850	2 bars, 50 × 10								
2300	2000	2 bars, 60 × 10								
2820	2500	2 bars, 80 × 10								
3200	2820	2 bars, 100 × 10								

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Busbar selection

Flat bars with width 1675 mm

Perforated copper bar	Reference
50 × 10 mm	**04525**
60 × 10 mm	**04526**
80 × 10 mm	**04528**



Bar supports: fixing directly on framework of 300-mm duct

3 fixed supports are compulsory for supporting the bars. If more than 3 supports are required, use the mobile supports (additional).

Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Fixed support for lateral flat busbar	**NSYBVS500**	**NSYBVS600**	**NSYBVS800**	**NSYBVS800L**
Mobile support (additional)	**04662**	**04662**	**04662**	**04678**

Bar wedging

The bottom support allows the bars to be installed and positioned. It does not count as a bar support.

Busbar centre-to-centre distance (mm)	Enclosure W300 Depth 500	Enclosure W300 Depth 600	Enclosure W300 Depth 800	Enclosure W300 Depth 800
	75	75	75	115
Fixed support for lateral flat busbar	**NSYAS500**	**NSYAS600**	**NSYAS800**	**NSYAS800L**

Connection to a horizontal busbar, thickness 10 mm

Vertical busbar connection (2)	Horizontal bars	Vertical bars	Reference
(1 bar/phase) to horizontal bars	L ≤ 80 mm	50/60 mm	**04636**
	L > 80 mm	50/60 mm	**04636 + 04642**
	L ≤ 80 mm	80 mm	**04637**
	L > 80 mm	80 mm	**04637 + 04642**
(2 bars/phase) to horizontal bars	L ≤ 80 mm	50/80 mm	**04637**
	L > 80 mm	50/80 mm	**04637 + 04642**

(2) References **04636** and **04637** are delivered as a unit: 1 link per phase.

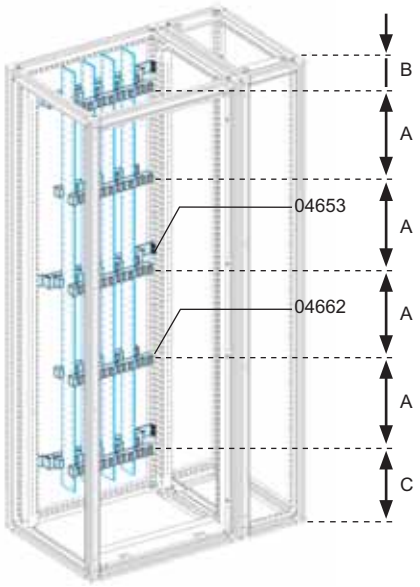
Spacial SF for Prisma Plus P system

Rear busbars up to 1250 A
Flat bars, thickness 5 mm

Busbar configuration

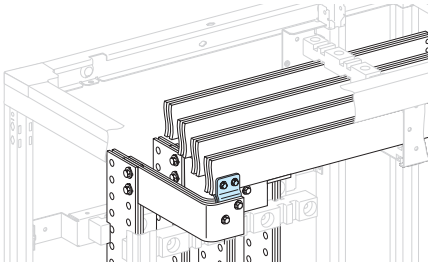
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars rest against one of the fixed supports by means of a wedge screwed onto each bar.
The table on this page shows:

- The number and section of the bars to be used according to the permissible current level of the busbar.
- The number of bar supports to be installed according to the rated short-time withstand current (Icw).



Busbar with Icw 30 kA eff/1 s.
The bars are supported by 3 fixed supports, 04653 × 3 (compulsory), and 2 mobile supports, 04662 × 2.

B = max. 100 mm
A = max. 750 mm
C = max. 87.5 mm



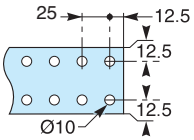
Number of copper bars and supports

Permissible current level (A) for panel		No. of bars/phase and section (mm)	No. of supports according to rated short-time withstand currents Icw (kA eff/1 s)				
IP ≤ 31	IP > 31		15	≤ 25	≤ 30	≤ 40	≤ 50
800	750	1 bar, 60 × 5	3	5			7
1000	900	1 bar, 80 × 5					
1400	1250	2 bars, 60 × 5					

Busbar selection

Flat bars with width 1675 mm

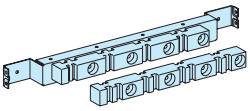
Perforated copper bar	Reference
60 × 5 mm	**04516**
80 × 5 mm	**04518**



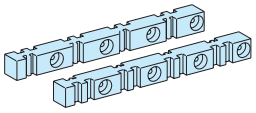
Bar supports

3 fixed supports are compulsory for supporting the vertical busbars. If more than 3 supports are required, use the mobile supports (additional).

Bar support	Reference
fixed for rear flat busbar	**04653**
mobile (additional)	**04662**



Fixed bar support **04653.**

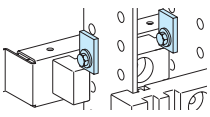


Mobile bar support **04662.**

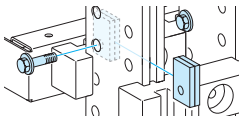
Bar wedging

A metal wedge with thickness 5 mm is screwed onto the bar.
It rests against a fixed support and wedges the bar.

Wedge for bars	Reference
100 5-mm wedges for bars	**04669**



Wedging: 1 bar/phase.



Wedging: 2 bars/phase.

Connection to a horizontal busbar

1600 A connection		Reference
to horizontal bars, thickness 5 mm		**04635 (1) (2)**
to horizontal bars, thickness 10 mm	L ≤ 80 mm	**04636 (1) (2)**
	L > 80 mm	**04636 (2) + 04642 (1)**

(1) A part of the link must be made using insulated flexible bars.
(2) References **04635** and **04636** are delivered as a unit = 1 link per phase.

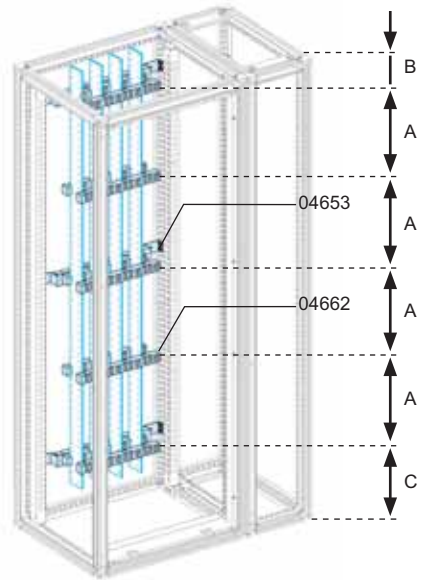
Spacial SF for Prisma Plus P system

Rear busbars up to 1600 A
Flat bars, thickness 10 mm

Busbar configuration

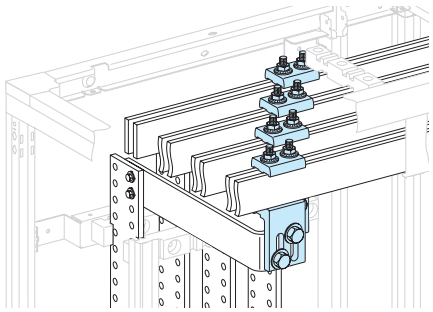
The bars are supported by insulating supports: 3 fixed supports (screwed to the framework) are compulsory. If necessary, use additional mobile supports.
The bars rest against one of the fixed supports by means of a wedge screwed onto each bar.
The table on this page shows:

- The number and section of the bars to be used according to the permissible current level of the busbar.
- The number of bar supports to be installed according to the rated short-time withstand current (Icw en KA eff/15).
- The busbar is installed in suitable enclosures with width 700 mm and depth 500 mm.



Busbar with Icw 40 kA eff/1 s.
The bars are supported by 3 fixed supports, 04653 (compulsory), and 2 mobile supports, **04662**.

B = max. 100 mm
A = max. 375 mm
C = max. 87.5 mm



Number of copper bars and supports

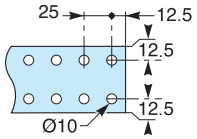
Permissible current level (A) for panel	No. of bars/phase and section (mm)	No. of supports according to the rated short-time withstand currents Icw (kA eff/1 s)							
IP > 31		≤ 25	≤ 30	≤ 40	≤ 50	≤ 60	≤ 65	≤ 75	≤ 85
1080	1 bar, 50 × 10	3	5			7		9	
1250	1 bar, 60 × 10								
1600	1 bar, 80 × 10								

Note: The busbar permissible current level values are provided for an ambient temperature of 35 °C around the panel.

Busbar selection

Flat bars with width 1675 mm

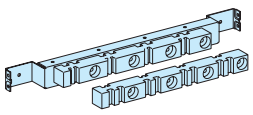
Perforated copper bar	Reference
50 × 10 mm	**04525**
60 × 10 mm	**04526**
80 × 10 mm	**04528**



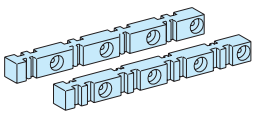
Bar supports

3 fixed supports are compulsory for supporting the vertical busbars. If more than 3 supports are required, use the mobile supports (additional).

Bar support	Reference
fixed for rear flat busbar	**04653**
mobile (additional)	**04662**



Fixed bar support **04653.**

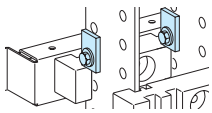


Mobile bar support **04662.**

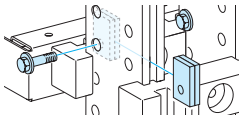
Bar wedging

A metal wedge with thickness 5 mm is screwed onto the bar.
It rests against a fixed support and wedges the bar.

Wedge for bars	Reference
100 5-mm wedges for bars	**04669**



Wedging: 1 bar/phase.



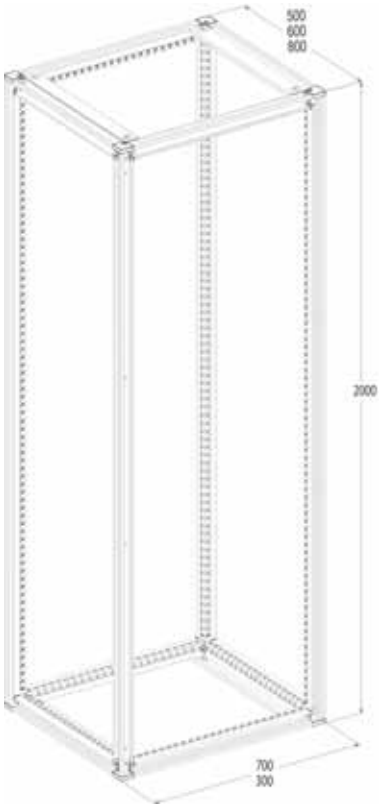
Wedging: 2 bars/phase.

Connection to a horizontal busbar, thickness 10 mm

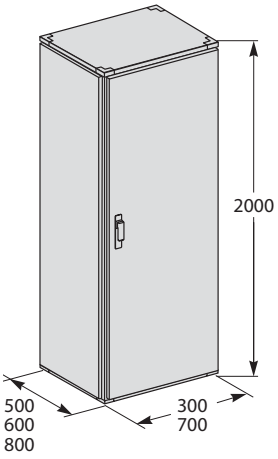
Connection ≤ 1600 A		Reference
to horizontal bars,thickness 10 mm	L ≤ 80 mm	**04636 (1) (2)**
	L > 80 mm	**04636 (2) + 04642 (1)**

(1) A part of the link must be made using insulated flexible bars.
(2) References **04635** and **04636** are delivered as a unit = 1 link per phase.

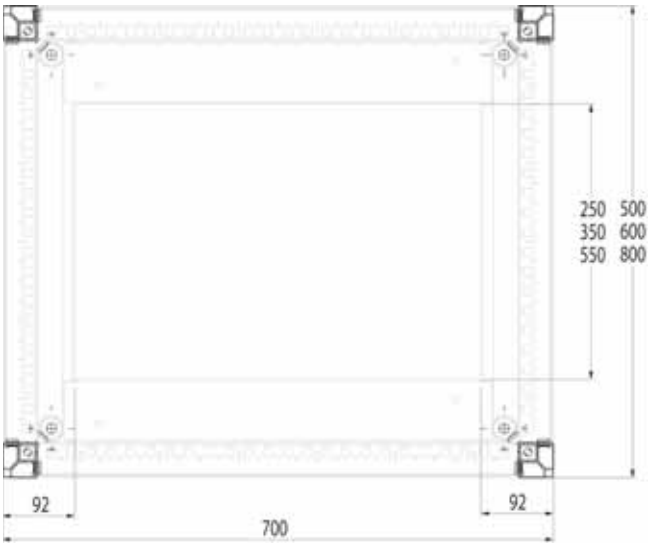
Spacial SF for Prisma Plus P system
Dimensions

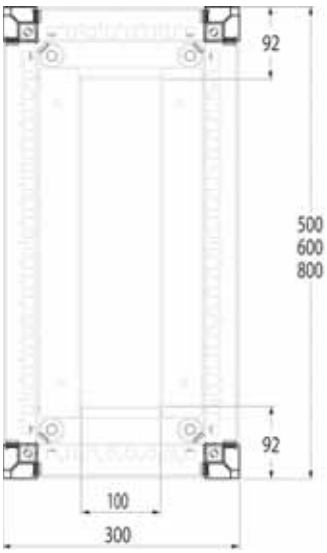


Plain or transparent door, side panels



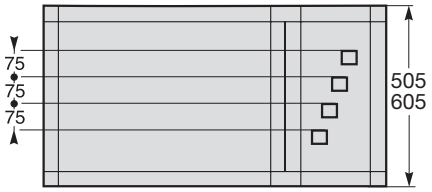
Cable-entry plate



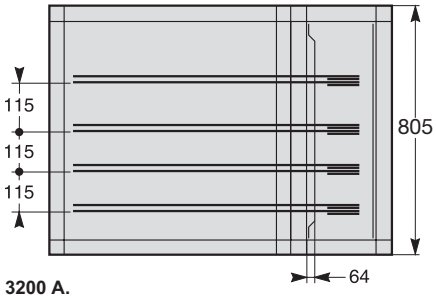


Spacial SF for Prisma Plus P system
Dimensions

Busbar installation
Side vertical busbar



1600 A.



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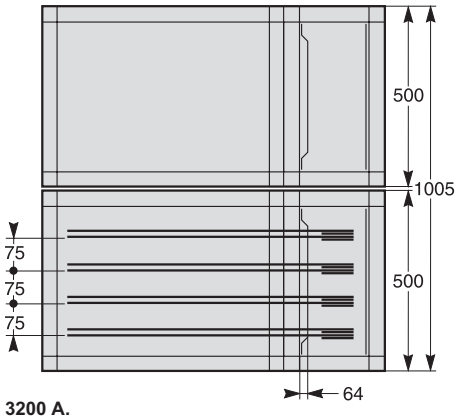

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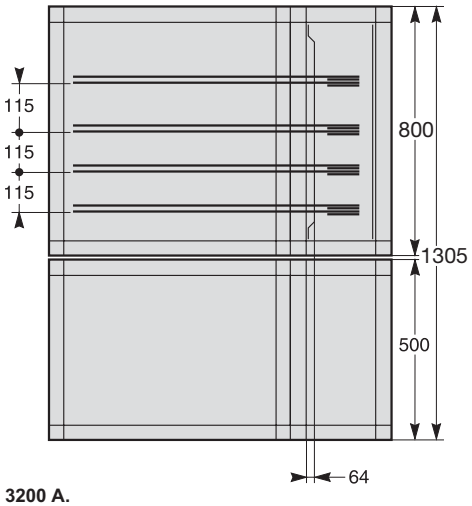
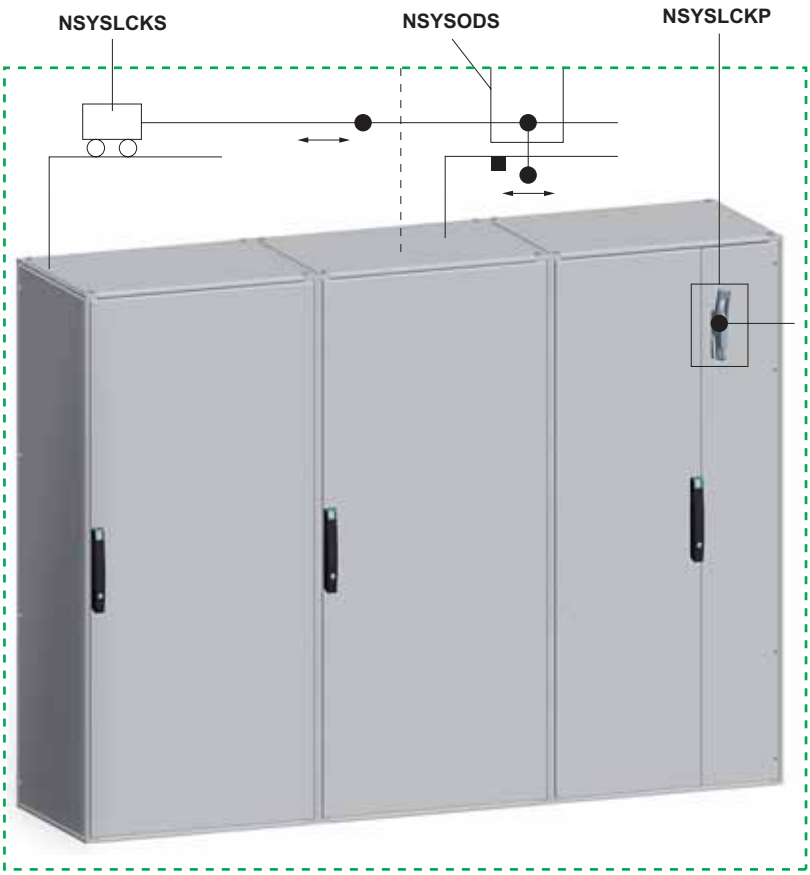


3200 A.

Automobile application

Built-in system for interlocking the doors of associated enclosures

- The door of the "incoming" enclosure is interlocked by the control of the main switch or circuit breaker. A built-in interlocking system with runner rods prevents the opening of the "outgoing" enclosure doors. Access is only allowed when the main switch or circuit breaker is in "O" position and the main door is open. Manual activation of the rods unlocks the other doors and allows access.
- Designed to be associated with certain circuit breakers or switches:
  – Square D (9422 A1).
  – Telemecanique.
- The built-in secure interlocking system for the door (on demand) of the "incoming"/"outgoing" enclosures allows Spacial SF enclosures to be adapted to the requirements of the American car industry.



Automobile application

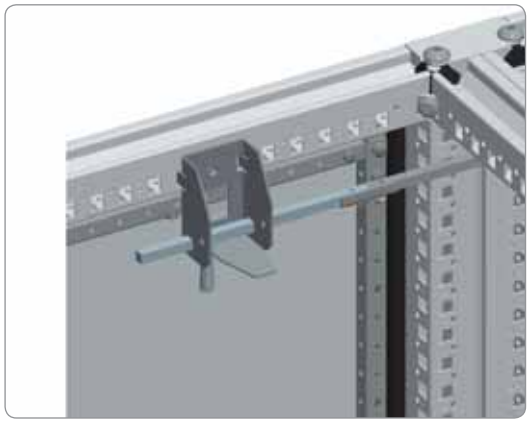
Interlocking for main door

- System for unlocking the main door adapted to the switches:
  – Allen Bradley (1494 VH11).
  – Square D (9422 A1).
  – Siemens (FH0H).
  – Schneider Electric.
- Unlocks the main door when the switch is in the open position "O".
- Material: steel.
- Finish: zinc-coated.
- The main door interlocking system requires the ordering of both references:
  1 Activation for secondary doors.
  2 Interlocking for secondary doors.

Supply: two brackets for fixing the configured panel, interlocking elements, switch and fixings.

Configured panel and handle not included.

Reference
NSYSLCKP



Activation for secondary doors

- System installed in the main enclosure. Activated by manual operation, preventing the opening of the secondary enclosures connected to one another by runner rods.
- It has a secure function which consists of a part that forces the system into the position in which the secondary enclosures are locked in order to lock the main door.
- Material:

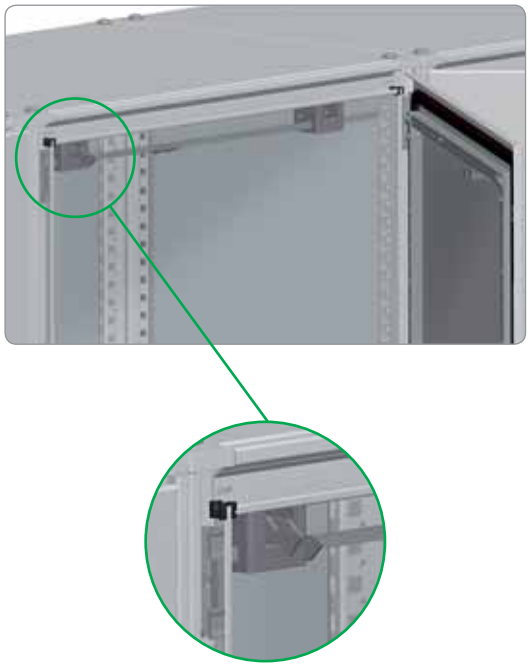
– Mechanism: zinc-coated steel.
– Activation handle: black plastic.

Supply: elements for activating the main door and fixings.

For the complete function, both activation (1) and interlocking systems (2) need to be ordered.

Reference
NSYSODS

Automobile application



Interlocking for secondary doors

- System for interlocking the outgoing enclosures connected to one another by runner rods that lock their doors.
- Fixing to the structure of the enclosures by screws.
- Material: steel.
- Finish: zinc-coated.

Supply: elements for interlocking the secondary doors and fixings.

For the complete function, both activation (1) and interlocking systems (2) need to be ordered.

Nominal dimensions (mm)	Reference
Width	
600	**NSYSLCKS6**
800	**NSYSLCKS8**
1000	**NSYSLCKS10**

4

Steel control desk enclosures

Spacial SD Steel control desk enclosures 4/2

Spacial SDF Steel control desk with console and desk 4/12

Accessories 4/14

For customised solutions

Spacial SD

The range of Spacial SD control desks provides all the functions required of a workstation intended for industrial and infrastructure applications.

The Spacial SD range has protection ratings of IP 55 and IK 10, which guarantee the safety and the protection of the installed devices. Furthermore, the broad range of sizes meets all the installation needs for the various sizes of switchgear that an application can require.

Spacial SD offers two clearly differentiated solutions: the SD control desks with no front console and the SD F control desks with front console, all available with 4 different widths (600, 800, 1000, 1200 mm). There are two versions of the control desk without front console:

– Front accessibility: Designed for straightforward solutions.

– Front and rear accessibility through a removable panel: Enables the installation of two adjoining plates and to work at the rear.

The control desk with front console offers full accessibility, since it is fully accessible from the rear thanks to the 3-point closure door it includes.

The entire range comes in two versions, with mounting plate and without mounting plate in the bottom position of the control desk.

For Spacial SD, the accessibility which allows quick and easy work is one of its main priorities. For this reason, its design excludes the central upright.

Cable entry is optimised because all the models of the range include a cable-gland plate with two adjustable parts.

The possibility of connecting the modular control desk to the modular consoles affords multiple combinations.

The console opens easily and safely thanks to the installed pneumatic opening lid stays.

All the control desks have mounting plate supports and rails that allow the installation of all kinds of mounting plates. Adjustable with a pitch of 25 mm.

The opening direction of the door can be changed quickly thanks to the included hinges.

The console and the front panels are equipped with cut-out vertical rails to allow quick installation of all types of equipment.

Furthermore, the Spacial SD control desk is compatible with most of the accessories of the Spacial SF and SM ranges.

Stainless-steel control desk
see Spacial SDX section

Control desks
Introduction

Without mounting plate

With mounting plate

Spacial SD: Monobloc control desk without console

- This range is available in 4 widths (600, 800, 1000 and 1200 mm) with fixed rear panel. Full accessibility is provided from the front (no central upright).
- These control desks are equipped with:

– A pneumatic opening stay on the opening of the desk lid.
– A cable-gland plate in two adjustable parts for cable entry.
– Hinges with removable pins for quick door removal or reversal of opening direction.
– Two perforated vertical rails on the desk lid for quick installation of cables and cable ducts.
– RAL 7035.

Dimensions (mm)			Door number	Control desk reference	
Width (B)	Height	Depth		With mounting plate	Without mounting plate
600	1000	466	1	**NSYSD6P**	**NSYSD6**
800	1000	466	1	**NSYSD8P**	**NSYSD8**
1000	1000	466	2	**NSYSD10P**	**NSYSD10**
1200	1000	466	2	**NSYSD12P**	**NSYSD12**

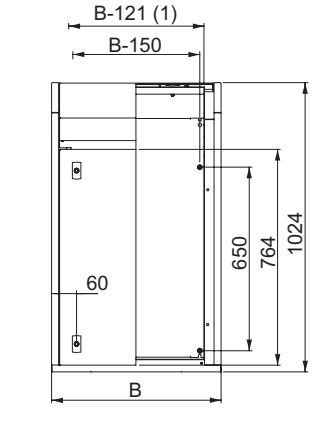
Specifications

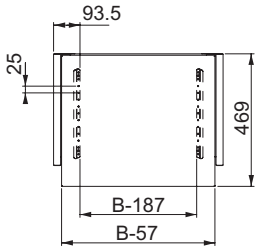
- Control desk equipped with adjustment rails with a pitch of 25 mm and brackets allowing adjustment of the mounting plate depth.
- Welded folded sheet steel, thickness 15 / 10 mm. Structured finish, epoxy-polyester powder paint, colour RAL 7035 grey.
- Protection rating IP 55. Resistance to external mechanical impacts IK 10.
- Reversible door opening to 120°. Locking by 3-mm double-bar lock (other inserts or cylinders also available, to be ordered separately, see page **4/20**).
- Desk lid equipped with a pneumatic opening stay. Opens to 75°. Perforated reinforcement rails with a pitch of 25 mm.
- Cable-gland plate with 2 adjustable parts, with polyurethane gasket.
- M8 × 18-mm earthing bolt for equipotential connection between the door and the body.
- Two versions available: with and without mounting plate.

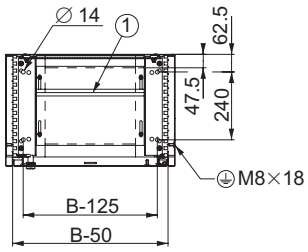
Control desks
Dimensions

Monobloc control desks without console

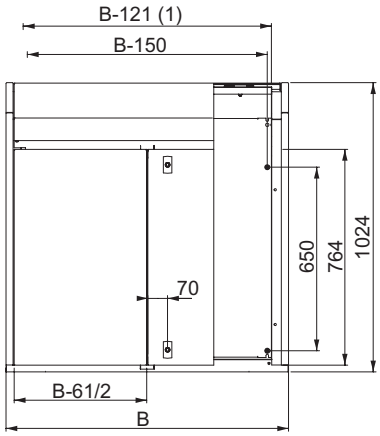
1 door

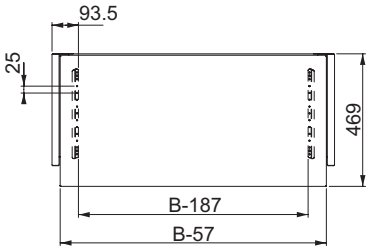


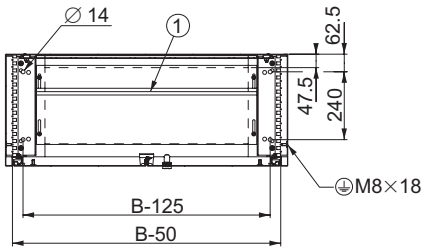


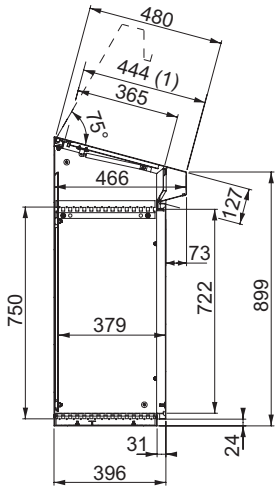


2 doors









(1) Useful clearance.

Common side view

Cable-gland plate clearance dimensions (mm)	
Width	**Maximum opening**
B-280	56

Control desks
Introduction

Without mounting plate

With mounting plate

The connection of a monobloc control desk (without console and with rear panel, ref. **NSYSD6RP** to **NSYSD12RP**) to one or several modular consoles allows all possible combinations (see page **4/10**).

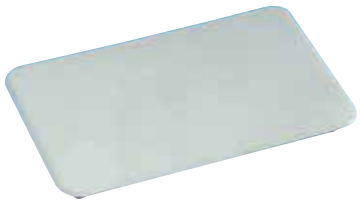
Spacial SD: Monobloc control desk with removable rear panel

- Control desk with rear access. The rear panel is removable.
- It is possible to install two racks back-to-back, allowing the installation of a large number of devices, while ensuring full accessibility from the front and the rear.
- At the top, these control desks are equipped with removable cable-entry plates. These plates enable the installation of one or more modular consoles (see page **4/10**).
- RAL 7035.

Dimensions (mm)			Door number	Control desk reference	
Width (B)	Height	Depth		With mounting plate	Without mounting plate
600	1000	597	1	**NSYSD6RP**	**NSYSD6R**
800	1000	597	1	**NSYSD8RP**	**NSYSD8R**
1000	1000	597	2	**NSYSD10RP**	**NSYSD10R**
1200	1000	597	2	**NSYSD12RP**	**NSYSD12R**

Specifications

- Control desk equipped with adjustment rails with a pitch of 25 mm and brackets allowing depth adjustment of the mounting plate.
- Welded folded sheet steel, thickness 15 / 10 mm. Structured finish, epoxy-polyester powder paint, colour RAL 7035 grey.
- Protection rating IP 55. Resistance to external mechanical impacts IK 10.
- Reversible door opening to 120°. Locking by 3-mm double-bar lock (other inserts or barrels also available, to be ordered separately, see page **4/20**).
- Desk lid equipped with a pneumatic opening stay. Opens to 75°. Perforated reinforcement rails with a pitch of 25 mm.
- Cable-gland plate with 2 adjustable parts, with polyurethane gasket.
- M8 × 18-mm earthing screw for equipotential connection between the door and the body.
- Two versions available: with and without mounting plate.



Blanking cover

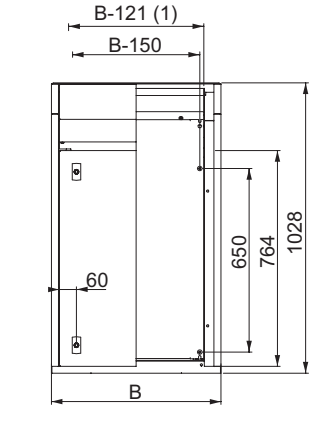
Blanking cover length (mm)	Reference RAL 7035
200	**NSYRP2**
400	**NSYRP4**
600	**NSYRP6**
800	**NSYRP8**

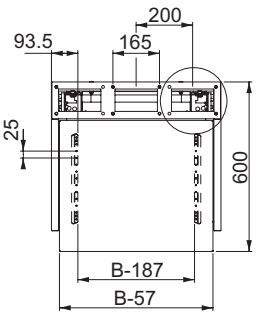
- To conceal the free space of the control desk when the width of the console or consoles is less than the width of the control desk (see the connection examples below). In any case, it is necessary to previously remove the top plate delivered with the control desk.
- Four lengths: 200, 400, 600 and 800 mm.
- Sheet steel, thickness 15 / 10 mm.
- Structured finish, epoxy-polyester powder paint, colour RAL 7035 grey.
- Fixing by screws.

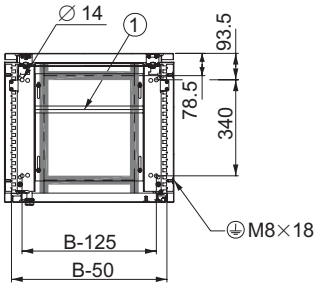
Control desks
Dimensions

Monobloc control desks with removable rear panel

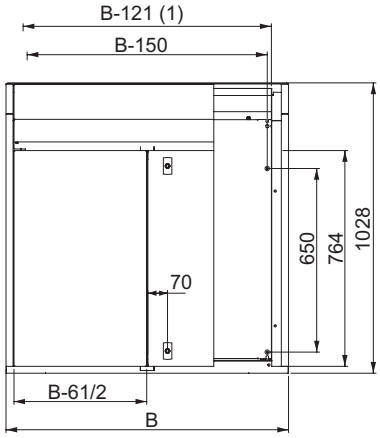
1 door

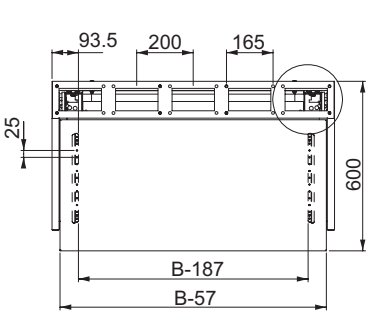


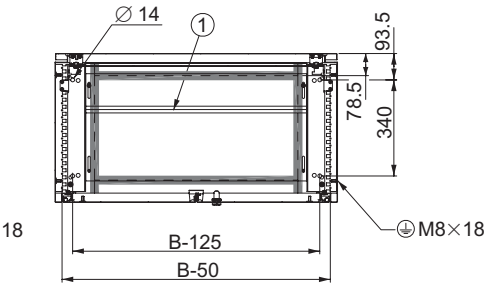


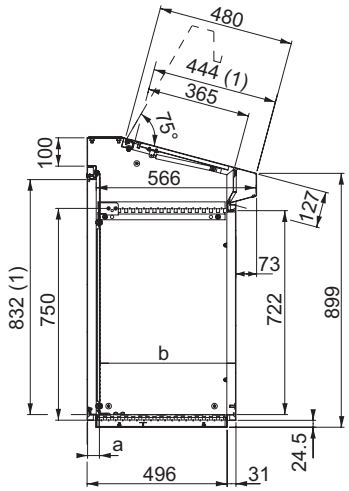


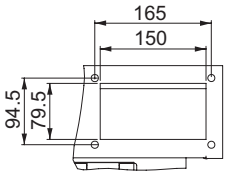
2 doors











(1) Useful clearance.

Common side view

Cable-gland plate clearance dimensions (mm)	
Width	**Maximum opening**
B-280	56

Adjustment of the depth of the mounting plate (mm)		
Depth	**Min.**	**Max.**
a	42	392
b	129	479

Modular consoles
Introduction

- Two widths: 400 and 600 mm.
- Two depths: 200 and 300 mm.
- Welded folded sheet steel, thickness 15 / 10 mm. Structured finish, epoxy-polyester powder paint, colour RAL 7035 grey.
- Protection rating IP 55. Resistance to external mechanical impacts IK 10.
- Hinged modular console cover equipped with a pneumatic opening stay. Opens to 75°.
- Locking of the hinged modular console cover by two 3-mm double-bar locks (other inserts or barrels also available, to be ordered separately, see page **4/20**).
- Screw fixed rear panel equipped with step slides in the version with a depth of 300 mm.
- The link between the control desk and the modular console requires, in certain cases, the addition of one or several blanking covers (to be ordered separately).
- Optional galvanised mounting plate.

Modular console in RAL 7035 grey sheet steel

Console (mm)		Reference
Width (B)	Depth	
400	200	**NSYSDC42**
400	300	**NSYSDC43**
600	200	**NSYSDC62**
600	300	**NSYSDC63**

Plain mounting plate for modular console (F)

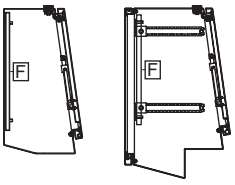
Console width (mm)	Fixing centre-to-centre distance (mm)		Overall surface (dm²)	Reference
	Width	Height		
400	325	325	12.77	**NSYMM44**
600	625	325	19.77	**NSYMM64**

Microperforated mounting plate for modular console (F)

Console width (mm)	Fixing centre-to-centre distance (mm)		Overall surface (dm²)	Reference
	Width	Height		
400	325	325	12.77	**NSYMF44**
600	625	325	19.77	**NSYMF64**

Telequick mounting plate for modular console (F)

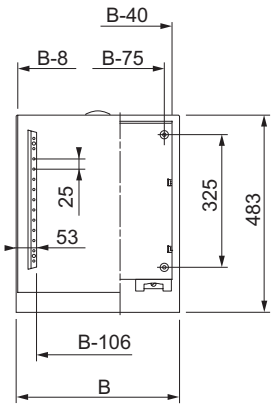
Console width (mm)	Fixing centre-to-centre distance (mm)		Overall surface (dm²)	Reference
	Width	Height		
400	325	325	12.10	**NSYMR44**
600	530	325	19.48	**NSYMR64**

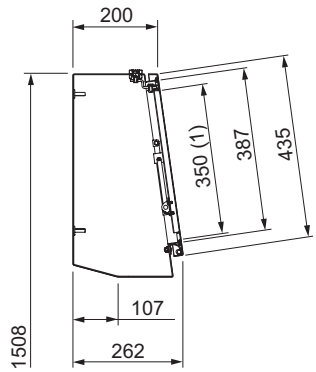


Mounting plate marked F for modular consoles with depths of 200 and 300 mm.

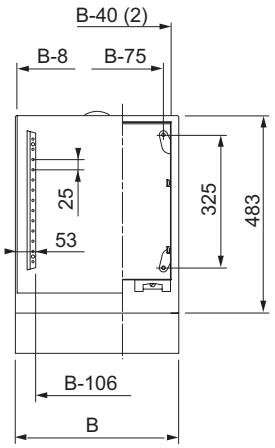
Modular consoles
Dimensions

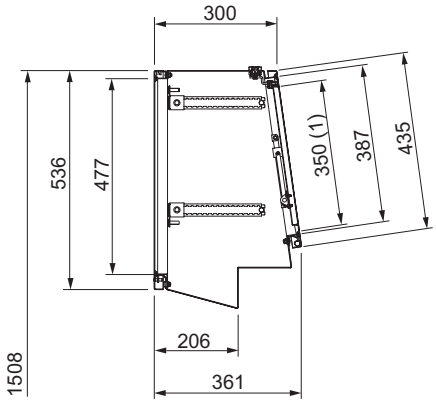
Modular console, depth 200 mm





Modular console, depth 300 mm





(1) Useful clearance.
(2) Same size for the rear panel.

4

Control desks
Combinations

Console and control desk combination examples

Control desk widths (mm)

Control desk ref. **NSYSD6R**

Console	Plate
NSYSDC42 / NSYSDC43	**NSYSDC62 / NSYSDC63**
NSYRP2	**–**

Control desk ref. **NSYSD8R**

Console	Plate		
NSYSDC42 / NSYSDC43	**2 × NSYSDC42 / NSYSDC43**	**NSYSDC62 / NSYSDC63**	
NSYRP4	**–**	**NSYRP2**	

Control desk ref. **NSYSD10R**

Console	Plate			
NSYSDC42 / NSYSDC43	**NSYSDC62 / NSYSDC63**	**NSYSDC62 / NSYSDC63**	**NSYSDC42 + NSYSDC62 / NSYSDC43 + NSYSDC63**	
NSYRP6	**NSYRP4**	**2 × NSYRP2**	**–**	

Control desk ref. **NSYSD12R**

Console	Plate				
NSYSDC42 / NSYSDC43	**NSYSDC62 / NSYSDC63**	**NSYSDC62 / NSYSDC63**	**2 × NSYSDC62 / NSYSDC63**	**NSYSDC42 + NSYSDC62 / NSYSDC43 + NSYSDC63**	
NSYRP8	**NSYRP6**	**2 × NSYRP2 + NSYRP4**	**–**	**NSYRP4**	

Mounting accessories
Installation accessories

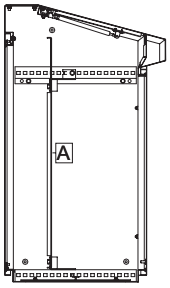
Mounting plate

Plain galvanized mounting plate for control desks without console, with or without removable rear panel

- Material: galvanised sheet steel with a thickness of 25 / 10 mm.
- Control desk without console with rear panel, across the entire height A. In this case, the depth can be adjusted with a pitch of 25 mm as standard.
- Control desk without console with rear panel, across the entire height A. To adjust the depth with a pitch of 25 mm, order a set of 4 adjustment rails and 4 fixing brackets (see below).

Galvanised mounting plate for control desks without console (A)

Control desk width (mm)	Fixing centre-to-centre distance (mm)		Surface (dm^2)	Reference
	Width	Height		
600	450	650	35	**NSYPMP8560**
800	650	650	49	**NSYPMP8580**
1000	850	650	63	**NSYPMP85100**
1200	1050	650	77	**NSYPMP85120**



Control desks
Introduction

Spacial SD: Control desk with console and desk

- With a height of 1400 mm, these control desks are available in four widths (800, 1000, 1200 and 1600 mm) and two depths (400 and 600 mm).
- To guarantee full access to the equipment, these control desks are equipped with:
– One or two rear doors covering the entire height of the control desk.
– One or two front doors in the lower part.
– A hinged desk lid held in open position by a pneumatic opening stay.
– A front console door held by a mechanical stay.
– A cable-gland plate in two adjustable parts for the cable entry.
– Hinges allowing the opening direction of the doors to be changed, as well as their quick removal.
– Two perforated vertical rails on the desk lid for quick installation of cables and cable ducts.
- In the version with a depth of 600 mm, the console can support the installation of a 14" screen with an optional PC support plate.

Specifications

- Welded folded sheet steel, thickness 15 / 10 mm. Structured finish, epoxy-polyester powder paint, colour RAL 7035 grey.
- Protection rating IP 55. Resistance to external mechanical impacts IK 10.
- Reversible front door opening to 120° with a 3-mm double-bar insert.
- Rear door equipped with a three-point lock, activated by a linkage, with a 5-mm double-bar insert.
- Desk lid equipped with a pneumatic opening stay. Opens to 75°. Perforated reinforcement rails with a pitch of 25 mm.
- Hinged console cover equipped with a pneumatic opening stay. Opens to 75°.
- Locking of the doors, the top lid and the hinged console cover by a 3-mm double-bar lock (other inserts or barrels also available, to be ordered separately, see page **4/20**).
- Control desk equipped with adjustment rails with a pitch of 25 mm and brackets allowing adjustment of the mounting plate depth in the lower part of the control desk. The control desk can be equipped across its entire height and / or in the upper part by separately ordering a set of rails and brackets.
- Cable-gland plate with 2 adjustable parts, with polyurethane gasket.
- M8 × 18-mm earthing bolt for equipotential connection between the door and the body.
- Optional plinth.

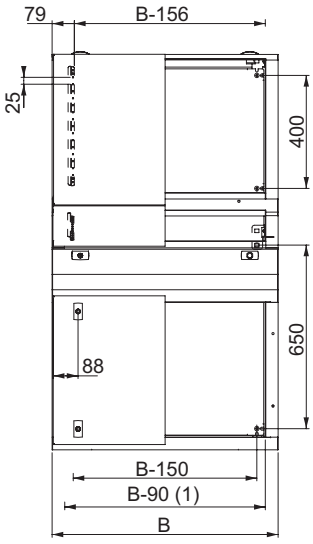
Control desk with RAL 7035 grey console

Control desk with console (mm)			Control desk reference	
Width (B)	Height	Depth	With mounting plate	Without mounting plate
800	1400	845	**NSYSDF88**	**NSYSDF88P**
1000	1400	845	**NSYSDF108**	**NSYSDF108P**
1200	1400	845	**NSYSDF128**	**NSYSDF128P**
1600	1400	845	**NSYSDF168**	**NSYSDF168P**
800	1400	1045	**NSYSDF810**	**NSYSDF810P**
1000	1400	1045	**NSYSDF1010**	**NSYSDF1010P**
1200	1400	1045	**NSYSDF1210**	**NSYSDF1210P**
1600	1400	1045	**NSYSDF1610**	**NSYSDF1610P**

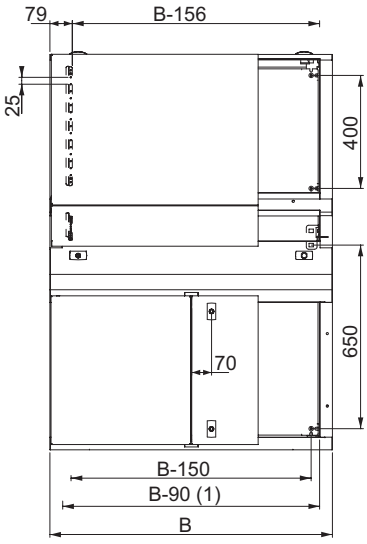
Control desks
Dimensions

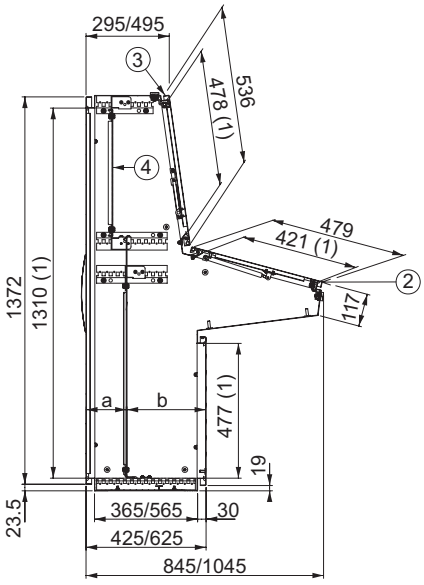
Monobloc control desks with console and desk

1 door



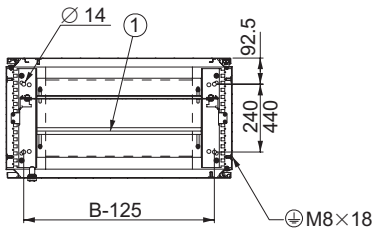
2 doors

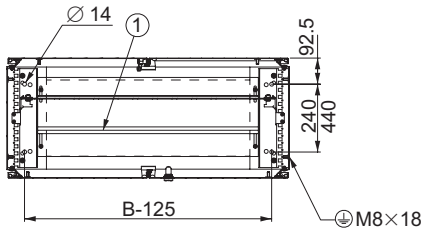




(1) Useful clearance.

Common side view





Key	
①	Cable-gland plate, max. opening: 56 mm
②	Maximum opening of the lid: 75°
③	Maximum opening of the hinged cover: 75°
④	Optional console mounting plate

Cable-gland plate clearance dimensions (mm)	
Width	**Maximum opening**
B-280	56

Depth adjustment of the mounting plate (mm)		
Depth	**Min.**	**Max.**
a (2)	40	216 / 416 (3)
b (2)	203	378 / 578 (3)

(2) For 2-door control desks:
– a + 25 mm,
– b – 25 mm.
(3) According to control desk depth.

Mounting accessories
Installation accessories

Mounting plate

Installation possibilities of the mounting plate in control desks

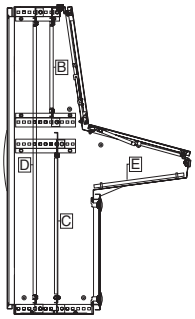
- Material: galvanised sheet steel with a thickness of 25 / 10 mm.
- Control desks with console:

– In the upper part: B (1).
– In the lower part: C.
– Across the entire height: D (1).
– In the desk: E.

(1) For this installation, order a set of 4 adjustment rails and 4 fixing brackets (see below).

- Equipped with adjustment rails, these control desks can accommodate several mounting plate combinations:

– Either one mounting plate across the entire height, or two mounting plates back-to-back in the lower part and one mounting plate in the upper part.
– One mounting plate on the base of the console.



Marks B, C, D, E according to the installation position of the mounting plate in the control desks

Mounting plate for control desks with console (B)

Control desk width (mm)	Fixing centre-to-centre distance (mm)		Surface (dm²)	Plate reference
	Width	Height		
800	650	400	31	**NSYPMP4580**
1000	850	400	40	**NSYPMP45100**
1200	1050	400	77	**NSYPMP45120**
1600	1450	400	67	**NSYPMP45160**

Mounting plate for control desks with console (C)

Control desk width (mm)	Fixing centre-to-centre distance (mm)		Surface (dm²)	Plate reference
	Width	Height		
800	650	650	49	**NSYPMP8580**
1000	850	650	63	**NSYPMP85100**
1200	1050	650	77	**NSYPMP85120**
1600	1450	650	105	**NSYPMP85160**

Mounting accessories
Installation accessories

Mounting plate for control desks with console (D)

Control desk width (mm)	Fixing centre-to-centre distance (mm)		Surface (dm^2)	Plate reference
	Width	Height		
800	650	1250	90	**NSYMP148**
1000	850	1250	116	**NSYMP1410**
1200	1050	1250	142	**NSYMP1412**

Mounting plate for control desks with console (E)

Control desk width (mm)	Fixing centre-to-centre distance (mm)		Surface (dm^2)	Plate reference
	Width	Height		
800	650	350	28	**NSYSPMP4080**
1000	850	350	36	**NSYSPMP40100**
1200	1050	350	44	**NSYSPMP40120**
1600	1450	350	60	**NSYSPMP40160**

Telequick mounting plate

- Allows the installation of any device without drilling or boring.
- Use M3-M6 clip nuts to fix the switchgear.
- Material: Steel with a thickness of 20/10 mm.
- Control desks with console:

– In the upper part: B (1).
– In the lower part: C.
– Across the entire height: D (2).

(1) For this installation, order a set of 4 adjustment rails and 4 fixing brackets.
(2) For this installation, order a set of 2 uprights ref. **NSYTVR14** and set of 4 adjustment rails and 4 fixing brackets.

Control desk width (mm)	Telequick mounting plate for control desk with position A and C			Reference
	Fixing centre-to-centre distance (mm)		Surface (dm^2)	
	Width	Height		
600	450	650	34	**NSYTMP6760** *
800	650	650	48	**NSYTMP6780**
1000	850	650	61	**NSYTMP67100**
1200	1050	650	75	**NSYTMP67120**

*Available only for position A.

Control desk width (mm)	Telequick mounting plate for control desk with position B			Reference
	Fixing centre-to-centre distance (mm)		Surface (dm^2)	
	Width	Height		
800	650	400	30	**NSYTMP4280**
1000	850	400	39	**NSYTMP42100**
1200	850	400	39	**NSYTMP42120**

Control desk width (mm)	Telequick mounting plate for control desk with position D				Reference
	Fixing centre-to-centre distance (mm)		Surface (dm^2)	Overall surface (dm^2)	
	Width	Height			
800	650	575	42	84.96	2 × **NSYSTMP6080**
1000	850	575	54	108.96	2 × **NSYSTMP60100**
1200	1050	575	66	132.96	2 × **NSYSTMP60120**

Mounting accessories
Installation accessories

Fixing brackets

- Set of f 4 fixing brackets.
- Depth adjustment on 25 mm pitch.
- Included as standard with desk (all versions).
- Material: 4 mm thick galvanised steel.
- Maximum load: 250 Kg.
- To be ordered separately when required for installation of two back to back mounting plates in control desks with rear access.

For desk width	Reference
600 -1600	**NSYMPBSD**

Adjustment rails and fixing brackets

- Set of 4 rails and 4 fixing brackets.
- To install a plain mounting plate or a Telequick mounting plate, either at the top or across the height of the monobloc control desk with console.
- For positioning 2 plates (back to back), order fixing brackets ref. **NSYMPBSD**.

For control desks with console depth (mm)	Reference
400	**NSYMPB4SD**
600	**NSYMPB4SD**

Technical uprights

- Set of 2 equipment uprights.
- Support for fixing Telequick mounting plates and rails.
- Material: Zink coated with a thickness of 20/10 mm.

For control desk height (mm)	Centre-to-centre distance (mm)	Reference
1000	650	**NSYTVR10**
1400	1250	**NSYTVR14**

Composition accessories
Floor accessories

Plinth

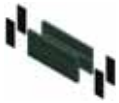
- See composition accessories: floor, page **3/36**.
- Models with heights: 100 and 200 mm.

Front plinth

- Supply:
– Height 100 mm: 4 corner pieces, 2 panels (front and rear), 4 corner covers and fixing elements.
– Height 200 mm: 4 corner pieces, 4 panels (2 front and 2 rear), 4 corner covers and fixing elements.

Plinth side panels

- Supply:
– Height 100 mm: 2 side panels, 4 corner covers and fixing elements.
– Height 200 mm: 4 side panels (with a height of 100 mm, 2 for each side), 4 corner covers and fixing elements.



Desk				Front console desk		Plinths			
Monobloc		Removable rear panel		With rear door		Height 100 (mm)		Height 200 (mm)	
With out mounting plate	With mounting plate	With out mounting plate	With mounting plate	With out mounting plate	With mounting plate	Kit front/back panel	Side panel	Kit front/back panel	Side panel
NSYSD6	NSYSD6P	-	-	-	-	NSYSPF6100	NSYSPS4100SD	NSYSPF6200	NSYSPS4200SD
NSYSD8	NSYSD8P	-	-	-	-	NSYSPF8100	NSYSPS4100SD	NSYSPF8200	NSYSPS4200SD
NSYSD10	NSYSD10P	-	-	-	-	NSYSPF10100	NSYSPS4100SD	NSYSPF10200	NSYSPS4200SD
NSYSD12	NSYSD12P	-	-	-	-	NSYSPF12100	NSYSPS4100SD	NSYSPF12200	NSYSPS4200SD
-	-	NSYSD6R	NSYSD6RP	-	-	NSYSPF6100	NSYSPS5100SD	NSYSPF6200	NSYSPS5200SD
-	-	NSYSD8R	NSYSD8RP	-	-	NSYSPF8100	NSYSPS5100SD	NSYSPF8200	NSYSPS5200SD
-	-	NSYSD10R	NSYSD10RP	-	-	NSYSPF10100	NSYSPS5100SD	NSYSPF10200	NSYSPS5200SD
-	-	NSYSD12R	NSYSD12RP	-	-	NSYSPF12100	NSYSPS5100SD	NSYSPF12200	NSYSPS5200SD
-	-	-	-	NSYSDF88	NSYSDF88P	NSYSPF8100	NSYSPS4100SD	NSYSPF8200	NSYSPS4200SD
-	-	-	-	NSYSDF108	NSYSDF108P	NSYSPF10100	NSYSPS4100SD	NSYSPF10200	NSYSPS4200SD
-	-	-	-	NSYSDF128	NSYSDF128P	NSYSPF12100	NSYSPS4100SD	NSYSPF12200	NSYSPS4200SD
-	-	-	-	NSYSDF168	NSYSDF168P	NSYSPF16100	NSYSPS4100SD	NSYSPF16200	NSYSPS4200SD
-	-	-	-	NSYSDF810	NSYSDF810P	NSYSPF8100	NSYSPS6100SD	NSYSPF8200	NSYSPS6200SD
-	-	-	-	NSYSDF1010	NSYSDF1010P	NSYSPF10100	NSYSPS6100SD	NSYSPF10200	NSYSPS6200SD
-	-	-	-	NSYSDF1210	NSYSDF1210P	NSYSPF12100	NSYSPS6100SD	NSYSPF12200	NSYSPS6200SD
-	-	-	-	NSYSDF1610	NSYSDF11010P	NSYSPF16100	NSYSPS6100SD	NSYSPF16200	NSYSPS6200SD

Composition accessories

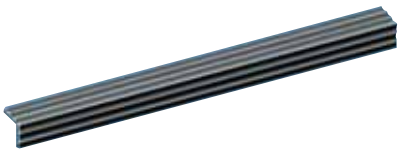
Pneumatic opening stay

- Holds the desk lid in open position at an angle of 75°.
- Delivered with fixings.

Nominal load per stay (N)	Stay reference
244	**NSYPLS24**
300	**NSYPLS30**

- The stays are delivered as standard with the control desks, according to the following table:

Max. load on lid (kg)	Control desk reference	Standard supply stay
13	**NSYSD6** and **NSYSD6R**	**NSYPLS24**
13	**NSYSD8** and **NSYSD8R**	**NSYPLS24**
17	**NSYSD10** and **NSYSD10R**	**NSYPLS30**
15	**NSYSD12** and **NSYSD12R**	**NSYPLS30**
13	**NSYSDF88** and **NSYSDF810**	**NSYPLS24**
17	**NSYSDF108** and **NSYSDF1010**	**NSYPLS30**
15	**NSYSDF128** and **NSYSDF1210**	**NSYPLS30**
11	**NSYSDF168** and **NSYSDF1610**	**NSYPLS30**



Document lip

- Retaining bar to be fixed on the front of the inclined control desk lid. Prevents documents and equipment from falling.
- Material: PVC, RAL 7011 grey.
- Fixing by adhesive.
- Only for control desks without console.

Control desk width (mm)	Reference
600	**NSYDL6**
800	**NSYDL8**
1000	**NSYDL10**
1200	**NSYDL12**
1600	**NSYDL16**

PC screen support

- For a control desk with monobloc console with a depth of 600 mm.
- This support is a galvanised mounting plate, in horizontal position, fixed to the adjustment rails of the console.
- Maximum acceptable load: 50 kg/m^2.
- Delivered with fixings.

For width (mm)	Reference
800	**NSYPCS8**
1000	**NSYPCS10**
1000	**NSYPCS12**
1200	**NSYPCS16**

Composition accessories
Locking system

Locks without handle

- Polyamide PA 6 material charged with 30% fibreglass.
- RAL 7011 grey.
- Fire resistance: 650°.
- Resistance to external mechanical impacts: IK 10.
- Insert breakage torque: 15 daN.
- Delivered with fixings, with no insert.

NSYML405SD

Shape inserts (without small escutcheon)

Description	Reference
8-mm triangular insert	**NSYTT8CRN**
8-mm male square insert	**NSYTC6CRN**
7-mm male square insert	**NSYTC7CRN**

(1) Insert installed as standard.

Cylindrical barrels (with small escutcheon)

Description	Reference
405 E key	**NSYML405SD**

Pivoting handle

Rear door lock

- To be installed on the rear door.
- Ergonomic locking system with pivoting handle (delivered without insert).
- Broad range of inserts for covering the greatest variety of needs (shape inserts, DIN cylinders, KABA, ASSA).
- Changing the opening direction to right / left thanks to the symmetric design of the lock unit (no linkages to be removed). Lock unit supported by 2 screws.
- Option:

– Handle for use with padlock, delivered with push-button mounted as standard. All the options are compatible with the basic system delivered with the control desk.

- Please contact us for other options.

Handle

Description	Reference
Spare standard handle	**NSYSDH**

Technical features

- Material: PA 6 charged with 30% fibreglass.
- Colour RAL 7011 grey.
- Fire resistance: 650°.
- Resistance to external mechanical impacts: IK 10.

Composition accessories
Locking system

Shape inserts and cylindrical barrels

Shape inserts		Reference
	6-mm square insert	**NSYINS61**
	6-mm female square insert	**NSYINS6G1**
	7-mm square insert	**NSYINS71**
	8-mm square insert	**NSYINS81**
	8-mm female square insert	**NSYINS8G1**
	8-mm square insert with slot	**NSYINS8H1**
	6.5-mm triangular insert	**NSYINT61**
	7-mm triangular insert	**NSYINT71**
	8-mm triangular insert	**NSYINT81**
	9-mm triangular insert	**NSYINT91**
	10-mm triangular insert	**NSYINT101**
	10-mm keyless hexagonal insert	**NSYINH31**
	3-mm double-bar insert	**NSYINDB31**
	5-mm double-bar insert	**NSYINDB51**
	Daimler Benz insert	**NSYINBENZ1**
	Fiat insert	**NSYINFIAT1**
	USA keyless slot insert	**NSYINUSA1**
	2 x 4 keyless slot insert	**NSYIN241**
	Crown insert	**NSYINCW1**

Push button		Reference
	Push button	**NSYINPULSD**

Cylindrical barrels		Reference
	Lock with 405E key	**NSYIN405E1**
	Lock with 421E key	**NSYIN421E1**
	Lock with 455 key	**NSYIN4551**
	Lock with 1242E key	**NSYIN1242E1**
	Lock with 1332E key	**NSYIN1332E1**
	Lock with 2124E key	**NSYIN2124E1**
	Lock with 2131A key	**NSYIN2131A1**
	Lock with 2132A key	**NSYIN2132A1**
	Lock with 2331A key	**NSYIN2331A1**
	Lock with 2433A key	**NSYIN2433A1**
	Lock with 2452E key	**NSYIN2452E1**
	Lock with 3113A key	**NSYIN3113A1**
	Lock with 3122E key	**NSYIN3122E1**
	Lock with 3123A key	**NSYIN3123A1**
	Lock with 3133A key	**NSYIN3133A1**
	Lock with 3422E key	**NSYIN3422E1**
	Lock with 3432E key	**NSYIN3432E1**
	Lock with EDF1300 key	**NSYINF1301**
	Lock with EDF1400 key	**NSYINF1401**
	Michelin 8079 keyless lock	**NSYINICHEL8791**
	Michelin 8133 keyless lock	**NSYINICHEL8131**
	Michelin 8376 keyless lock	**NSYINICHEL8371**
	E1 keyless lock	**NSYINE11**

Cabling for your equipment
Several solutions

Plain mounting plate

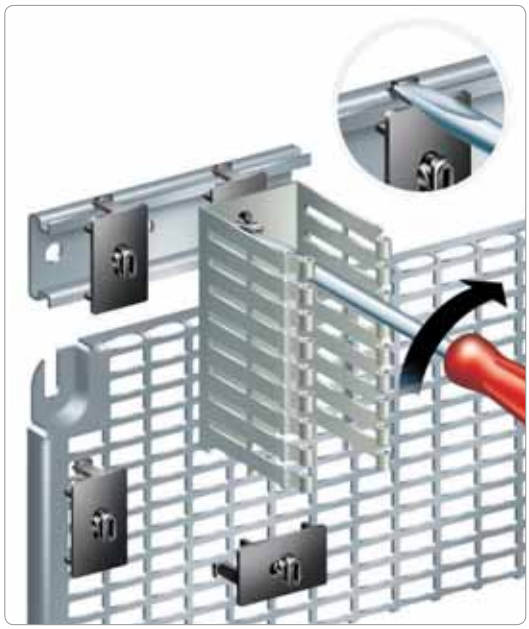
- For repetitive equipment.
- To install equipment fixed by screws, with drill holes made by the customer.
- Addition of rails for clip in equipment.

Telequick mounting plate

- For repetitive equipment.
- For easy installation of equipment fixed by screws, without drilling.
- Addition of rails for clip in equipment.
- Upgradeable solution, during or after manufacturing the equipment.

Mixed mounting plate

- Solution supporting plain and Telequick mounting plates and DIN rails chassis.
- Flexibility of use: allows the installation of screw-on and clip in devices.
- Upgradeable solution, during or after manufacturing the equipment.
- Power cable can be installed at the rear.
- Option of having equipment on the front and rear.



Clip in installation of the plastic leg. Easy quarter-turn installation of the cable duct. Removal possible thanks to the lug (magnifying glass).

Implementation

- Ten sizes of cable ducts with dedicated accessories.
- Cable duct sizes optimised for maximum wire capacity.
- Easy implementation:

– Snap-off tongues for the cable entries,
– Fixing with 4 dedicated accessories as required, by screws, by clipping in, for fixing to the door, for fixing to the mounting plate.

- Important: no metal parts may remain inside the cable ducts (respect for electrical insulation).

5

Stainless-steel enclosures

Spacial S3X Stainless-steel wall-mounting enclosures 5/8

Dimensions 5/11

Selection guide 5/12

Spacial S3EX for potentially explosive atmospheres 5/16

Spacial SMX Stainless-steel floor-standing monobloc enclosures 5/20

Selection guide 5/22

Dimensions 5/23

Spacial SMX PC rack to protect computer equipment 5/32

Spacial SFX Stainless-steel floor-standing suitable enclosures 5/24

Selection guide 5/26

Dimensions 5/27

Spacial SDX Stainless-steel floor-standing control desk 5/36

Selection guide 5/38

Dimensions 5/39

Our stainless-steel solutions:
to withstand aggressions
in exposed environments

Choice:

A complete range of enclosures.
Plain door and glazed door.
2 stainless-steel grades: 304L and 316L (according to the range).

Resistance to corrosion:

High resistance to corrosion. 304L and 316L stainless steels provide the best solutions for applications in extremely demanding environments.

Aesthetics:

Scotch-Brite® brushed finish as standard.
Micro-beaded or painted finish (on request).
Chrome-plated escutcheon.
Invisible weld points.
Perfect polishing.

Customisation:

Machining and cut-outs.
Special dimensions.
Accessory installation.
Special finishes: painted and micro-beaded.
Production according to your specifications.

Hygiene:

The high quality of the standard finish enables very easy maintenance while avoiding contamination.
The hygienic feet made from 316L stainless steel, 100 mm and 200 mm high, make it easier to clean under the enclosures.

Availability:

Wide range of dimensions for the wall-mounting enclosures, monobloc and suitable floor-standing enclosures and control desks.
Accessory compatibility with our metal ranges.

What is stainless steel?

How is the stainless steel grade determined?

These enclosures have been specially designed for the chemical, oil and food and beverage industries, among others, which are particularly demanding in terms of hygiene and resistance to corrosion.

Thanks to an elaborate composition

- The following table shows the percentages of the main alloy elements that make up stainless steels. The resistance of the material to aggressive agents in the environment depends mainly on these alloys.

Stainless-steel type		Chemical composition (%)			
AISI grade	N. Europe	carbon	chromium	nickel	molybdenum
304L	1.4307	< 0.03	17 - 19	8 - 10	0
316L	1.4404	< 0.03	17 - 19	10 - 13	2 - 2.25

Choosing a stainless steel grade

AISI 304L stainless steel (known as food and beverage stainless steel)

The most commonly used type in the food and beverage industry for its resistance to corrosion and easy cleaning.

- Prevention against corrosion, especially in the presence of organic acids.
- Resistance to the action of nitrous gas in the presence of condensation water and in most aggressive environments.

AISI 316L stainless steel (known as marine stainless steel)

Recommended in salty or chlorinated environments due to its very high resistance to corrosion thanks to the presence of molybdenum.

- Improved resistance to corrosion.
- Particularly well adapted to environments charged with acidity, bromine and saline halides or which use very corrosive additives and solvents.

The finish

The finish: 3 solutions against aggressive environmental agents

Surface condition plays an important role in the fight against bacteria. The lower the roughness, the fewer bacteria become incrusted. Reduced roughness means fewer bacteria, less adherence of materials and an impeccable finish.
To choose a finish is also to choose an appearance of the enclosures that matches the environment of other machines and equipment.

Solution 1: Scotch-Brite® brushing

The method used consists of brushing as defined by the ASTM (American Society for Testing and Material).

- Finish very commonly used for the chemical and food and beverage industries.
- Surface roughness is improved thanks to an additional polishing process which offers more efficient characteristics against polluting elements.
- Surface roughness, Ra ⩽ 0.8 µm.

Solution 2: Micro-beading (on request)

Exclusiveness, an impeccable finish with smooth silky appearance.

The method:
- Bombardment with miniscule ceramic balls of the entire surface to be treated at very high speed.
- Closes micro-cracks caused during lamination by flattening.

The result:
- Increased hardness.
- Reduced surface roughness (Ra ≈ 0.8 µm).
- A perfectly even surface, with a silky appearance (no scratches and no burrs).
- Reduces the adherence of materials.
- Allows disinfection.

Typical application: pharmaceutical and food and beverage industries.

Solution 3: Protective painting (on request)

The highest protection against aggressions, external pollution and projections of metal particles.

- Provides the ultimate protection against corrosion.

Typical applications: marine, seaside, off-shore.

Customised offer

Configured or **Specific:** two solutions customised according to your needs.

Configured

Specific

Configured:
- Standard dimensions and finishes.
- Machining.
- Standard accessory installation.

Specific:
- Special dimensions.
- Finishes.
- Cut-outs.
- Accessory installation.

Customisation

To optimise your installations, we place all our production flexibility and the high quality of our manufacturing processes at your entire disposal. We supply a wall-mounting enclosure "ready for cabling".

- A perfect finish.
- Optimum operation.
- Saves installation time.
- Adapts to any installation conditions.
- Machining and cut-outs.
  Machining stainless steel can be a delicate operation if not performed using the proper tools. We take care of this and perform it industrially.
  The solution contributes to a perfect finish:
  – No burrs, no roughness on the edge of the cut-outs.
  – Guaranteed machining tolerances.
  – External surfaces with no scratches.
- Special characteristics.
  It is possible to manufacture enclosures with special dimensions, steels and paint.

Other options

- Transparent door.
- Removable cable-gland plate.
- Compartmentalisation.
- Adjustable stainless-steel feet, H = 100 or 200 mm.
- Stamped ventilation louvres.
- Consult your sales agent to discover all our other configuration options.

Examples

Suitable enclosures assembled with built-in control desk

- Suitable enclosures made from 304L stainless steel. Micro-beaded with built-in work console, sliding shelves and inner mounting plates.
- Installed on plinth, H = 100 mm.

Strengths

- Meticulous aesthetics.
- Impeccable surface condition.
- Easy disinfection.

Examples

Monobloc stainless-steel control desk

- Control desk made from micro-beaded 304L stainless steel with monobloc console and desk top, recessed front and rear panels and equipped with inner mounting plates.
- Dimensions:
  Height: 1200 mm.
  Width: 2200 mm.
  Depth: 1060 mm.

Strengths

- Large monobloc control desk.
- Meticulous aesthetics.
- Impeccable surface condition (micro-beading).
- Easy disinfection.

Suited 19" rack and PC rack for pharmaceutical process

- 19" rack and PC rack made from micro-beaded 304L stainless steel with electropolished fronts.
- Equipped with hygienic feet, H = 100 mm.

Strengths

- Meticulous aesthetics.
- Impeccable surface condition (electropolishing).
- Easy disinfection.

Stainless-steel lighting enclosures

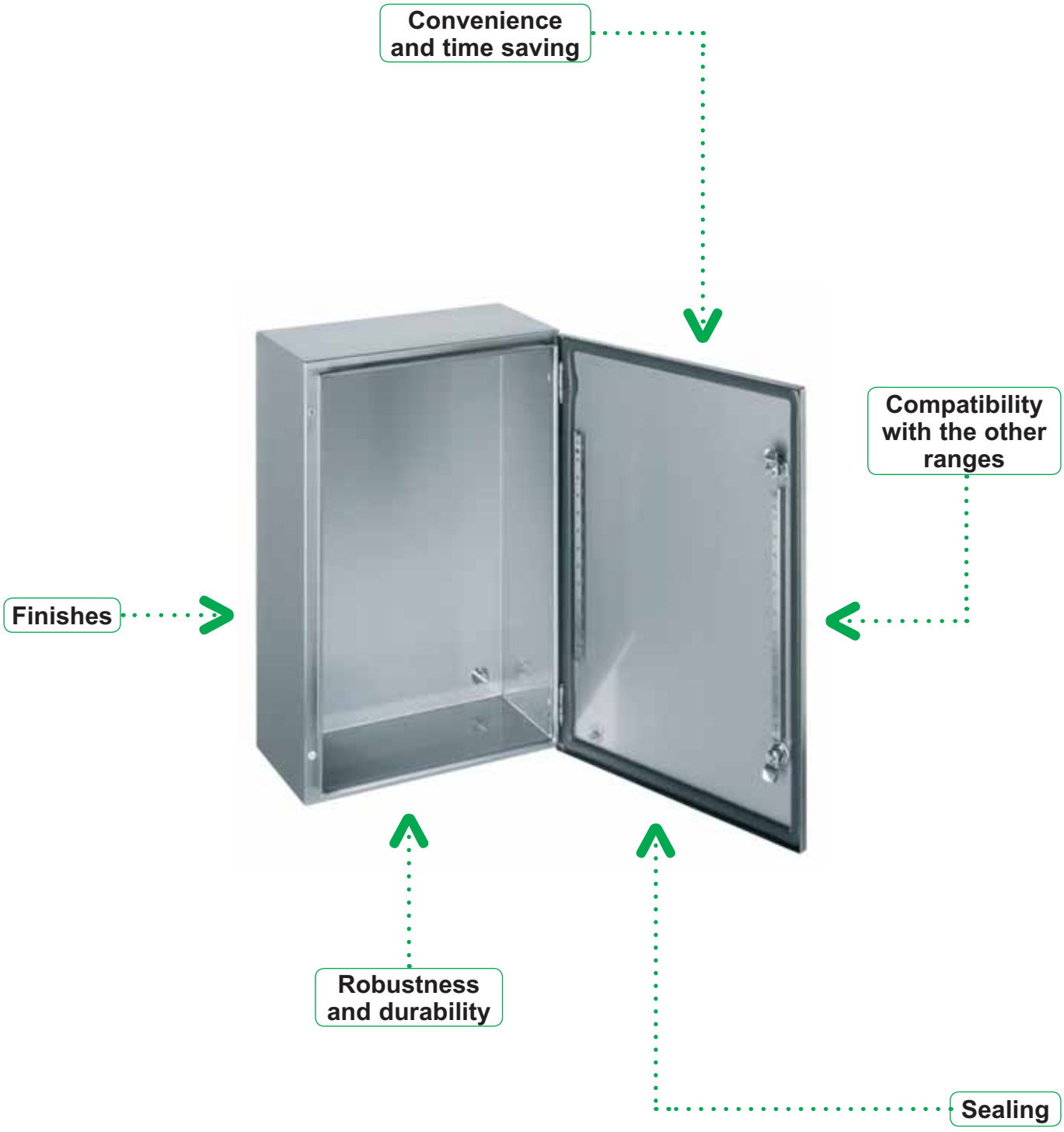
- Large enclosures, W = 3000 mm, made from micro-beaded 316L stainless steel, 2.0 mm, with tilted top and plinth. These enclosures are installed on bridge piers.

Strengths

- Excellent seal.
- Meticulous aesthetics.

Specific Configured

Stainless-steel wall-mounting enclosures



Finishes:

Two types of steel offered as standard: 304L and 316L, with Scotch-Brite® brushed finish.
Painted in the RAL range or micro-beaded finish (on request).

Large range of accessories:

Stainless-steel accessories: canopy, wall-fixing lugs.
Accessories of the standard offer: mounting plate, inner door, modular chassis and step slides.
Large selection of locks with 100% stainless-steel transformation.

Sealing:

Protection rating of IP 66 (IEC 60529): complete protection against dust and water sprays.
Polyurethane gasket.
Gutter-shaped front profile.
Three closure points for the double door.

Robustness and durability:

Resistance to external mechanical impacts:
IK 10: plain door,
IK 08: glazed door.
Door reinforcement frame or profile.
Stainless-steel hinges.

Convenience and time saving:

304 or 316L stainless-steel wall-fixing lugs.
Vertical reinforcement perforated profiles, which make it easier to equip the door.
Reversible door opening to 120°.
Easy installation directly on the machine thanks to the 4 rear drill holes.

304L / 316L stainless-steel wall-mounting enclosure
Introduction

Technical features

These enclosures have been specially designed for the chemical, oil and food and beverage industries, among others, which are particularly demanding in terms of hygiene and resistance to corrosion.

- Two types of materials, with Scotch-Brite® brushed finish, are available:
  – AISI 304L,
  – AISI 316L.
- Two wall-mounting enclosure versions are available:
  – With plain door,
  – With glazed door, Securit® glass, 4 mm thick.
- Protection rating of IP 66 for all single enclosures with single door and glazed door, IP 55 for the double door enclosures, according to IEC 60529.
- Resistance to external mechanical impacts:
  – IK 10 for the solid-door enclosures,
  – IK 08 for the glazed-door enclosures.
- Thickness: 1.5 mm.
- Single-piece body (cross-shaped structure). Gutter-shaped front profile.
- 4 rear studs for fixing the material.
- 2 cut-out vertical profiles on the door (from a height of 600 mm), with drill holes with a diameter of 4.25 mm and a pitch of 25 mm for installing accessories.
- Door strengthening frame (from a height of 1000 mm), cross-section of 20 mm × 15 mm, with drill holes with a diameter of 5 mm and a pitch of 25 mm.
- Standard lock with 3-mm double-bar lock (chrome-plated zamak).
- 2 locking points for heights of more than 500 mm or three points for two-door enclosures.
- Stainless-steel hinges screwed to the body of the enclosure. They make it easier to remove and invert the door. Opening angle: 120°.
- Polyurethane gasket.
- M6 × 16 screws on the door and on the body, allowing equipotential connection between the earth connections (on request).
- 4 holes for fixing to the wall directly or with the help of mounting lugs (on request), blocked by sealing plugs.

Certifications

- IEC 62208.
- UL 508A.
- CAN/CSA 22.

Stainless-steel wall-mounting enclosures
Dimensions

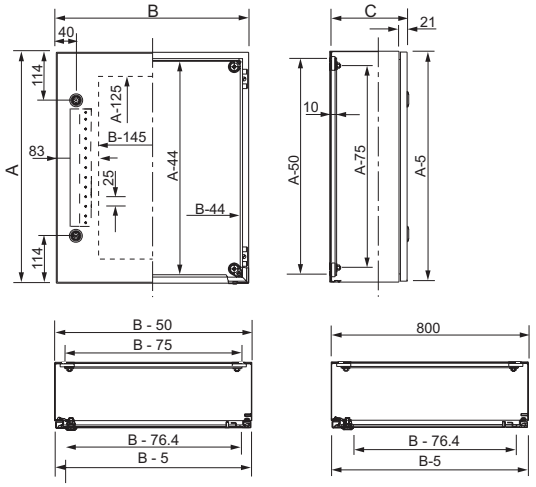


FIG. 2

External dimensions (mm)			Fig.
A	B	C	
300	200	150	1
300	250	150	1
300	300	150	1
400	300	150	1
400	300	200	1
400	400	200	1
400	600	200	1
500	400	200	2*
600	400	200	2
600	600	250	2
700	500	250	2
800	600	250	2
800	800	300	2
1000	800	300	3
1000	1000	300	4
1200	800	300	3
1200	1000	300	4

*Without door reinforcement.

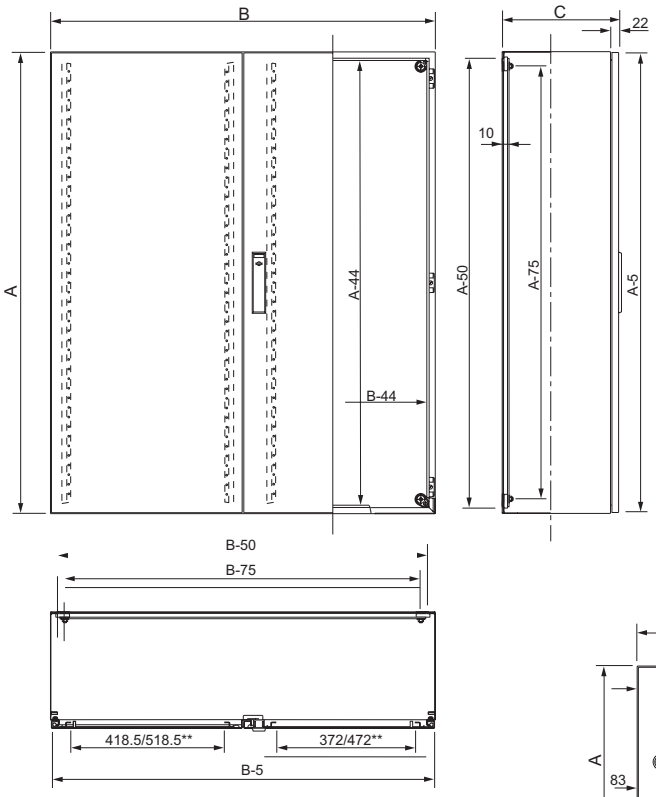


FIG. 4

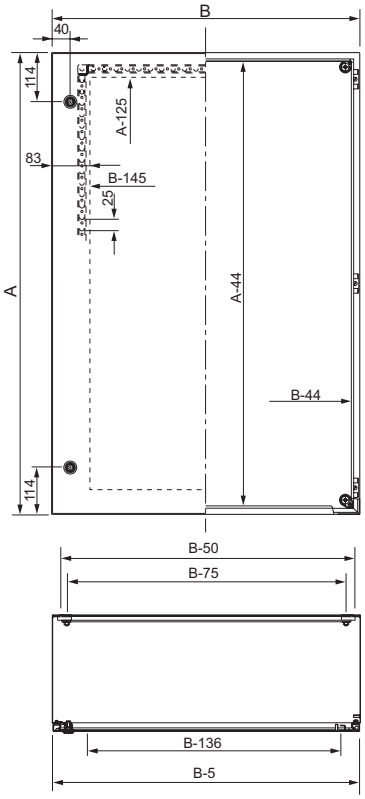


FIG. 3

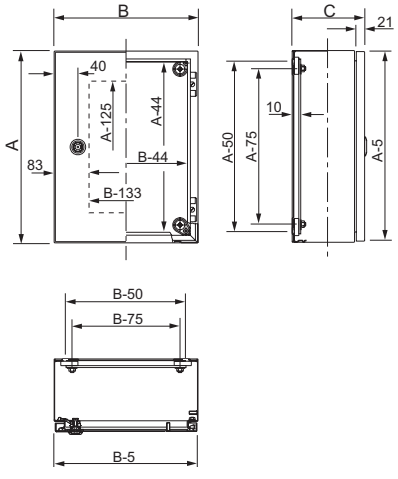


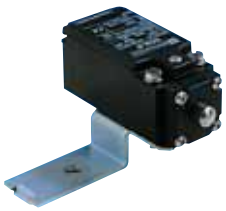
FIG. 1

**For glazed door.

Stainless-steel wall-mounting enclosures
Selection guide

External dimensions (mm)			No. of locks	No. of doors	304L stainless steel		316L stainless steel	304L stainless-steel canopy	Plain mounting plate***
Height	Width	Depth			Plain door	Glazed door**	Plain door		
300	200	150	1	1	NSYS3X3215	-	NSYS3X3215H	NSYTX2015	NSYMM32
300	250	150	1	1	NSYS3X302515	-	NSYS3X302515H	NSYTX2515	NSYMM3025
300	300	150	1	1	NSYS3X3315	-	NSYS3X3315H	NSYTX3015	NSYMM33
400	300	150	1	1	NSYS3X4315	-	NSYS3X4315H	NSYTX3015	NSYMM43
400	300	200	1	1	NSYS3X4320	NSYS3X4320T	NSYS3X4320H	NSYTX3020	NSYMM43
400	400	200	1	1	NSYS3X4420	-	NSYS3X4420H	NSYTX4020	NSYMM44
400	600	200	1	1	NSYS3X4620	-	NSYS3X4620H	NSYTX6020	NSYMM46
500	400	200	2	1	NSYS3X5420	NSYS3X5420T	NSYS3X5420H	NSYTX4020	NSYMM54
600	400	200	2	1	NSYS3X6420	NSYS3X6420T	NSYS3X6420H	NSYTX4020	NSYMM64
600	600	250	2	1	NSYS3X6625	-	NSYS3X6625H	NSYTX6025	NSYMM66
700	500	250	2	1	NSYS3X7525	NSYS3X7525T	NSYS3X7525H	NSYTX5025	NSYMM75
800	600	250	2	1	NSYS3X8625	NSYS3X8625T	NSYS3X8625H	NSYTX6025	NSYMM86
800	800	300	2	1	NSYS3X8830	-	NSYS3X8830H	NSYTX8030	NSYMM88
1000	800	300	2	1	NSYS3X10830	NSYS3X10830T	NSYS3X10830H	NSYTX8030	NSYMM108
1000	1000	300	*	2	NSYS3X101030	-	NSYS3X101030H	NSYTX10030	NSYMM1010
1200	800	300	2	1	NSYS3X12830	-	NSYS3X12830H	NSYTX8030	NSYMM128
1200	1000	300	*	2	NSYS3X121030	-	NSYS3X121030H	NSYTX10030	NSYMM1210

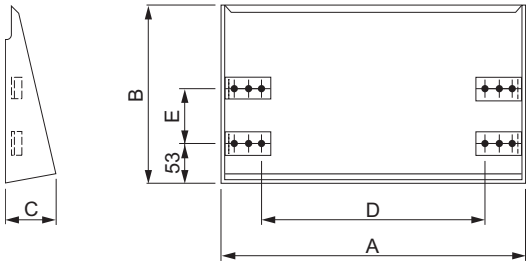
*Three-point closure system.
**The glazed door has no reinforcement.
***See other mounting plates in common accessoires.

Adhesive plastic document pocket	Door switch	Lighting
		
Page	Page	Page
7/130	7/134	7/126

Composition accessories

Canopy

- Direct fixing to the body of the enclosure.
- 304L stainless-steel sheet, 1.5 mm thick, Scotch-Brite® brushed finish.
- Delivered with the fixings required for installation.
- Other finishes, other stainless steels: contact us.



Configured

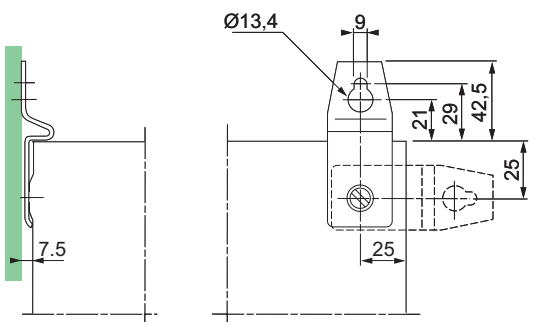
Optional in factory assembly: contact us.

For wall-mounting enclosures (mm)		Dimensions (mm)					Canopy reference
Width	Depth	A	B	C	D	E	
200	150	205	183	51	120	-	**NSYTX2015**
250	150	205	183	51	120	-	**NSYTX2515**
300	150	305	183	51	220	-	**NSYTX3015**
300	200	305	233	51	220	70	**NSYTX3020**
400	200	405	233	70	320	70	**NSYTX4020**
500	250	505	283	70	420	120	**NSYTX5025**
600	200	605	233	70	520	70	**NSYTX6020**
600	250	605	283	70	520	120	**NSYTX6025**
800	300	805	333	70	720	170	**NSYTX8030**
1000	300	1005	333	70	920	170	**NSYTX10030**

Wall-fixing lugs

- Set of four 304 or 316L stainless-steel wall-fixing lugs.
- Mounting of the wall-fixing lugs in horizontal or vertical position.
- Fixing from the outside.
- Maximum load: horizontal 180 kg and vertical 350 kg.

Stainless-steel type	Reference
304	**NSYPFCX**
316L	**NSYPFC2X**



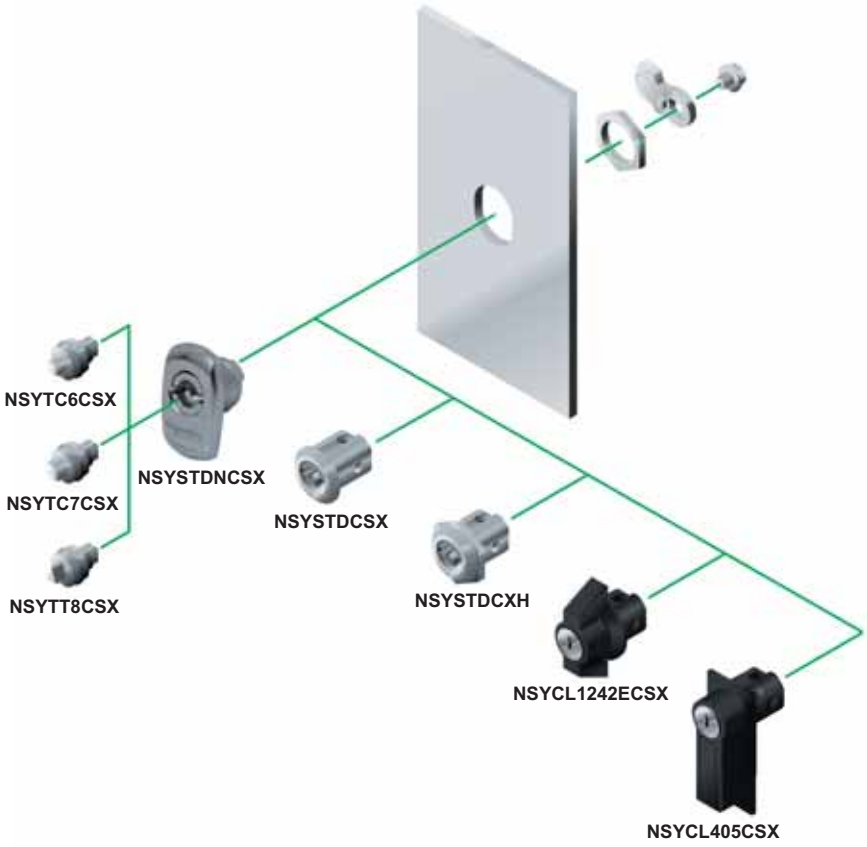
Composition accessories
Locking system

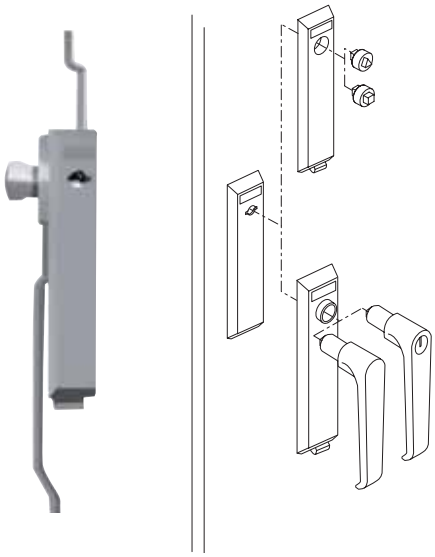
Escutcheon

- Wall-mounting enclosure supplied with 3-mm double-bar chrome-plated zamak lock.
- Protection rating: IP 66.

Standard escutcheon
3-mm double-bar lock (standard - chrome-plated zamak)

NSYSTDNCSX





For the closures of double-door enclosures, contact us.

Description	Material	Reference
Standard 3-mm double-bar lock	chrome-plated zamak	**NSYSTDNCSX**
Round 3-mm double-bar lock (spare)	chrome-plated zamak	**NSYSTDCSX**
Round 3-mm double-bar lock	100 % stainless steel	**NSYSTDCXH**
8-mm triangular insert	100 % stainless steel	**NSYTT8CSX**
7-mm square insert	100 % stainless steel	**NSYTC7CSX**
6-mm square insert	100 % stainless steel	**NSYTC6CSX**
1242E handle lock	Chrome-plated	**NSYCL1242ECSX**
405 handle lock	Polyamide	**NSYCL405CSX**

Configured

Optional in-factory assembly: contact us.

Door accessories

Inner door

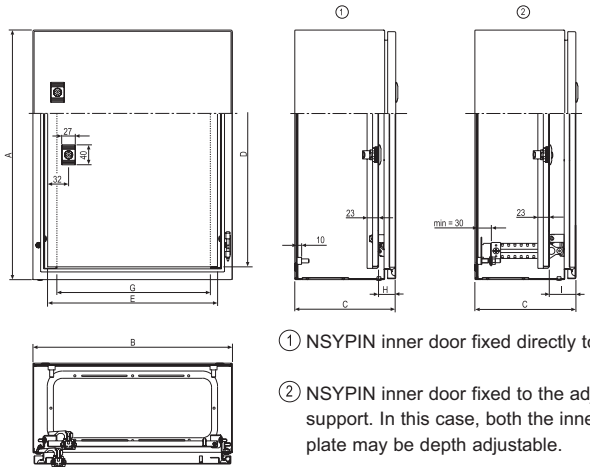
- 3-mm double-bar lock.
- The inner door can be mounted either on the front side of the enclosure or on step slides (not suplied with standard).
- Maximum load: 30 kg/m².
- As standard it can be mounted an inner door and a mounting plate, on the step slides, at the same time.
- Not compatible with door retainer and door switch. Consult us.

Composition: 1 inner door.

For wall-mounting enclosures		Reference	D	E	G	H	I min.
Height (A)	Width (B)						
400	300	**NSYPIN43**	349	241	208	32	51
500	400	**NSYPIN54**	449	341	308	32	51
600	400	**NSYPIN64**	549	341	308	32	51
700	500	**NSYPIN75**	649	441	408	32	51
800	600	**NSYPIN86***	749	541	508	32	51
1000	800	**NSYPIN108***	949	741	708	32	51
1200	800	**NSYPIN128***	1149	741	708	32	52

* Equipped with welded vertical profiles in order to facilitate cable management.

Spacial S3X stainless-steel enclosures dimensions

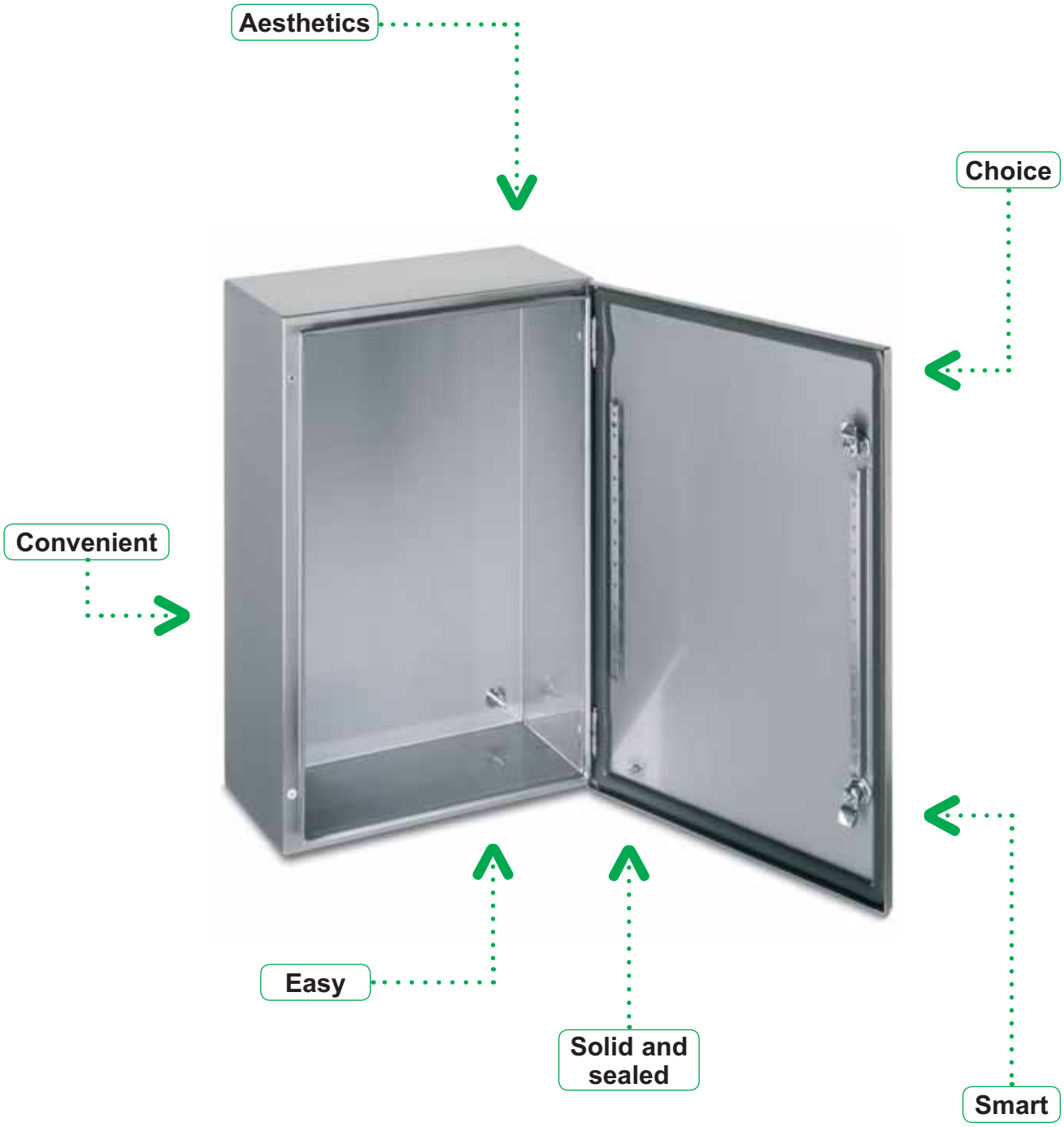


① NSYPIN inner door fixed directly to the enclosure.

② NSYPIN inner door fixed to the adjustable NSYSDCR support. In this case, both the inner door and the mounting plate may be depth adjustable.

5

Spacial S3XEX compliant with the ATEX directive



Aesthetics:

Stainless-steel enclosure with no cut-out.
Scotch-Brite® brushed finish.
Monobloc body with a cross-shaped structure.

Choice:

Plain door: 7 references.
Plain mounting plate.
Silkscreened mounting plate.
Microperforated mounting plate.
Telequick mounting plate.
DIN rail chassis.

Solid and sealed:

Resistance to external mechanical impacts: IK10.
Protection rating: IP66. Polyurethane gasket.
Gutter-shaped front profile.

Smart:

3-mm double-bar lock as standard.
Door rails cut-out with a pitch of 25 mm allowing accessories to be mounted on the door.

Easy:

The 4 fixing holes are blocked by four crimped blind nuts.
The door can be easily removed and turned over to open towards the left.

Convenient:

Large variety of common accessories with the Spacial S3X range.
Reusable packaging.

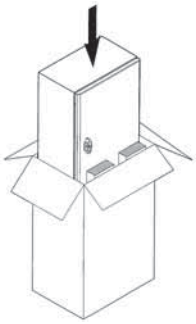
Blind nut for external earth connection (on request).

Earthing studs welded to the door and in the body.

The mounting plates are mounted on 4 10-mm shouldered backstuds.

The 4 fixing holes are blocked by 4 crimped blind nuts.

Specific ATEX marking.



Delivered in a reusable cardboard box with instruction sheet enclosed.

5

Introduction

The compulsory wall-fixing lugs:
– 304 stainless steel: reference **NSYPFCX**.
– 316L stainless steel: reference **NSYPFC2X**.

Technical characteristics

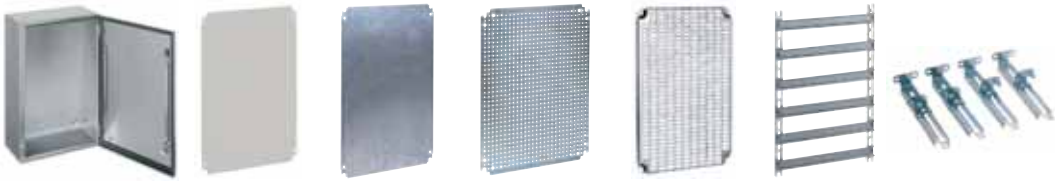
The Spacial ATEX range of stainless-steel enclosures is certified by the LOM with no. LOM 08ATEX3028U (component certificate).

The enclosures have the following marks:
Ⓔx II 2 GD Ex e II Ex tD A21 IP66 according to ATEX directive 94/9/EC and standards EN 60079-0 (2004),EN 60079-7 (2006), EN 61241-0 (2005) and EN 61241-1 (2004).

Download our ATEX certificates and product sheets over the internet.

- Stainless-steel material: AISI 304L with Scotch-Brite® brushed finish.
- Plain door.
- Protection rating of IP66 according to IEC 60529.
- Resistance to external mechanical impacts of IK10 according to IEC 62262.
- Single-piece body (cross-shaped structure). Gutter-shaped front profile.
- 2 perforated vertical profiles on the door (from a height of 600 mm), with drill holes with a diameter of 4.25 mm and a pitch of 25 mm for installing accessories.
- Door reinforcement frame (from a height of 1000 mm), cross-section of 20 mm × 15 mm, with drill holes with a diameter of 5 mm and a pitch of 25 mm.
- Standard closure with 3-mm double-bar lock (chrome-plated zamak).
- 2 closure points for heights of more than 500 mm.
- Stainless-steel hinges screwed onto the body of the enclosure, making it easier to remove and invert the door. Opening angle: 120°.
- Polyurethane gasket.
- M6 × 16 screws on the door and on the body, allowing equipotential connection.
- The wall-fixing lugs are compulsory; they are blocked by sealing plugs. The 4 fixing holes are blocked by 4 crimped blind nuts.
- One crimped M6 blind nut for an external earth connection (braid not supplied).
- Authorised ambient temperature limits:
  –25 °C ≤ Ta ≤ +60 °C

Selection guide for wall-mounting enclosures and main accessories



External dimensions (mm)			Enclosure reference	Mounting plate reference				DIN rail chassis	Step slides
Height	Width	Depth		Plain	Silkscreened	Microperforated	Telequick		
300	200	150	**NSYS3XEX3215**	**NSYMM32**	-	**NSYMF32**	**NSYMR32**	-	-
400	300	200	**NSYS3XEX4320**	**NSYMM43**	**NSYMS43**	**NSYMF43**	**NSYMR43**	**NSYMD43**	**NSYSDCR200**
500	400	200	**NSYS3XEX5420**	**NSYMM54**	**NSYMS54**	**NSYMF54**	**NSYMR54**	**NSYMD54**	**NSYSDCR200**
600	400	200	**NSYS3XEX6420**	**NSYMM64**	**NSYMS64**	**NSYMF64**	**NSYMR64**	**NSYMD64**	**NSYSDCR200**
700	500	250	**NSYS3XEX7525**	**NSYMM75**	**NSYMS75**	**NSYMF75**	**NSYMR75**	**NSYMD75**	**NSYSDCR250**
800	600	250	**NSYS3XEX8625**	**NSYMM86**	**NSYMS86**	**NSYMF86**	**NSYMR86**	**NSYMD86**	**NSYSDCR250**
1000	800	300	**NSYS3XEX10830**	**NSYMM108**	-	**NSYMF108**	**NSYMR108**	**NSYMD108**	**NSYSDCR300**

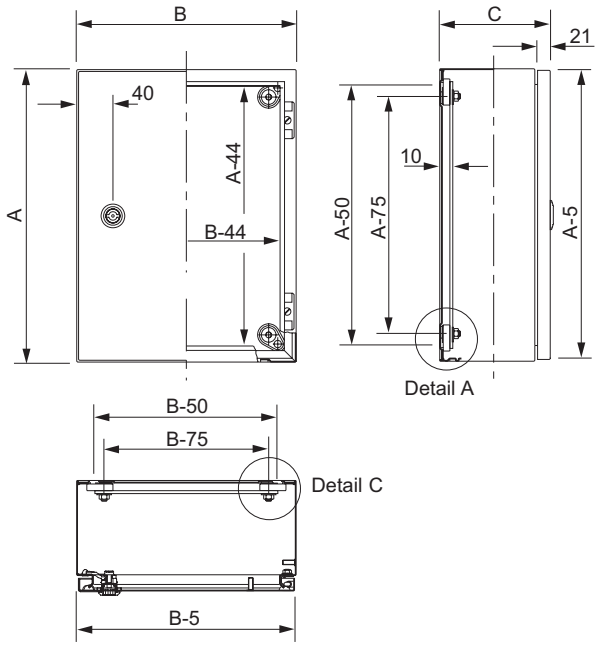
The accessories of the Spacial S3X enclosure can be installed in the Spacial S3XEX enclosure. However, plastic accessories should not be used, due to the risk of a static charge.

Dimensions

External dimensions (mm)			
Height (A)	Width (B)	Depth (C)	Fig.
300	200	150	1
400	300	200	1
500	400	200	2*
600	400	200	2
700	500	250	2
800	600	250	2
1000	800	300	3

*Without door reinforcement.

Fig. 1



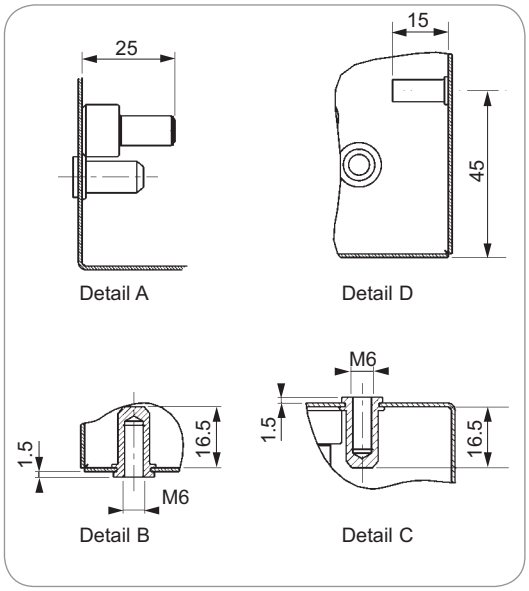


Fig. 2

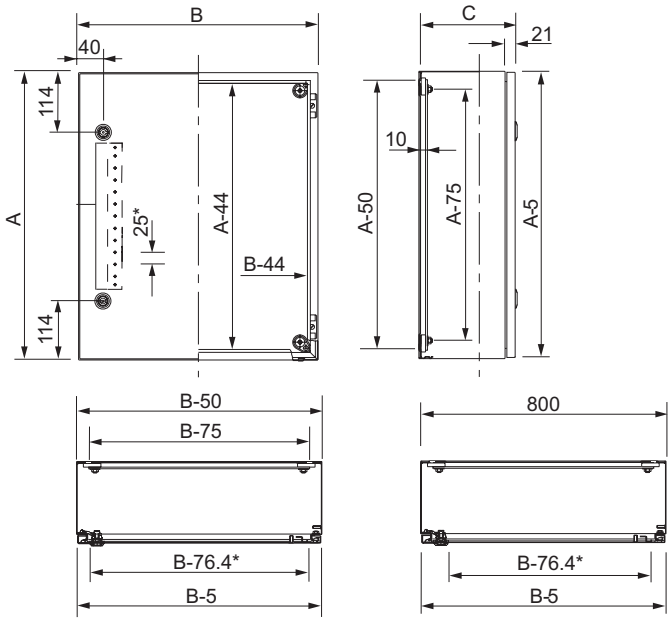
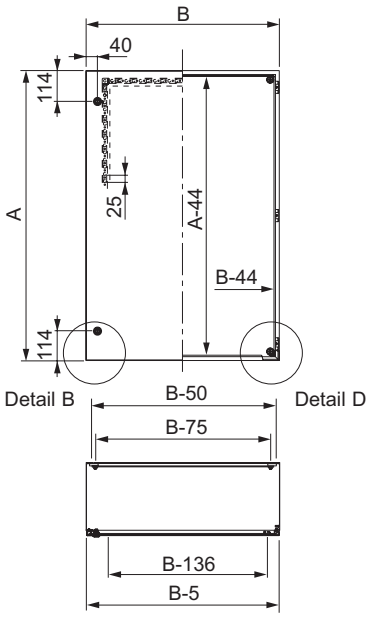


Fig. 3



*Door reinforcement.

Stainless-steel monobloc floor-standing enclosures

Material and finishes:

Stainless-steel grade:
AISI 304L and 316L as standard.
Finishes:
Scotch-Brite® brushed (standard).
Micro-beaded (on request).
Painted (on request).

Resistance to corrosion:

High resistance to corrosion. 304L and 316L stainless steels provide the best solutions for applications in extremely demanding environments.

Convenience and time saving:

Complete range of accessories for installation, cable management, etc.
316L stainless-steel plinth: easy cable entry.
Reversible door opening to 120°.
Padlock lock with key or form insert.
Adjustment rails perforated with a pitch of 25 mm.
Perforated reinforcement frame allowing accessories to be mounted on the door.

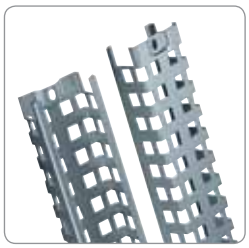
Sealing:

Protection rating of IP 55 (IEC 60529): complete protection against dust and water sprays.
3-point closures.
Canopy (optional):
- protects the sealing plane of the door,
- guarantees correct water drainage,
- no stagnation on the top.

Single-piece cable-gland plate with polyurethane gasket.

Compatible with the other ranges:

The mounting plates and other accessories of the Spacial SM standard metal offer.



Hygiene:

The high quality of the standard finish enables very easy maintenance while avoiding contamination.
The hygienic feet made from 316L stainless steel, 100 mm and 200 mm high, make it easier to clean under the enclosures.

Robustness and durability:

Resistance to external mechanical impacts:
IK 10 according to IEC 62262.
3 hinges made entirely from stainless steel.
Door reinforcement frame.

Stainless-steel monobloc floor-standing enclosures
Introduction

Technical characteristics

These enclosures have been specially designed for the chemical, oil and food and beverage industries, among others, which are particularly demanding in terms of hygiene and resistance to corrosion.

- Stainless-steel sheet floor-standing enclosure, 1.5 mm thick, folded and welded.
- Two types of materials, with Scotch-Brite® brushed finish, are available:
  – 304L stainless steel,
  – 316L stainless steel.
- Micro-beaded and painted finishes (on request).
- Protection rating: IP 55 according to IEC 60529.
- 1 Nema door, type 1, 2, 3, 3R, 4, 4X, 5, 12, 12K, 13.
- 2 Nema doors, type 1, 2, 12K.
- Resistance to external mechanical impacts: IK 10 according to IEC 62262.
- Plain front door. Opening to left or right to 120° with reinforcement frame. Installed on 3 stainless-steel hinges. 3-point closure with handle made from painted zamak, 5-mm double bar.
  Acceptable load of 50 kg.
- Delivered with 4 mounting plate-supporting brackets.
- Single-piece cable-gland plate delivered.
- 316L stainless-steel plinths, optional heights of 100 and 200 mm.
- Optional stainless-steel canopies.
- Optional eyebolts.
  Maximum load: 830 kg when slinging at 60°.
- For more information on the technical features of the different types of finishes: see page **5/5**.

Certifications

- IEC 62208.
- UL 508.
- CAN/CSA 22.

5

Specific

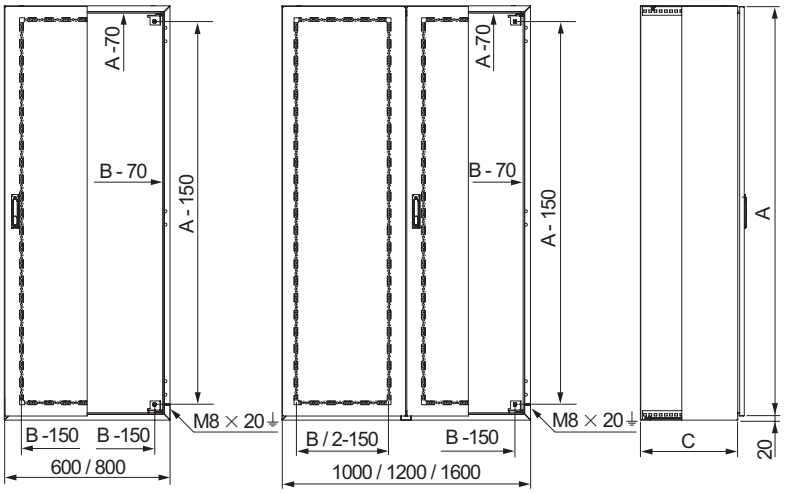
External dimensions (mm)			Number of front doors	Stainless-steel floor-standing enclosure 304L / 316L*	Brushed 316L stainless-steel plinth height 100 mm **		Brushed 316L stainless-steel plinth height 200 mm **		Plain mounting plate ***
Height	Width	Depth			Front + corner	Side	Front + corner	Side	
1400	1000	300	2	NSYSMX141030	NSYSPXF10100H	NSYSPXS3100H	NSYSPXF10200H	2 × NSYSPXS3100H	NSYMP1410
1600	800	400	1	NSYSMX16840	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP168
1800	600	400	1	NSYSMX18640	NSYSPXF6100H	NSYSPXS4100H	NSYSPXF6200H	2 × NSYSPXS4100H	NSYMP186
1800	800	400	1	NSYSMX18840*	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP188
1800	1200	400	2	NSYSMX181240*	NSYSPXF12100H	NSYSPXS4100H	NSYSPXF12200H	2 × NSYSPXS4100H	NSYMP1812
1800	1600	400	2	NSYSMX181640*	NSYSPXF16100H	NSYSPXS4100H	NSYSPXF16200H	2 × NSYSPXS4100H	NSYMP1813
2000	800	500	1	NSYSMX20850	NSYSPXF8100H	NSYSPXS5100H	NSYSPXF8200H	2 × NSYSPXS5100H	NSYMP208
2000	1000	400	2	NSYSMX201040*	NSYSPXF10100H	NSYSPXS4100H	NSYSPXF10200H	2 × NSYSPXS4100H	NSYMP2010
2000	1200	500	2	NSYSMX201250*	NSYSPXF12100H	NSYSPXS5100H	NSYSPXF12200H	2 × NSYSPXS5100H	NSYMP2012
2000	1600	600	2	NSYSMX201660*	NSYSPXF16100H	NSYSPXS6100H	NSYSPXF16200H	2 × NSYSPXS6100H	NSYMP2016

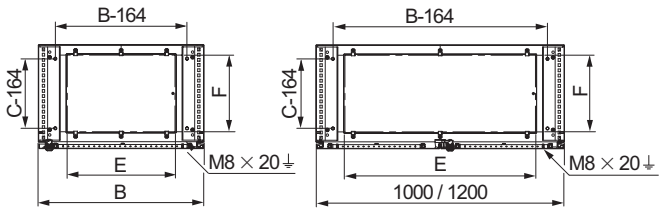
*For version in AISI 316L stainless steel, add the lettre H to the end of the reference. Example NSYSMX18840H
**See section on stainless-steel composition accessories.
***See other mounting plates in common accessoires.

Stainless-steel monobloc floor-standing enclosures
Dimensions

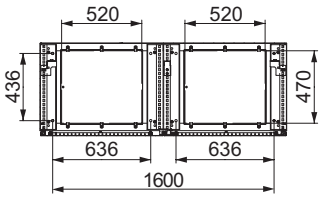
304L and 316L stainless-steel floor-standing enclosures:

Floor-standing enclosure dimensions (mm)			No. of cable-gland plates	Dimensions (mm)	
Height (A)	Width (B)	Depth (C)		E	F
1400	1000	300	1	720	270
1600	800	400	1	520	270
1800	600	400	1	520	270
1800	800	400	1	520	270
1800	1200	400	1	920	270
1800	1600	400	2	1320	270
2000	800	500	1	520	370
2000	1000	400	1	720	270
2000	1200	500	1	920	370
2000	1600	600	2	1320	470



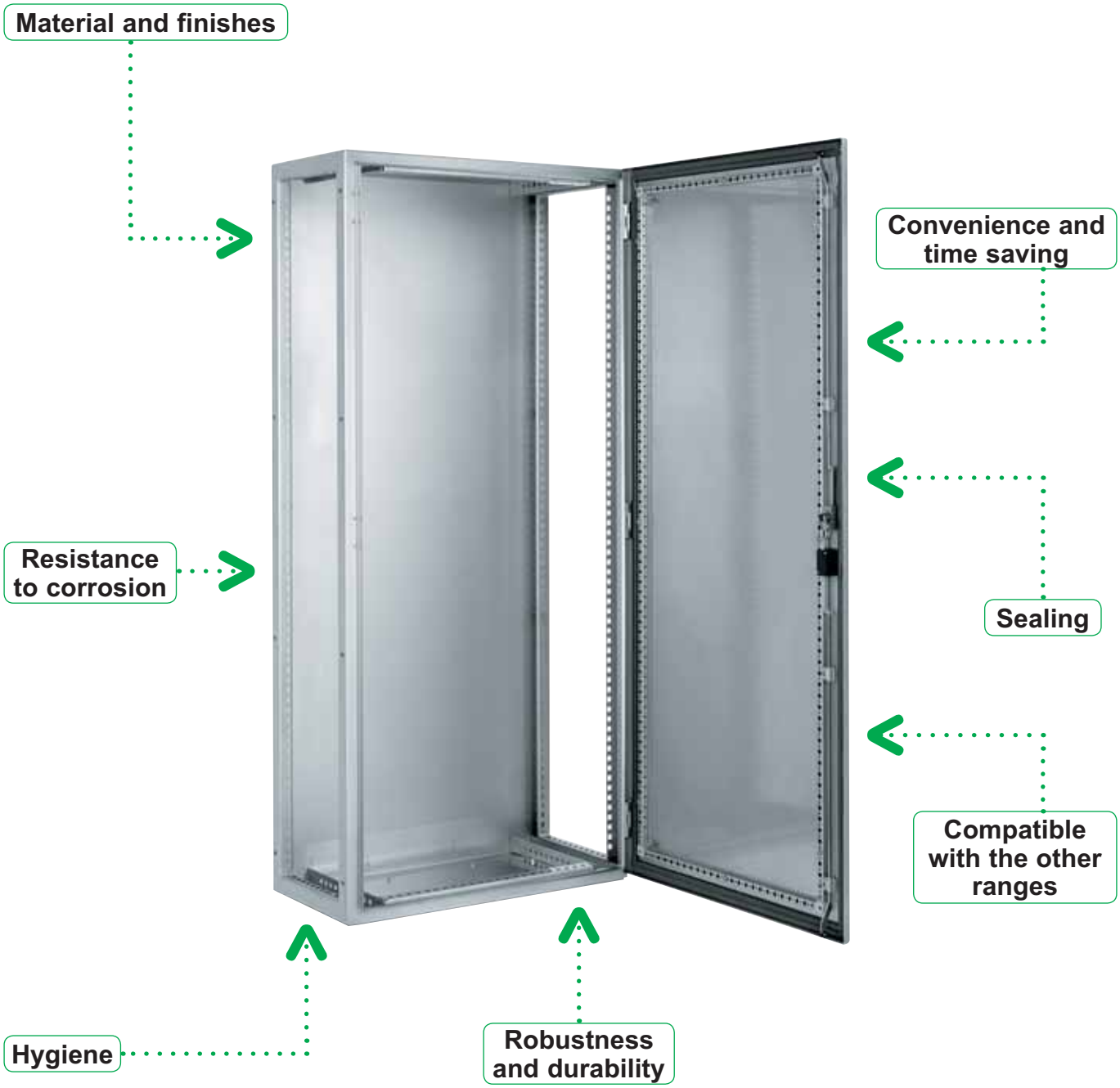


Enclosure width of 1000 and 1200 mm.



Enclosure width of 1600 mm.

Stainless-steel suitable enclosures



Material and finishes:

Stainless-steel grade:
AISI 304L as standard.
AISI 316L (on request).
Finishes:
Scotch-Brite® brushed (standard).
Micro-beaded (on request).
Painted (on request).

Resistance to corrosion:

High resistance to corrosion. 304L and 316L stainless steels provide the best solutions for applications in extremely demanding environments.

Convenience and time saving:

Complete range of accessories for installation, cable management, etc.
304L or 316L stainless-steel plinth: easy cable entry.
Reversible door opening to 120°.
Padlock lock with key or form insert.
Adjustment rails perforated with a pitch of 25 mm.
Perforated reinforcement frame allowing accessories to be mounted on the door.

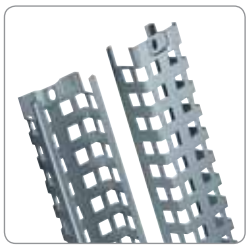
Sealing:

Protection rating of IP 55 (IEC 60529): complete protection against dust and water sprays.
3-point closures.
Canopy (optional):
- protects the sealing plane of the door,
- guarantees correct water drainage,
- no stagnation on the top.

Single-piece cable-gland plate with polyurethane gasket.

Compatible with the other ranges:

The mounting plates and other accessories of the Spacial SF standard metal offer.



Hygiene:

The high quality of the standard finish enables very easy maintenance while avoiding contamination.
The hygienic feet made from 316L stainless steel, 100 mm and 200 mm high, make it easier to clean under the enclosures.

Robustness and durability:

Resistance to external mechanical impacts:
IK 10 according to IEC 62262.
3 hinges made entirely from stainless steel.
Door reinforcement frame.

Stainless-steel suitable enclosures
Introduction

Technical characteristics

These enclosures have been specially designed for the chemical, oil and food and beverage industries, among others, which are particularly demanding in terms of hygiene and resistance to corrosion.

- Enclosure made up of a structure, consisting of top and bottom, rear panel and vertical profiles.
- Made from AISI 304L stainless steel with Scotch-Brite® brushed finish.
- Available on request:
  – 316L version.
  – Micro-beaded and painted finish.
- Protection rating of IP55 according to standard IEC 60529.
- High resistance to mechanical impacts: IK 10 according to standard IEC 62262.
- Plain front door. Opening to left or right to 120° with reinforcement frame installed.
  – 3 stainless-steel hinges.
  – 3-point closure with handle made from painted zamak, 5-mm double bar.
  – Acceptable load of 50 kg.
- Single-piece cable-gland plate delivered.
- Optional 316L stainless-steel plinths, heights of 100 and 200 mm.
- Optional stainless-steel canopies.
- Optional eyebolt.
- Maximum load: 830 kg when slinging at 60º.

Basic composition

- Structure consisting of top and bottom, rear panel and vertical profiles.
- Single front door, with reinforcement frame.
- Sash-bolt handle made from painted zamak, 3-mm double bar.
- 4 mounting plate-supporting brackets.
- Single-piece cable-gland plate with sealing gasket.

Note: the panels and plinths can be installed and the enclosures can be assembled (on request).

Specific

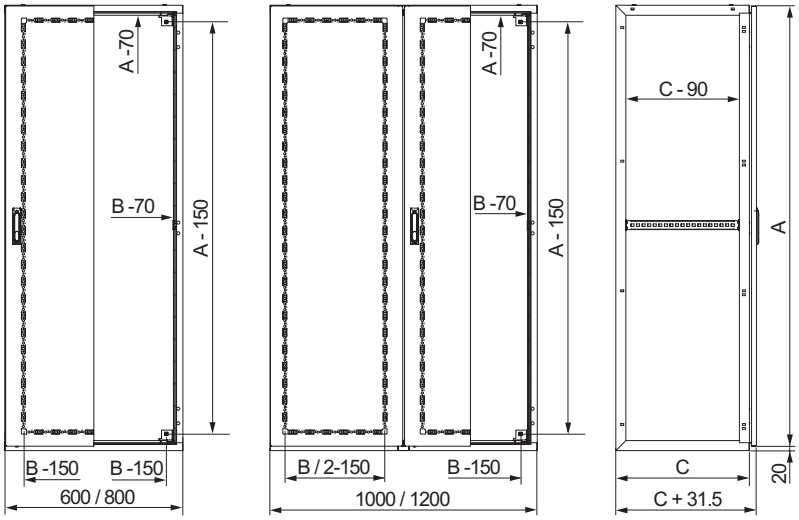
Spacial SFX suitable enclosures

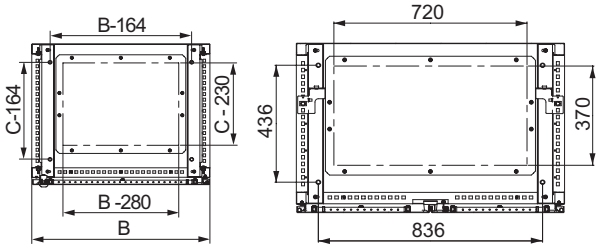
External dimensions (mm)			Number of front doors	References in 304L stainless steel (1)			Brushed 316L stainless-steel plinth height 100 mm (2)		Brushed 316L stainless-steel plinth height 200 mm (2)		Plain mounting plate (3)
Height (A)	Width (B)	Depth (C)		Suitable enclosure	Set of 2 side panels	Coupling kit	Front + corner	Side	Front + corner	Side	
1800	600	400	1	NSYSFX18640	NSY2SPX184	NSYSFBK19	NSYSPXF6100H	NSYSPXS4100H	NSYSPXF6200H	2 × NSYSPXS4100H	NSYMP186
1800	800	400	1	NSYSFX18840	NSY2SPX184	NSYSFBK19	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP188
1800	1200	400	2	NSYSFX181240	NSY2SPX184	NSYSFBK19	NSYSPXF12100H	NSYSPXS4100H	NSYSPXF12200H	2 × NSYSPXS4100H	NSYMP1812
2000	600	500	1	NSYSFX20650	NSY2SPX205	NSYSFBK19	NSYSPXF6100H	NSYSPXS5100H	NSYSPXF6200H	2 × NSYSPXS5100H	NSYMP206
2000	800	400	1	NSYSFX20840	NSY2SPX204	NSYSFBK19	NSYSPXF8100H	NSYSPXS4100H	NSYSPXF8200H	2 × NSYSPXS4100H	NSYMP208
2000	800	600	1	NSYSFX20860	NSY2SPX206	NSYSFBK19	NSYSPXF8100H	NSYSPXS6100H	NSYSPXF8200H	2 × NSYSPXS6100H	NSYMP208
2000	1000	600	2	NSYSFX201060	NSY2SPX206	NSYSFBK19	NSYSPXF10100H	NSYSPXS6100H	NSYSPXF10200H	2 × NSYSPXS6100H	NSYMP2010
2000	1200	600	2	NSYSFX201260	NSY2SPX206	NSYSFBK19	NSYSPXF12100H	NSYSPXS6100H	NSYSPXF12200H	2 × NSYSPXS6100H	NSYMP2012

(1) 316L stainless-steel enclosures on request.
(2) See section on stainless-steel composition accessories.
(3) See other mounting plates in common accessoires.

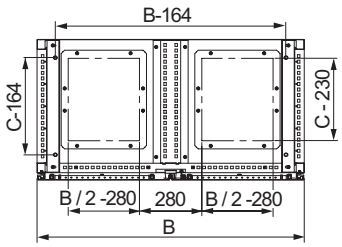
Stainless-steel suitable enclosures
Dimensions

External dimensions (mm)			Number of front doors
Height (A)	Width (B)	Depth (C)	
1800	600	400	1
1800	800	400	1
1800	1200	400	2
2000	600	500	1
2000	800	400	1
2000	800	600	1
2000	1000	600	2
2000	1200	600	2





Enclosure width 1000 mm.



Enclosure width 1200 mm.

Composition accessories

Side panels for stainless-steel suitable enclosure for SFX

- Side panels including a polyurethane sealing gasket.
- Their special design guarantees the protection of the door gasket.

For suitable enclosure (mm)		Reference
Height	Depth	
1800	400	**NSY2SPX184**
2000	400	**NSY2SPX204**
2000	500	**NSY2SPX205**
2000	600	**NSY2SPX206**

Coupling kit for SFX

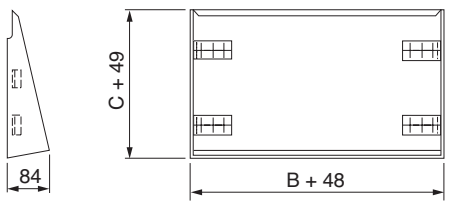
- Used for joining enclosures side by side.
- Fixing from the inside of the enclosures.
- Degree of protection: IP55.
- Material:
  – Flat connectors and brackets: zinc-coated steel.
  – Sealing gasket: EPDM.

Reference
NSYSFBK19

Top-mounting accessories Canopy for SMX and SFX

- Guarantees very high protection of the enclosure when used outdoors.
- It is fixed in the same holes as the eyebolt. Delivered with fixings.
- Material: 304L stainless-steel sheet, 1.5 mm thick, Scotch-Brite® brushed finish.
- Other finishes or other types of stainless steel: contact us.

For enclosures with dimensions (mm)		Reference
Width (B)	Depth (C)	
600	400	**NSYSCX6040**
600	500	**NSYSCX6050**
800	400	**NSYSCX8040**
800	500	**NSYSCX8050**
800	600	**NSYSCX8060**
1000	300	**NSYSCX10030**
1000	400	**NSYSCX10040**
1000	600	**NSYSCX10060**
1200	400	**NSYSCX12040**
1200	500	**NSYSCX12050**
1200	600	**NSYSCX12060**
1600	400	**NSYSCX16040**
1600	600	**NSYSCX16060**

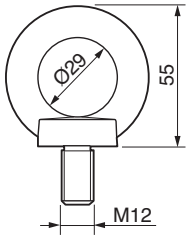


Composition accessories

Eyebolts

- Set of four M12 eyebolts.
- Material: treated moulded steel.
- It is fixed using fixing nuts supplied with the enclosure.
- Maximum load: 830 kg when slinging at 60°.

Reference
NSYSMEB



Lifting bracket for stainless-steel suitable enclosure for SFX

- Set of four lifting brackets.
- Material: treated steel.
- They are fixed instead of the eyebolts on two suitable enclosures side-by-side, guaranteeing the rigidity of the enclosure when lifted.
- Maximum load: 2000 kg when slinging at 60°.

Reference
NSYPUNX

Closure option

- The enclosures are delivered as standard with handle made from painted zamak, 5 mm double bar (1242E, 405E, 455E, 6.5-mm triangle available).
- Large range of standard inserts available.

Description	Pack.	Reference
Spare handle	1	NSYMCSX
5-mm double-bar insert	1	NSYTDB5ME
6-mm square insert	1	NSYTC6ME
7-mm square insert	1	NSYTC7ME
8-mm square insert	1	NSYTC8ME
6.5-mm triangular insert	1	NSYTT6ME
8-mm triangular insert	1	NSYTT8ME
Padlocking device	1	NSYBCME

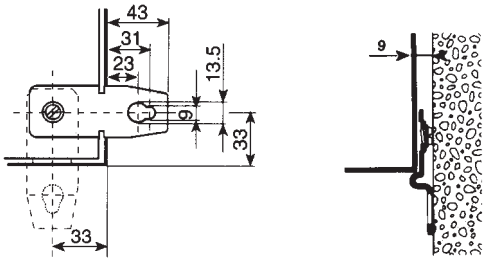
Stainless-steel composition accessories

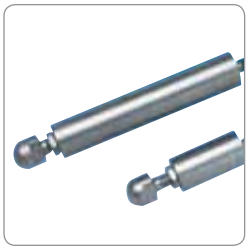
Wall-fixing lugs for SMX

- Set of four 304 stainless-steel wall-fixing lugs.
- Mounting of the wall-fixing lugs in horizontal or vertical position.
- Fixing from the outside.
- Maximum load: horizontal 180 kg and vertical 350 kg.

Reference
NSYFCMX

NSYFCMX





Hygienic feet

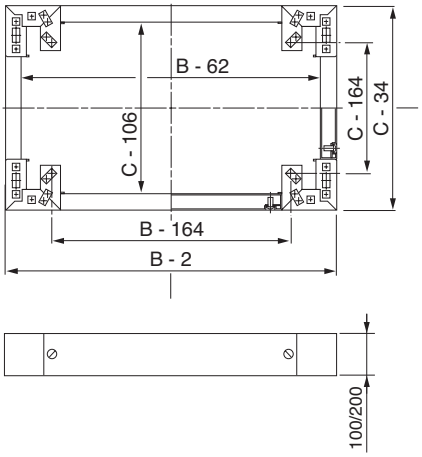
- Set of 4 adjustable feet.
- Made from 316L stainless steel, making it easier to clean under the enclosure.
- Recommended for applications that require special hygiene conditions.
- Available in heights of 100 or 200 mm.
- Maximum admissible load per foot: 100 kg.

Height (mm)	Reference
100	NSYPHX100
200	NSYPHX200

Stainless-steel composition accessories

Stainless-steel plinths

- Mounting in the holes for fixing the enclosures to the floor.
- Made from high quality stainless steel, AISI 316L Scotch-Brite® brushing, to guarantee the durability in application where the contact with the floor increase the risk of corrosion.
- Available in two heights: 100 and 200 mm.

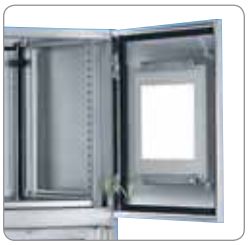


External dimensions (mm)		Brushed 316L stainless-steel plinth height 100 mm (1)		Brushed 316L stainless-steel plinth height 200 mm (1)	
Width (B)	Depth (C)	Front + corner	Side	Front + corner	Side
600	400	**NSYSPXF6100H**	**NSYSPXS4100H**	**NSYSPXF6200H**	2 × **NSYSPXS4100H**
600	500	**NSYSPXF6100H**	**NSYSPXS5100H**	**NSYSPXF6200H**	2 × **NSYSPXS5100H**
600	600	**NSYSPXF6100H**	**NSYSPXS6100H**	**NSYSPXF6200H**	2 × **NSYSPXS6100H**
600	800	**NSYSPXF6100H**	**NSYSPXS8100H**	**NSYSPXF6200H**	2 × **NSYSPXS8100H**
800	400	**NSYSPXF8100H**	**NSYSPXS4100H**	**NSYSPXF8200H**	2 × **NSYSPXS4100H**
800	500	**NSYSPXF8100H**	**NSYSPXS5100H**	**NSYSPXF8200H**	2 × **NSYSPXS5100H**
800	600	**NSYSPXF8100H**	**NSYSPXS6100H**	**NSYSPXF8200H**	2 × **NSYSPXS6100H**
1000	300	**NSYSPXF10100H**	**NSYSPXS3100H**	**NSYSPXF10200H**	2 × **NSYSPXS3100H**
1000	400	**NSYSPXF10100H**	**NSYSPXS4100H**	**NSYSPXF10200H**	2 × **NSYSPXS4100H**
1000	500	**NSYSPXF10100H**	**NSYSPXS5100H**	**NSYSPXF10200H**	2 × **NSYSPXS5100H**
1000	600	**NSYSPXF10100H**	**NSYSPXS6100H**	**NSYSPXF10200H**	2 × **NSYSPXS6100H**
1200	400	**NSYSPXF12100H**	**NSYSPXS4100H**	**NSYSPXF12200H**	2 × **NSYSPXS4100H**
1200	500	**NSYSPXF12100H**	**NSYSPXS5100H**	**NSYSPXF12200H**	2 × **NSYSPXS5100H**
1200	600	**NSYSPXF12100H**	**NSYSPXS6100H**	**NSYSPXF12200H**	2 × **NSYSPXS6100H**
1600	400	**NSYSPXF16100H**	**NSYSPXS4100H**	**NSYSPXF16200H**	2 × **NSYSPXS4100H**
1600	600	**NSYSPXF16100H**	**NSYSPXS6100H**	**NSYSPXF16200H**	2 × **NSYSPXS6100H**

Stainless-steel monobloc PC racks

Convenience:

Anti-glare glazed door designed for viewing 14" and 17" screens by removing part of the silkscreen printing.
Cable entry made easier by a cable-gland plate (at the rear) in 2 pieces.



Sealing:

IP 55, even with the keyboard drawer open, thanks to the pivoting Plexiglas shutter.

Resistance to mechanical impacts:

Resistance to external mechanical impacts: IK 10.

Optional accessories:

Shelf mounted on telescopic rails.

Ergonomic:

Partial doors delimit the access to each function with a 3-mm double-bar lock.
Access to the various functions and working heights, guaranteeing optimum comfort.
Built-in screen and CPU support.
Built-in mouse support.

Hygiene:

The high quality of the standard finish enables very easy maintenance while avoiding contamination.
The hygienic feet made from 316L stainless steel, 100 mm and 200 mm high, make it easier to clean under the enclosures.

Resistance to corrosion:

High resistance to corrosion. 304L and 316L stainless steels provide the best solutions for applications in extremely demanding environments.

Material and finishes:

Micro-beaded 304L as standard.
Micro-beaded 316L on request.

Stainless-steel monobloc PC racks
Introduction

Technical characteristics

The stainless-steel monobloc PC racks have been especially designed to protect computer equipment installed in corrosive or specially environments that require washing or exposure to sprays of liquid.

Composition

- Monobloc structure in 304L stainless-steel sheet, micro-beaded finish.
- Can be made in 316L stainless steel on request.
- Top and bottom partial doors on the front side.
- Pivoting panel for the keyboard.
- Plain rear door.

Execution

- Protection rating: IP 55, even with the keyboard drawer open.
- High resistance to mechanical impacts: IK 10 according to standard IEC 62262.

Ergonomics

- Partial front doors delimit the access to each function with a 3-mm double-bar lock (other inserts or key locks available).
- Glued anti-glare window.
- Access to the various functions and working heights, guaranteeing optimum comfort during use.

Monitor-screen compartment

- The anti-glare glazed door is designed for viewing screens:
– 14" as standard,
– 17" by removing a part of the silkscreen printing.
- The height of the monitor support can be adjusted.
- The monitor shelf can withstand a maximum weight of 50 kg.

CPU / keyboard compartment

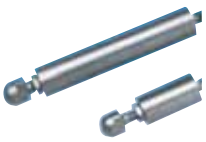
- The keyboard fixed to the inside becomes operational by tilting the central panel.
- The CPU is placed on a height-adjustable shelf, visible and accessible through a pivoting, transparent shutter.

Optional accessories

- Shelf installed on a sliding rail, with adjustable height.
- Plinths with heights of 100 and 200 mm.
- Telescopic tray: **NSYTTG60**

Specific

304L stainless-steel PC racks

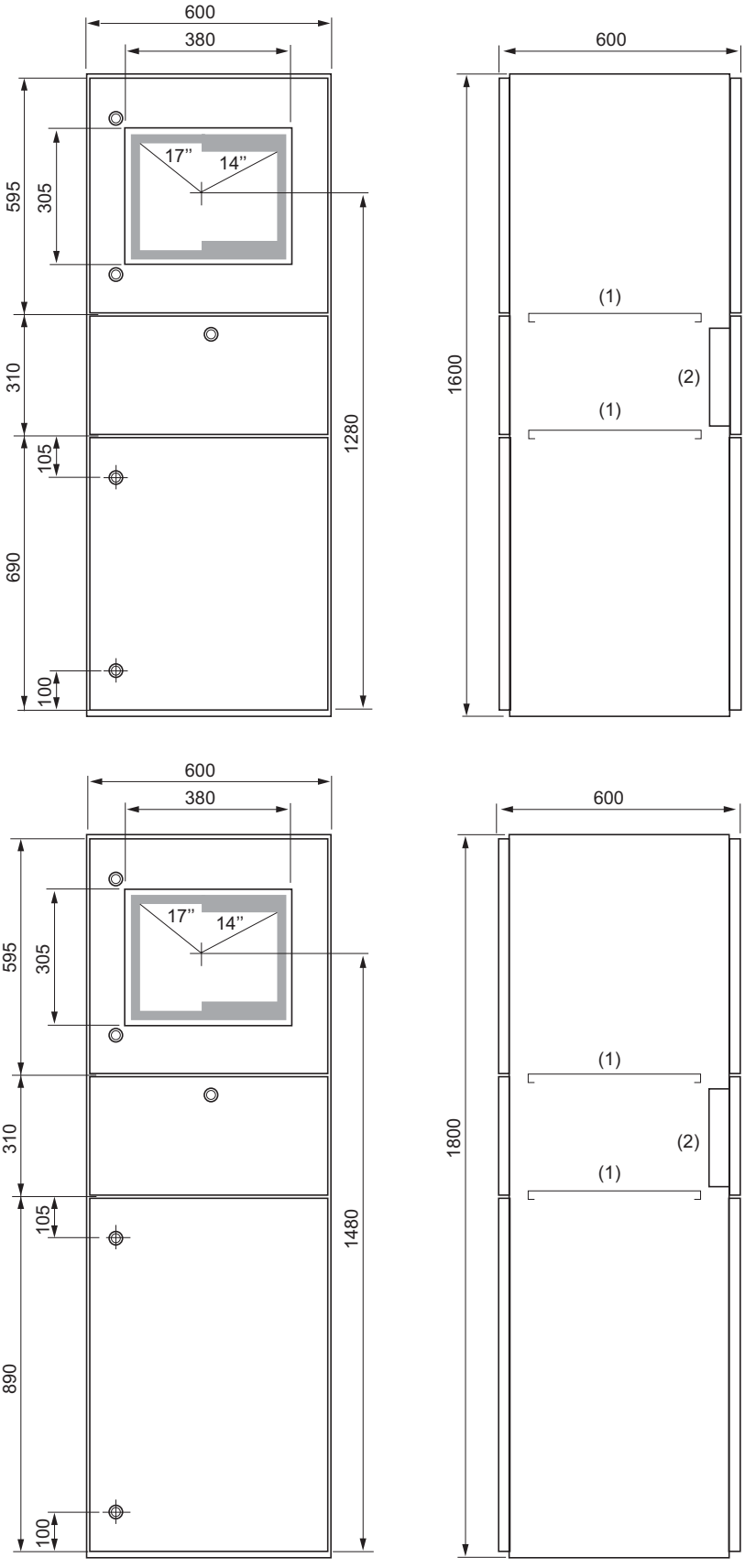


External dimensions (mm)			Stainless-steel PC rack reference	Hygienic feet		Brushed 316L stainless-steel plinth height 100 mm (1)		Brushed 316L stainless-steel plinth height 200 mm (1)	
Height	Width	Depth		Height 100 (mm)	Height 200 (mm)	Front + corner	Side	Front + corner	Side
1600	600	600	NSYSMX16660PC	NSYPHX100	NSYPHX200	NSYSPXF6100H	NSYSPXS6100H	NSYSPXF6200H	2 × NSYSPXS6100H
1600	600	800	NSYSMX16680PC	NSYPHX100	NSYPHX200	NSYSPXF6100H	NSYSPXS8100H	NSYSPXF6200H	2 × NSYSPXS8100H
1800	600	600	NSYSMX18660PC	NSYPHX100	NSYPHX200	NSYSPXF6100H	NSYSPXS6100H	NSYSPXF6200H	2 × NSYSPXS6100H
1800	600	800	NSYSMX18680PC	NSYPHX100	NSYPHX200	NSYSPXF6100H	NSYSPXS8100H	NSYSPXF6200H	2 × NSYSPXS8100H

(1) See section on stainless-steel composition accessories.

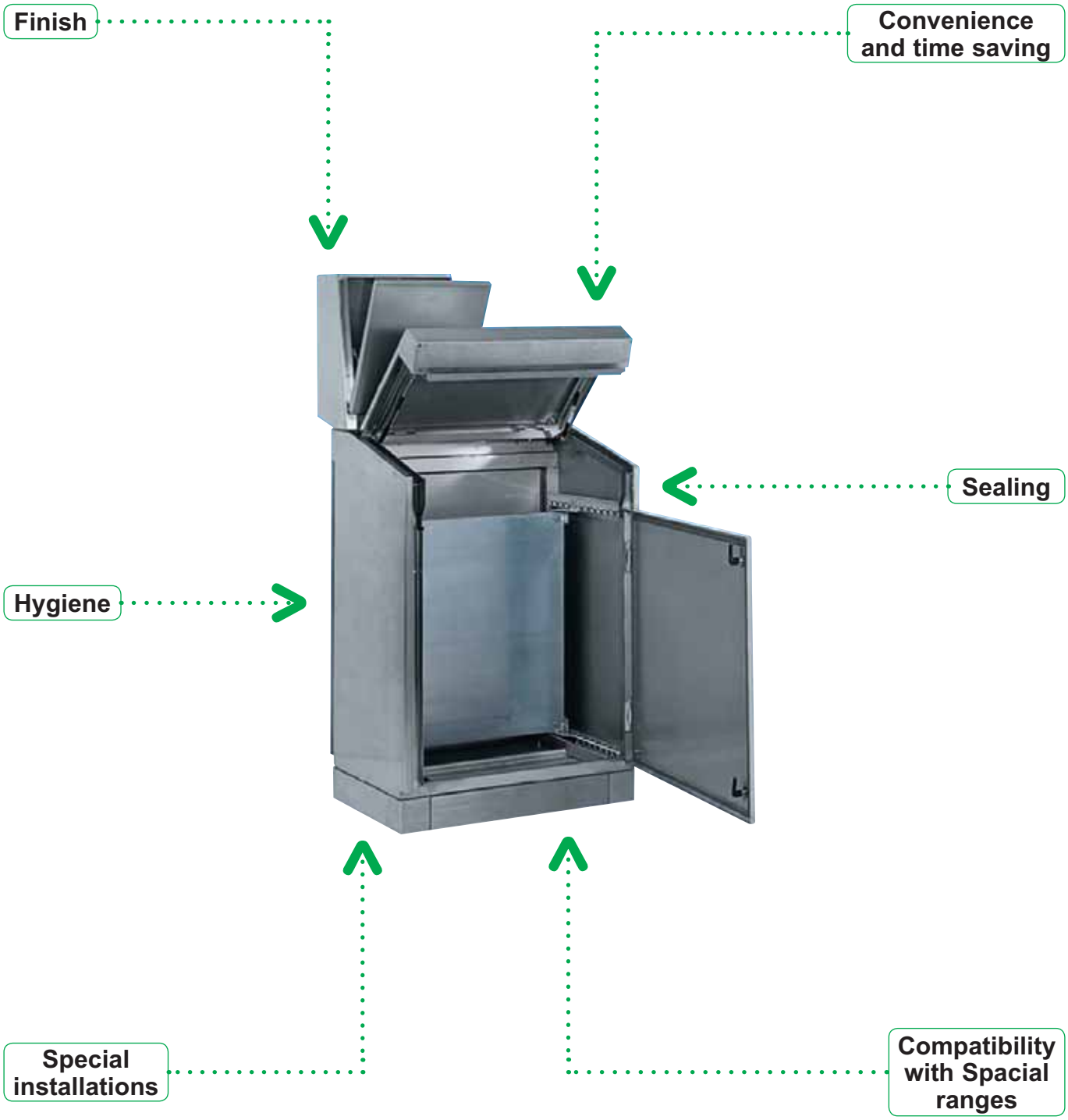
Stainless-steel monobloc PC racks

Dimensions



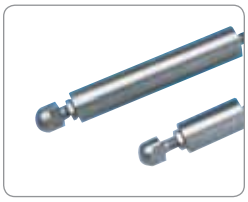
(1) Screwed shelf, adjustable height.
(2) Sealed case for keyboard.

Stainless-steel control desks



Hygiene:

The high quality of the standard finish enables very easy maintenance while avoiding contamination.
The hygienic feet made from 316L stainless steel, 100 mm and 200 mm high, make it easier to clean under the enclosures.



Sealing:

- Protection rating of IP 55:
– complete protection against dust and water sprays.
- Door and body gaskets made from polyurethane.
- Single-piece cable-gland plate with polyurethane gasket.
- Removable plates for concealing the free space left by the console.

Resistance to corrosion:

High resistance to corrosion. 304L and 316L stainless steels provide the best solutions for applications in extremely demanding environments.

Finishes:

304L stainless steel with Scotch-Brite® brushed finish as standard.
Micro-beaded 316L (on request).

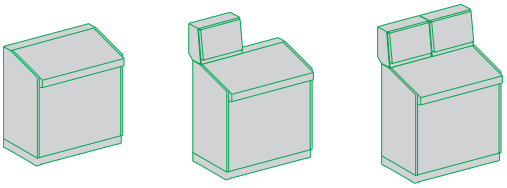
Compatibility with the other ranges:

- Stainless-steel accessories:
– plinths, locks.
- Accessories of the standard offer:
– mounting plate, pneumatic opening stay, etc.

Convenient:

The association of a monobloc control desk with one or more consoles enables all combinations.
Complete accessibility to the inside of the control desk thanks to its design without intermediate crossbars.
The desk lid and the console are equipped with pneumatic opening stays (opening to 75°) allowing complete access to the inside and preventing sudden falls of the console or the hinged cover.
Equipped with adjustment rails for adjusting the depth of the mounting plate.
Removable rear panel.

Examples of associations of consoles and control desks:



Multiple combinations available.

Stainless-steel control desks
Introduction

The Spacial SDX range of control desks offers all the functions required to set up a control station that meets the industrial or infrastructural needs of applications in harsh environments or in the food and beverage sector. Easy to implement, compatible with dialogue components, guaranteeing the security and protection of control devices, these control desks, with their range of dimensions, meet the strictest needs of their users.

The association of a control desk with one or more consoles enables all combinations.
Furthermore, the accessories are compatible with those of the Spacial range of steel control desks and floor-standing enclosures.

Technical characteristics

- Floor-standing enclosure in 304L stainless-steel sheet, 1.5 mm thick.
- Protection rating: IP 55 according to IEC 60529.
- Resistance to external mechanical impacts: IK 10 according to IEC 62262.
- Locking by standard 3-mm double-bar lock (chrome-plated zamak).
- Hinges made entirely from stainless steel.
- With a height of 1000 mm and a depth of 500 mm, this range is available in 4 widths (600, 800, 1000 and 1200 mm).
- Full accessibility from the front.
- With removable rear panel.
- These control desks are equipped:

– with a pneumatic opening stay on the opening of the desk lid, opening to 75°,
– a single-piece cable-gland plate for cable entry,
– 2 perforated vertical rails on the desk lid for quick fixing of cables and trunkings.

- They are equipped with 4 adjustment rails for adjusting the depth of the mounting plates with a pitch of 25 mm.
- Furthermore, it is possible to install two mounting plates back-to-back, allowing the installation of a large number of devices, while conserving full accessibility from the front and from the rear.
- The hinges allow the opening direction to change and the doors to be quickly removed, with an opening angle of 120°.
- At the top, these control desks are equipped with blanking covers for cable entry. This last point allows the installation of one or several modular consoles.

Specific

Dimensions (mm)			Reference	Number of front doors	316L stainless-steel plinth, height 100 mm (1)		316L stainless-steel plinth, height 200 mm (1)		Plain mounting plate (2)
Height	Width	Depth			Front + corner	Side	Front + corner	Side	
1000	600	500	**NSYSDX6**	1	**NSYSPXF6100H**	**NSYSPXS5100H**	**NSYSPXF6200H**	2 × **NSYSPXS5100H**	**NSYPMP8560**
1000	800	500	**NSYSDX8**	1	**NSYSPXF8100H**	**NSYSPXS5100H**	**NSYSPXF8200H**	2 × **NSYSPXS5100H**	**NSYPMP8580**
1000	1000	500	**NSYSDX10**	2	**NSYSPXF10100H**	**NSYSPXS5100H**	**NSYSPXF10200H**	2 × **NSYSPXS5100H**	**NSYPMP85100**
1000	1200	500	**NSYSDX12**	2	**NSYSPXF12100H**	**NSYSPXS5100H**	**NSYSPXF12200H**	2 × **NSYSPXS5100H**	**NSYPMP85120**

(1) See section on stainless-steel composition accessories.
(2) See other mounting plates in common accessoires.

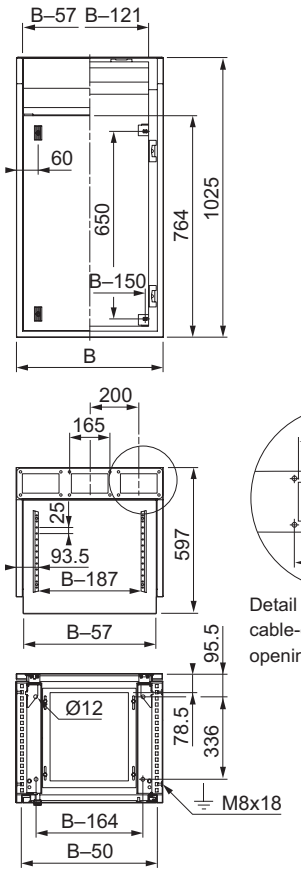
Stainless-steel control desks
Dimensions

Monobloc control desks without console with removable rear panel

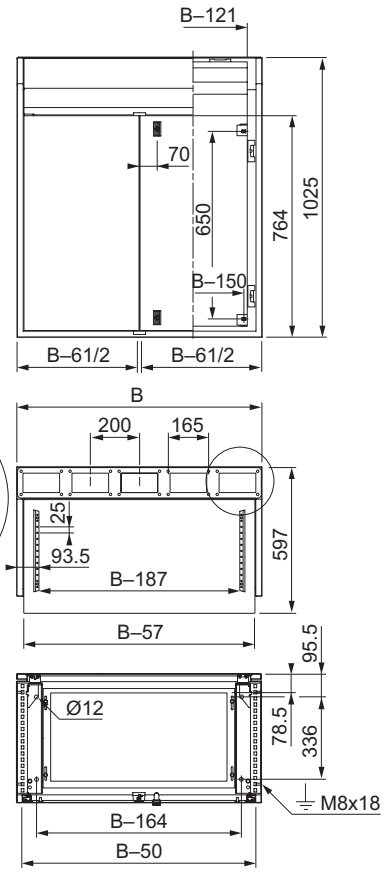
Cable-gland plate clearance dimensions (mm)	
Width	**Depth**
B–280	370

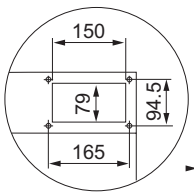
Adjustment of mounting-plate depth (mm)		
Dimensions	**Min.**	**Max.**
a	45	395
b	126	476

1 door



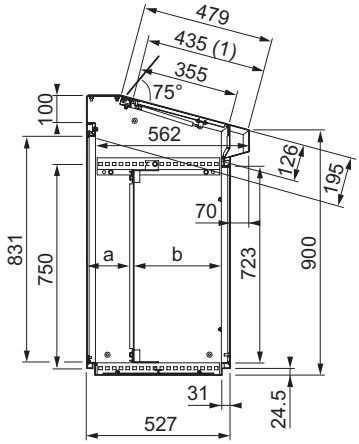
2 doors





Detail of the cable-entry openings

(1) Useful clearance



Common side view

Composition accessories

Modular consoles

The consoles are available with two widths of 400 and 600 mm and with two depths of 200 and 300 mm.

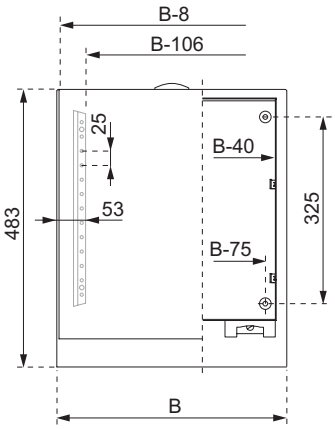
● They are equipped with:

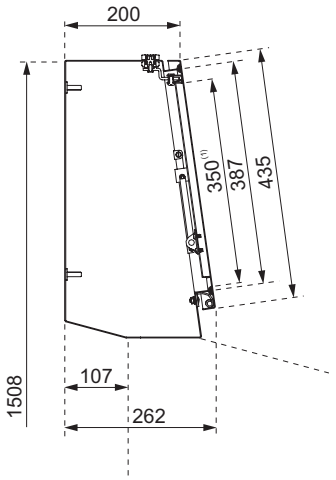
– A front door held by an opening stay, opening of 75°.

– A screwed rear panel with step slides in the deepest version (300 mm).

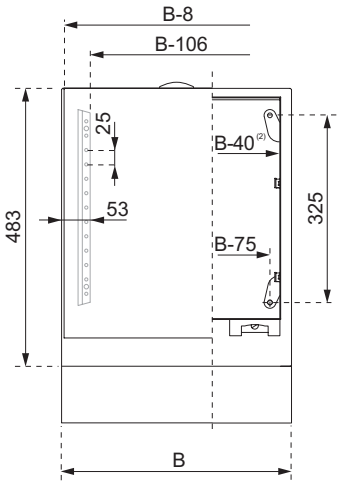
External dimensions (mm)		Console reference
Width (B)	Depth	
400	200	**NSYSDCX42**
400	300	**NSYSDCX43**
600	200	**NSYSDCX62**
600	300	**NSYSDCX63**

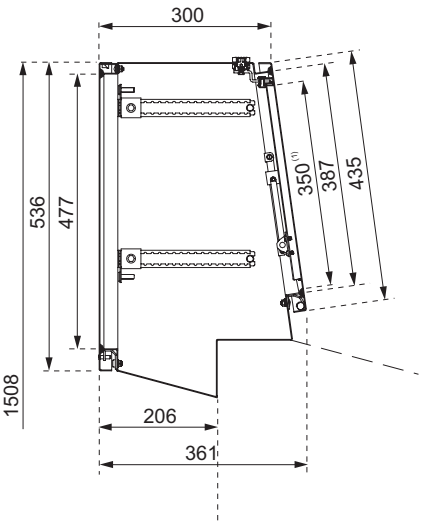
Depth: 200 mm





Depth: 300 mm





(1) Useful clearance.
(2) Same dimensions for the rear panel.

Composition accessories

Mounting options

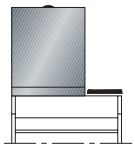


Fig. 1

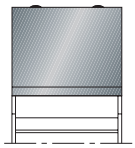


Fig. 2

600 mm(1)

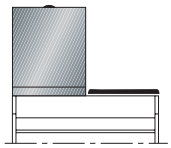


Fig. 3

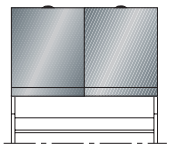


Fig. 4

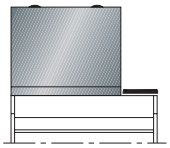


Fig. 5

800 mm(1)

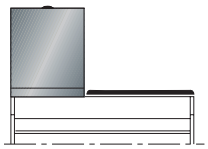


Fig. 6

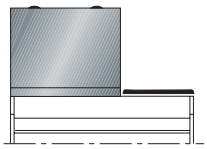


Fig. 7

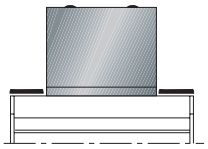


Fig. 8

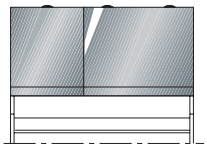


Fig. 9

1000 mm(1)

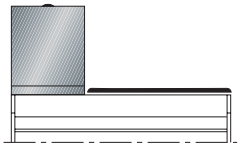


Fig. 10

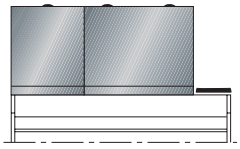


Fig. 11

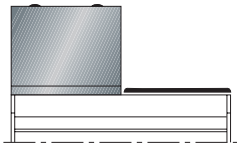


Fig. 12

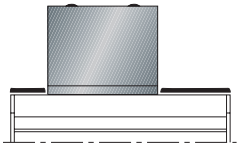


Fig. 13

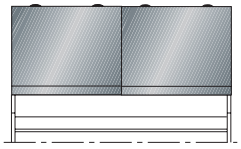


Fig. 14

1200 mm(1)

(1) Control desk width.

Models, dimensions and references

Control desk width (mm)	Control desk reference	Width (mm)	Console reference		Blanking covers	Fig. no.
			Depth: 200 mm	Depth: 300 mm		
600	**NSYSDX6**	400	**NSYSDCX42**	**NSYSDCX43**	**NSYRPX2**	1
600	**NSYSDX6**	600	**NSYSDCX62**	**NSYSDCX63**	**-**	2
800	**NSYSDX8**	400	**NSYSDCX42**	**NSYSDCX43**	**NSYRPX4**	3
800	**NSYSDX8**	400	2 × **NSYSDCX42**	2 × **NSYSDCX43**	**-**	4
800	**NSYSDX8**	600	**NSYSDCX62**	**NSYSDCX63**	**NSYRPX2**	5
1000	**NSYSDX10**	400	**NSYSDCX42**	**NSYSDCX43**	**NSYRPX6**	6
1000	**NSYSDX10**	600	**NSYSDCX62**	**NSYSDCX63**	**NSYRPX4**	7
1000	**NSYSDX10**	600	**NSYSDCX62**	**NSYSDCX63**	2 × **NSYRPX2**	8
1000	**NSYSDX10**	400 + 600	**NSYSDCX42 + NSYSDCX62**	**NSYSDCX43 + NSYSDCX63**	**-**	9
1200	**NSYSDX12**	400	**NSYSDCX42**	**NSYSDCX43**	**NSYRPX8**	10
1200	**NSYSDX12**	400 + 600	**NSYSDCX42 + NSYSDCX62**	**NSYSDCX43 + NSYSDCX63**	**NSYRPX2**	11
1200	**NSYSDX12**	600	**NSYSDCX62**	**NSYSDCX63**	**NSYRPX6**	12
1200	**NSYSDX12**	600	**NSYSDCX62**	**NSYSDCX63**	**NSYRPX2 + NSYRPX4**	13
1200	**NSYSDX12**	600	2 × **NSYSDCX62**	2 × **NSYSDCX63**	**-**	14

Composition accessories

Blanking covers

The blanking covers are designed to conceal
the free space in the control desk when the width of
the console or consoles is less than the width of the control desk
(it is necessary previously to remove the top plate supplied as standard):
- 4 lengths: 200, 400, 600 and 800 mm.
- AISI 304L.
- Fixed by screws.

Width (mm)	Reference
200	**NSYRPX2**
400	**NSYRPX4**
600	**NSYRPX6**
800	**NSYRPX8**

Pneumatic opening stay

- Holds the desk lid in open position at an angle of 75°.
- Delivered with the fixings.

Nominal load per stay (N)	Stay reference
244	**NSYPLS24**
300	**NSYPLS30**

- The stays are delivered as standard with the control desks, according to the following table:

Max. load on lid (kg)	Control desk reference	Standard supply stay
13	**NSYSDX6**	**NSYPLS24**
13	**NSYSDX8**	**NSYPLS24**
17	**NSYSDX10**	**NSYPLS30**
15	**NSYSDX12**	**NSYPLS30**

Selection tools

> www.schneider-electric.com

Our international site allows you to access all the Schneider Electric products in just two clicks with direct links to:

- A complete library of technical documents, catalogues, FAQs brochures, etc.
- Certificates.
- 2D & 3D drawings.
- Selection Guides from the e-catalogue.
- Product discovery sites.

You may also find illustrated overviews, news to which you can subscribe, a list of country contacts and more useful information.

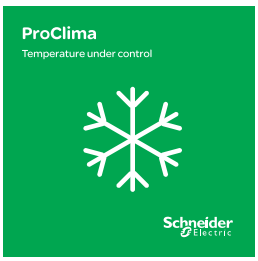
Our software suite

> Spacial.pro

Spacial.pro allows you to make switchboard proposals based on the standard Spacial offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the Bill of Material and 2D drawings for front/side views.

> ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.



> Spacial.ref
Thalassa.ref

These digital rules allow you to select the best components from the current extensive product range without the risk of any mistakes, since product and accessory selection take place automatically, saving you time and money.

6

Insulating enclosures

Thalassa PLS Insulating modular boxes 6/6

Selection guide 6/7

Dimensions 6/9

Thalassa PLM Wall-mounting in polyester 6/16

Dimensions 6/21

Selection guide 6/22

Thalassa PLMEX for potentially explosive atmospheres 6/34

Thalassa PLA Floor-standing in polyester 6/38

Selection guide 6/40

Dimensions 6/44

Accessories 6/46

Thalassa PLAT Ventilated canopy 6/41

Thalassa PLAZ Plinth-type open bottom 6/42

Thalassa PLAZT Plinth-type open bottom and ventilated canopy 6/43

Thalassa PLD Floor-standing DIN in polyester 6/70

Selection guide 6/71

Dimensions 6/73

Accessories 6/74

Polyester enclosures
Our solutions

Thalassa PLS boxes

- A range of insulating modular boxes for creating assemblies that separate functions and provide easy visibility thanks to their transparent covers.
- 14 box sizes from 270 × 180 × 180 mm to 720 × 540 × 230 mm.
- Accessories for power, automatism and modular applications.

Thalassa PLM wall-mounting enclosures

- ABS/PC or polyester monobloc enclosure, IP 66, plain and transparent doors with built-in top and bottom canopies allowing the enclosures to be inverted.
- 8 sizes from 310 × 215 × 160 mm to 1056 × 852 × 350 mm.
- Large range of accessories (common with the Spacial 3D universal enclosure) for power, automatism and modular applications.

Polyester enclosures

Thalassa PLA floor-standing enclosure

- Modular design, made from polyester, combining:
  – 40 sizes.
  – 4 versions available, from completely sealed (IP 65) to self-ventilated with canopy and/or open bottom (IP 44 or 54).
  – Plain, glazed or anti-posting door.
- The large range of accessories allows it to adapt to all your needs:
  – Power distribution.
  – Automatism.
  – Modular.
  – 19".

Thalassa PLD floor-standing enclosure

- Mainly designed for Low Voltage power distribution, they have inserts for installing busbars.

Polyester enclosures
Customised solutions

Configured Specific

The customised offer anticipates the adaptation needs of the standard offer

Advantages of our customised offer

Preparation for installation with machining
Save time on marking out and transport to the machining location, avoid drilling errors with pre-machining of the body, panels and doors.

Save time with pre-installed accessories
On the polyester floor-standing and wall-mounting enclosures, we can supply or rapidly install a selection of accessories.

Save time with machined accessories
In order to adapt better to your needs, we can machine the accessories for polyester wall-mounting and floor-standing enclosures, including mounting plate, internal doors, cable-gland plates, etc.

Improve its appearance with colour
For better integration of your enclosures in their environment or to help identify them, we offer you two solutions:
- Enclosures with colour in the mass, maintenance free (minimum amount required).
- Repainting of standard enclosures.
- Application of anti-graffiti paint.

Increase the service life of your equipment
Installation of the most frequent accessories of the thermal range in the factory.

Polyester enclosures
Installation examples

Configured Specific

Machined, coupled and equipped Thalassa PLS boxes

Thalassa PLM wall-mounting enclosure machined in the factory to accommodate cable glands

Thalassa PLA floor-standing enclosure with accessories installed in the factory

Coupled Thalassa PLA floor-standing enclosures with accessories installed ain the factory

Insulating modular boxes

Modular

The dimensions of the sides, multiples of 9 cm, allow the creation of assemblies.

Protection

- IP 65.
- Seal between body and cover.

Choice

- 14 sizes.
- 9 combinations of length × width.
- 2 cover heights.
- Transparent lids.
- Opaque lid made from polycarbonate or polyester.

Industry or infrastructure

- Energy, automatism.
- Accessories for modular distribution.

Safety

- Full insulation for class II equipment.
- Locking with 4, 6 or 8 points.

Easy

Bosses with inserts, at the rear of the body, for fixing plates or various supports.

Customisation

- Various machining operations of the rear and the cover.
- Option of colour in the mass.

IP 65 insulating modular boxes
Introduction

- The product references show the two lateral dimensions in cm.
- 14 sizes of insulating boxes; the sides are multiples of 9 cm.
- Insulating boxes that can be coupled by all their side surfaces, allowing the creation of the greatest variety of modular assemblies.
- Rear made from polyester reinforced with fibreglass, moulded by hot compression, 9 sizes.
- 3 types of lids available according to the sizes:

– Standard lid, made from transparent polycarbonate with neoprene seal, 45 mm high, or 95 mm high (final index A) according to the sizes.
– Opaque polycarbonate lid (index C), with neoprene gasket, 45 mm high, or 95 mm high (final index A) according to the sizes.
– Polyester lid (index P) with PUR seal, 45 mm high.

- The rears (prefix F) and the covers (prefix T) are supplied separately as standard references. The separate covers are supplied without locking screws or plumbing accessories.
- The PLS enclosures with transparent lids are also offered in batches; the reference refers to the complete batch.

Technical characteristics

- Degree of protection: IP 65.
- Resistance to external mechanical impacts: IK 09.
- RAL 7032 grey colour (opaque rears and lids).
- Excellent resistance to corrosion; can withstand most chemical agents.
- Full insulation to create class II assemblies.
- Standard lock with slot screws outside the volume of the boxes. Delivered with plumbing system.
- External wall mounting by 4 lugs, to be ordered separately.
- Service temperature: – 30 to + 120 °C.
- Bosses with M6 inserts for fixing the mounting plate.
- Halogen-free and compliant with the RoHS directive.
- Certification according to standard IEC 62208, guaranteeing IP, IK, resistance to heat and fire (self-extinguishing), insulation to 5000 V, resistance to bad weather and load of the mounting plate, 100 kg/m^2.
- UL certification and NEMA classification 4X and 13.

Selection guide

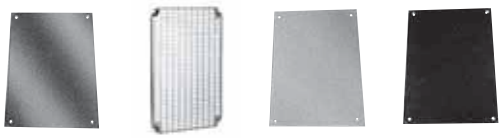
Dimensions (mm)			Cover boxes				
Height	Width	Depth	Transparent	Opaque	Polyester	Transparent in batches	Supply
180	270	180	**NSYPLS1827**	**NSYPLSC1827**	**NSYPLSP1827**	**NSYPLS1827L**	56
270	270	180	**NSYPLS2727**	**NSYPLSC2727**	**NSYPLSP2727**	**NSYPLS2727L**	56
270	270	230	**NSYPLS2727A**	**NSYPLSC2727A**		**NSYPLS2727AL**	56
270	360	180	**NSYPLS2736**	**NSYPLSC2736**	**NSYPLSP2736**	**NSYPLS2736L**	56
270	360	230	**NSYPLS2736**	**NSYPLSC2736A**	**-**	**NSYPLS2736AL**	56
270	540	180	**NSYPLS2754**	**NSYPLSC2754**	**NSYPLSP2754**	**NSYPLS2754L**	28
270	540	230	**NSYPLS2754A**	**NSYPLSC2754A**	**-**	**NSYPLS2754AL**	28
360	360	180	**NSYPLS3636**	**NSYPLSC3636**	**NSYPLSP3636**	**NSYPLS3636L**	28
360	540	180	**NSYPLS3654**	**NSYPLSC3654**	**NSYPLSP3654**	**NSYPLS3654L**	28
360	540	230	**NSYPLS3654A**	**NSYPLSC3654A**	**-**	**NSYPLS3654AL**	28
360	720	230	**NSYPLS3672A**	**NSYPLSC3672A**	**-**	**NSYPLS3672AL**	27
540	540	180	**NSYPLS5454**	**NSYPLSC5454**	**NSYPLSP5454**	**NSYPLS5454L**	14
540	540	230	**NSYPLS5454A**	**NSYPLSC5454A**	**-**	**NSYPLS5454AL**	14
540	720	230	**NSYPLS5472A**	**NSYPLSC5472A**	**-**	**NSYPLS5472AL**	14

IP 65 insulating modular boxes
Introduction

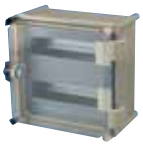
Selection guide

Dimensions (mm)			Rear 135 mm	Bottom covers			Top covers	
Height	Width	Depth		Transparent 45 mm	Opaque 45 mm	Polyester 45 mm	Transparent 95 mm	Opaque 95 mm
180	270	180	**NSYFPLS1827**	**NSYTPLS1827**	**NSYTPLSC1827**	**NSYTPLSP1827**	-	-
270	270	180	**NSYFPLS2727**	**NSYTPLS2727**	**NSYTPLSC2727**	**NSYTPLSP2727**	-	-
270	270	230	**NSYFPLS2727**	-	-	-	**NSYTPLS2727A**	**NSYTPLSC2727A**
270	360	180	**NSYFPLS2736**	**NSYTPLS2736**	**NSYTPLSC2736**	**NSYTPLSP2736**	-	-
270	360	230	**NSYFPLS2736**	-	-	-	**NSYTPLS2736A**	**NSYTPLSC2736A**
270	540	180	**NSYFPLS2754**	**NSYTPLS2754**	**NSYTPLSC2754**	**NSYTPLSP2754**	-	-
270	540	230	**NSYFPLS2754**	-	-	-	**NSYTPLS2754A**	**NSYTPLSC2754A**
360	360	180	**NSYFPLS3636**	**NSYTPLS3636**	**NSYTPLSC3636**	**NSYTPLSP3636**	-	-
360	540	180	**NSYFPLS3654**	**NSYTPLS3654**	**NSYTPLSC3654**	**NSYTPLSP3654**	-	-
360	540	230	**NSYFPLS3654**	-	-	-	**NSYTPLS3654A**	**NSYTPLSC3654A**
360	720	230	**NSYFPLS3672**	-	-	-	**NSYTPLS3672A**	**NSYTPLSC3672A**
540	540	180	**NSYFPLS5454**	**NSYTPLS5454**	**NSYTPLSC5454**	**NSYTPLSP5454**	-	-
540	540	230	**NSYFPLS5454**	-	-	-	**NSYTPLS5454A**	**NSYTPLSC5454A**
540	720	230	**NSYFPLS5472**	-	-	-	**NSYTPLS5472A**	**NSYTPLSC5472A**

Selection guides for mounting plates



For installing in the boxes (mm)		Metallic mounting plates		Insulating mounting plates	
Height	Width	Plain	Telequick	Polyester	Bakelite
180	270	**NSYPMM1827**	**NSYPMR1827**	**NSYPMA1827**	**NSYPMB1827**
270	270	**NSYPMM2727**	**NSYPMR2727**	**NSYPMA2727**	**NSYPMB2727**
270	360	**NSYPMM2736**	**NSYPMR2736**	**NSYPMA2736**	**NSYPMB2736**
270	540	**NSYPMM2754**	**NSYPMR2754**	**NSYPMA2754**	**NSYPMB2754**
360	360	**NSYPMM3636**	-	**NSYPMA3636**	**NSYPMB3636**
360	540	**NSYPMM3654**	**NSYPMR3654**	**NSYPMA3654**	**NSYPMB3654**
360	720	**NSYPMM3672**	**NSYPMR3672**	**NSYPMA3672**	**NSYPMB3672**
540	540	**NSYPMM5454**	**NSYPMR5454**	**NSYPMA5454**	**NSYPMB5454**
540	720	**NSYPMM5472**	**NSYPMR5472**	**NSYPMA5472**	**NSYPMB5472**



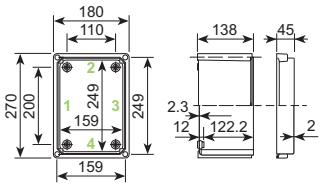
For installing in the boxes (mm)		Modular distribution chassis	No. of rows	No. of 18 mm modules
Height	Width	Page 6/14		
180	270	**NSYDLS12**	1	12
270	270	**NSYDLS24**	2	24
360	270	**NSYDLS242**	2	24
		NSYDLS36	3	36
540	270	**NSYDLS48**	4	48

IP 65 insulating modular boxes
Dimensions

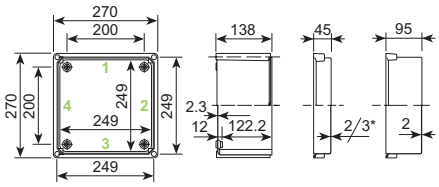
Dimensions (mm)

The surfaces are numbered to enable identification of the surfaces to be drilled in the customised offer.

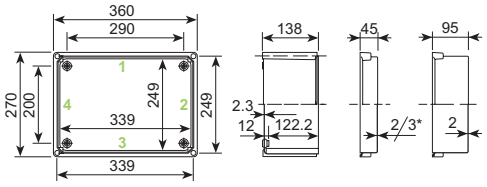
NSYPLS•••1827



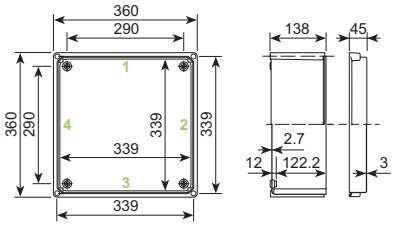
NSYPLS•••2727•



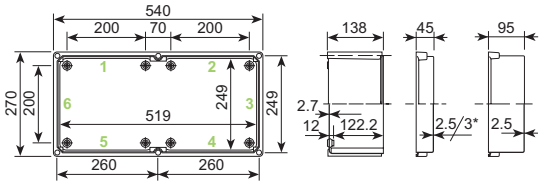
NSYPLS•••2736•



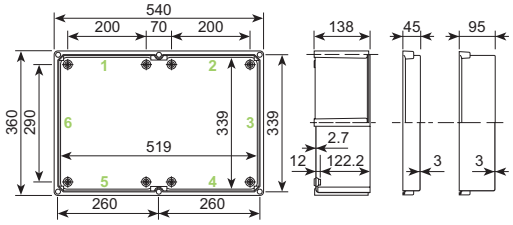
NSYPLS•••3636



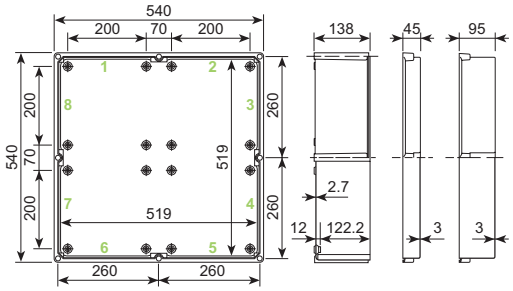
NSYPLS•••2754•



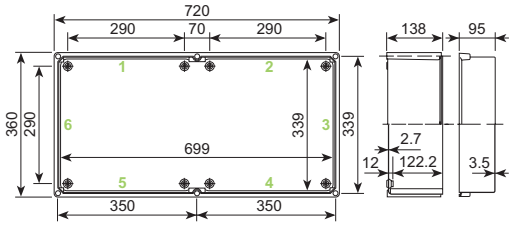
NSYPLS•••3654•



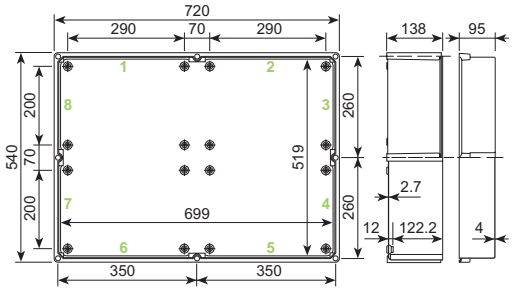
NSYPLS•••5454•



NSYPLS•••3672•

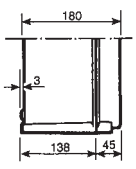


NSYPLS•••5472•



* Thickness of 3 mm for the polyester cover.

A



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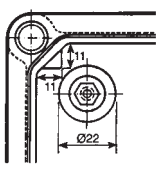

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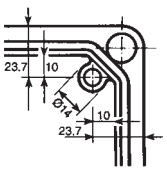
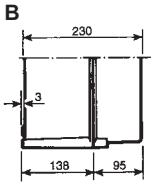


B



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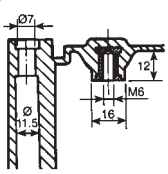

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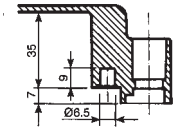


A Bottom and bottom cover.
B Bottom and top cover.
C D Internal view of the corners, details of the bosses with M6 inserts.
E F Internal view of the corners of the poyester covers with bosses for inserts ref. **NSYTEX5** for M5 screws.

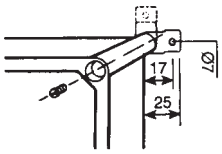
6

IP 65 insulating modular boxes
Accessories

Wall-fixing lugs

- Set of 4 lugs and fixings.
- Material: passivated zinc-coated or stainless steel.

Name	References
Steel mounting lugs	**NSYPF27N**
Stainless-steel mounting lugs	**NSYPF27X**



Post-fixing device

- Contains all the elements required for mounting on a post.

For installation on a surface with dimensions (mm)	References
270	**NSYFSP27270**
360	**NSYFSP27360**
540	**NSYFSP27540**

Coupling frames

- Coupling frame for an opening of 110 mm (for 180-mm surfaces).
- Coupling frame for an opening of 200 mm (for 270-mm surfaces).
- Coupling frame for an opening of 290 mm (for 360-mm surfaces).
- A sealing gasket is built into the frame with full opening to maintain the protection rating of IP 65.
- 200-mm or 290-mm frame with partial opening: without seal, IP 65 not maintained (to be ordered in multiples of 10).

Opening (mm)	References	
	Full-opening frame	Partial-opening frame
110	**NSYUM27180**	-
200	**NSYUM27270**	**NSYUCC270**
290	**NSYUM27360**	**NSYUCC360**

Side plates

- 200-mm cable-gland plate or locking plate for the 270-mm surfaces.
- 290-mm cable-gland plate or locking plate for the 360-mm surfaces.
- IP 65 maintained by a sealing gasket.

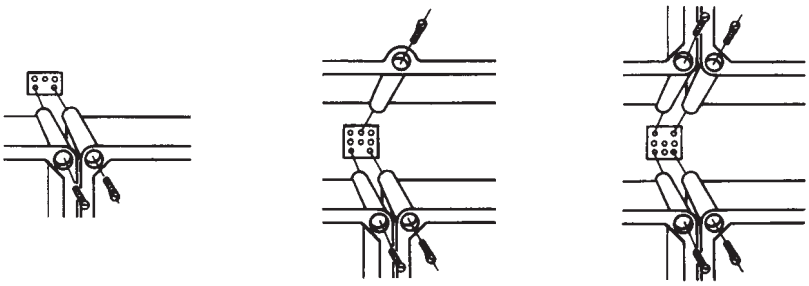
Side plates (mm)	References
200	**NSYTL27270**
290	**NSYTL27360**

IP 65 insulating modular boxes
Accessories

Box coupling unit piece

- For coupling 2, 3 or 4 boxes, with optional wall-mounting.
- To be ordered in multiples of 25.

For coupling	References
2 boxes	**NSYPS2C27**
3 or 4 boxes	**NSYPS4C27**



M6 × 8 screw with cylindrical head.

Hinges

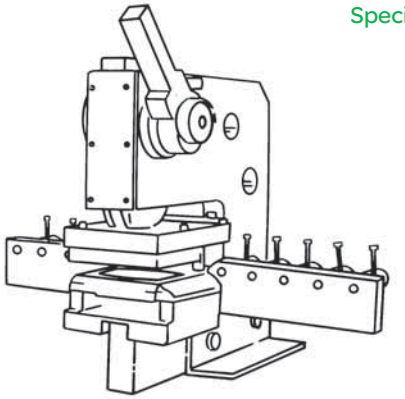
- Set of 2 external hinges made from plastic or internal hinges made from brass.
- To open the door to 180°.

Name	References
External plastic hinges	**NSYBE27**
Internal brass hinges	**NSYBL27**

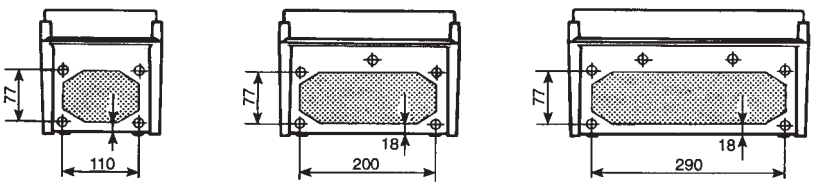
Specific

Drill holes

- The machining operations on the dimensions of the lateral plates or frames can be specifically produced in our factory.
- The surfaces can be identified by the numbers provided on page **6/9**.



Side cut-out press, ref. **NSYPUC27**.



IP 65 insulating modular boxes
Accessories

With slotted head

With wings

With plumbable triangular head

Closing for PLS boxes

- Set of 4, 6 or 8 screws.
- Three types of screws are available:
  – With slotted head.
  – With wings.
  – With plumbable triangular head.
- Steel plumbing accessory included as standard. Option of using plastic-coated plumbing triangles, ref. **NSYPPS27** (order in multiples of 10).

Name	Tool	References
Set of 4 slotted screws (1)	Flat-blade screwdriver	**NSYTCD274**
Set of 6 slotted screws (1)	Flat-blade screwdriver	**NSYTCD276**
Set of 8 slotted screws (1)	Flat-blade screwdriver	**NSYTCD278**
Set of 4 wing screws (2)	Manual	**NSYTCM274**
Set of 6 wing screws (2)	Manual	**NSYTCM276**
Set of 8 wing screws (2)	Manual	**NSYTCM278**
Set of 4 triangular screws	NSYLT27	**NSYTCT274**
Set of 6 triangular screws		**NSYTCT276**
Set of 8 triangular screws		**NSYTCT278**

(1) Included in the standard references of boxes **NSYPLS•••**.
(2) Included in the standard references of modular distribution boxes **NSYPLS•••DLS•••**.

Closing locks

- Option of installing a side lock, on the opposite side to where the hinges are installed.

Name	Tool	References
Double-bar side lock and handle	NSYDBP	**NSYCL27M**
Side lock with key 405		**NSYCL27L405**
Side lock with key 1242E		**NSYCL27L1242E**

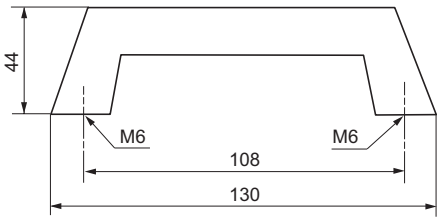
Plumbing and opening

Name	References
Plastic-coated plumbing triangle*	**NSYPPS27**
Triangular key for PLS	**NSYLT27**

*Order in multiples of 10.

Plastic carrying handle

Name	Reference
Carrying handle	**NSYATM27**

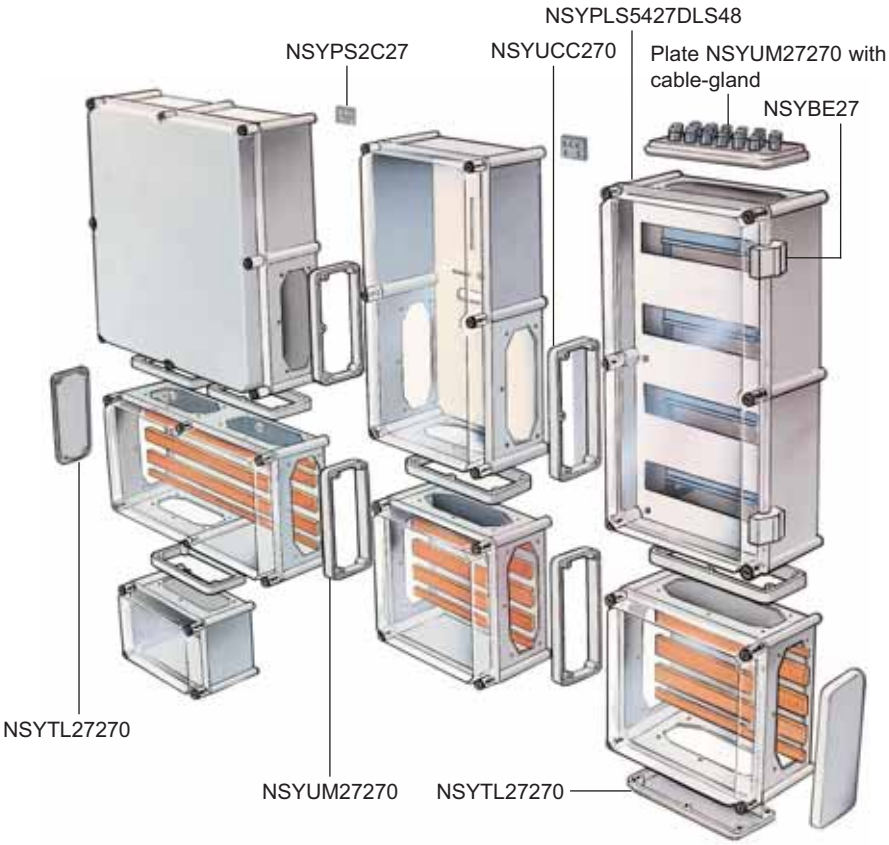


See also the accessories

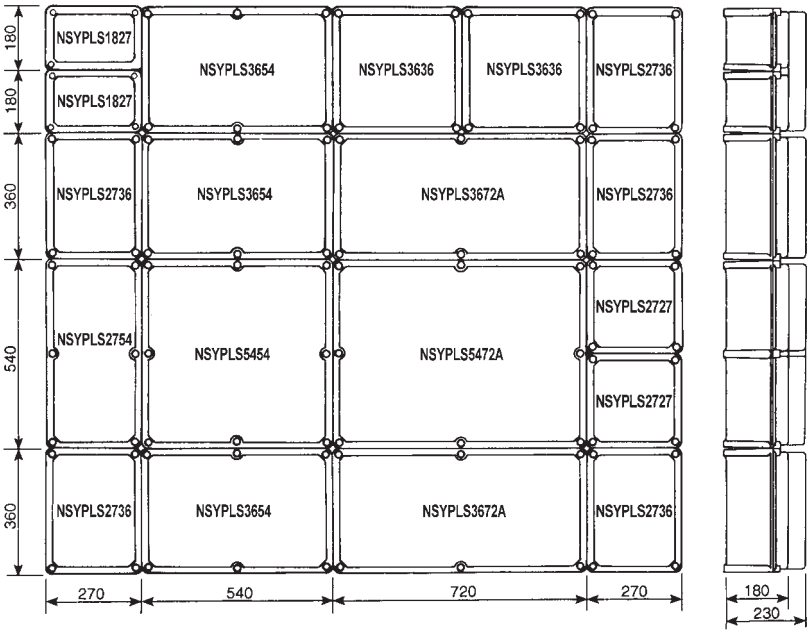
Cable management page **7/103**
Distribution blocks page **7/96**
Ventilation louvres page **8/29**
Modular access window page **7/135**
Door window page **7/135**

Insulating modular boxes
Accessories

Examples of assembly



All the boxes can be joined by their lateral surfaces, using the coupling frames **NSYUM•••** or **NSYUCC•••**, and the joining and fixing pieces **NSYPS2C27** and **NSYPS4C27**.



Insulators

To form busbars.

NSYAE25

NSYAS25

Insulating modular boxes
Modular distribution application

NSYPLS5427DLS48

Insulating modular boxes with modular distribution chassis

PLS boxes, polyester rear and PC transparent cover with hinges and wing screws for manual opening.
Built-in DLS modular chassis, made up of an insulating protection panel, RAL 7011 colour, 35-mm DIN rails and a 2 × 16 + 5 × 6 mm² neutral/earth connection strip.

- Opening for cable entry, delivered with lock plate, ref. **NSYTL27270**.
- Double-insulating installation.
- Plastic external hinges, allowing opening to 180°.
- Removable 36-mm blanking covers (2 modules): 1 per row in the standard offer.
- The modular chassis can be ordered separately, see references page **6/8**.

Specific

- The boxes can be equipped with a double-bar lock and handle ref. **NSYCL27M**, or a lock with key ref. **NSYCL27L405**, by specific demand.

See also the accessories

Modular distribution page **7/73**

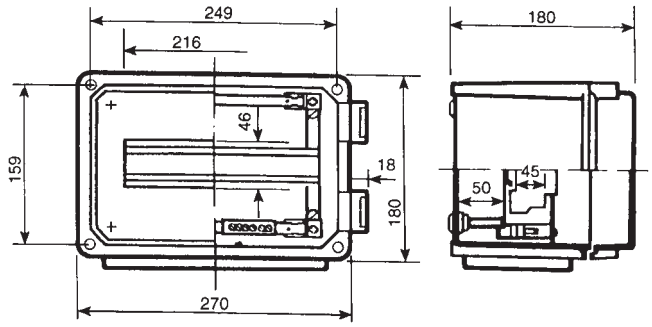
Insulating modular boxes
Modular distribution application

Selection guide

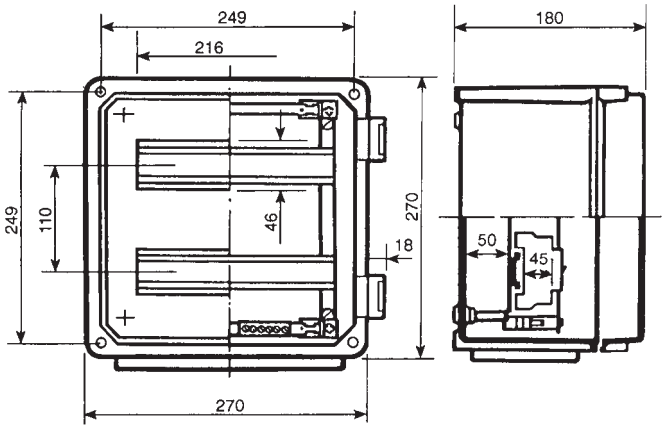
External dimensions (mm)			Number of 18 mm modules	Number of rows	Approximate weight (kg)	References
Height (A)	Width (B)	Depth (C)				
180	270	180	12	1	1.7	**NSYPLS1827DLS12**
270	270	180	24	2	2.5	**NSYPLS2727DLS24**
360	270	180	24	2	2.7	**NSYPLS3627DLS24**
360	270	180	36	3	2.8	**NSYPLS3627DLS36**
540	270	180	48	4	3.8	**NSYPLS5427DLS48**

Dimensions (mm)

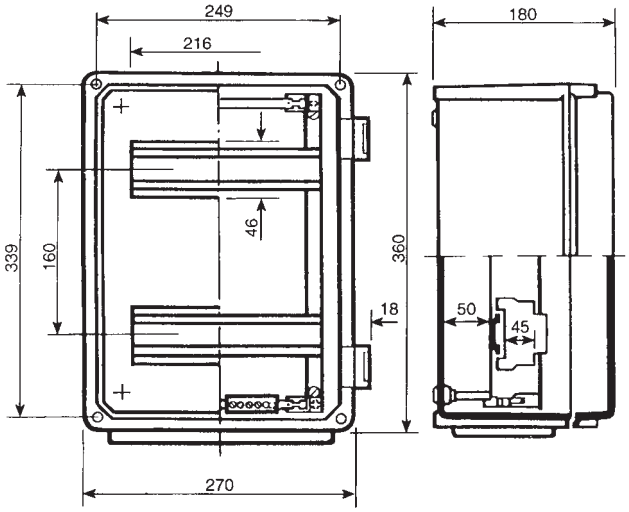
NSYPLS1827DLS12



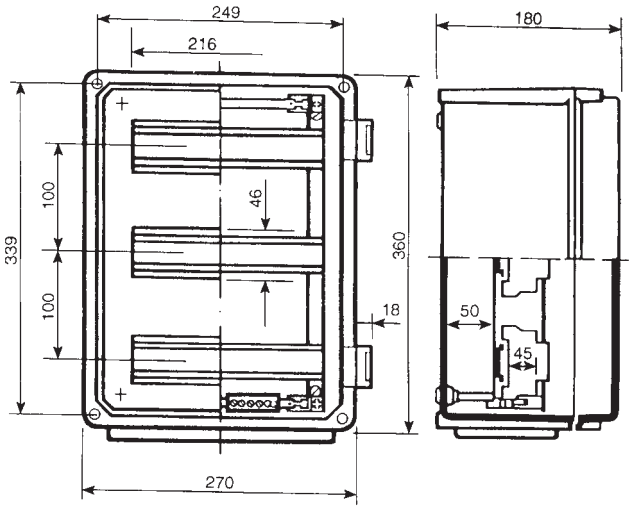
NSYPLS2727DLS24



NSYPLS3627DLS24



NSYPLS3627DLS36



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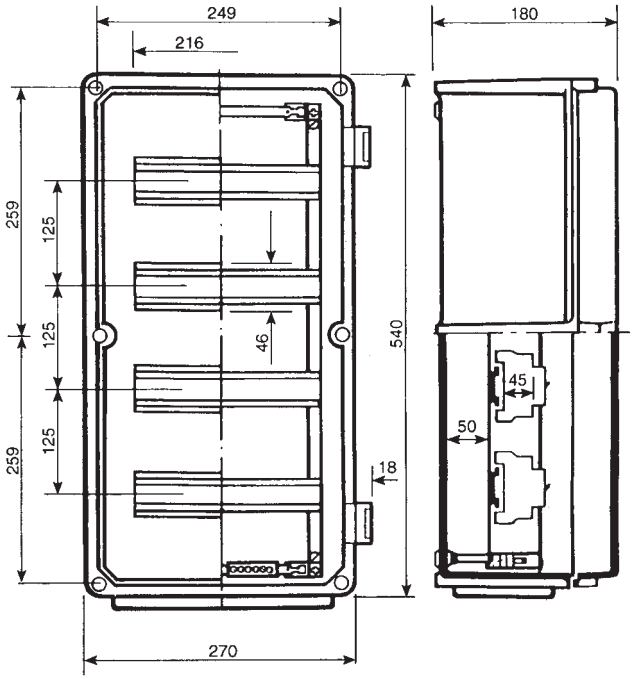


Polyester wall-mounting enclosures

Service life

High resistance to corrosion in harsh environments, maintaining its mechanical properties and insulation.

Protection

- IP 66.
- Polyurethane seal.
- Built-in canopy.
- Lock outside sealed area.

Choice

- 1 ABS/PC version and 7 polyester versions.
- Smooth or glazed door.

Easy

- Door easily reversible by turning it over.
- Opening to 120° or 180°.
- Easy machining with no corrosion.
- Lightness.

Smart

- Notches for easy fixing of DIN rails.
- Grid pattern on the rear of the door for marking the machining operations.

Customisation

- Configured: machining and accessories.
- Specific: non-standard colour and accessories.

Safety

- Full insulation (to produce class II units).
- Mechanical strength.
- No risk to the public.

Applications

- Industry or infrastructures in harsh environments.
- Indoor or outdoor installation.
- Accessories for modular distribution.

General characteristics of the Thalassa PLM wall-mounting enclosures:

- Indoor or outdoor use.
- 1 size for the ABS/PC wall-mounting enclosure (310 × 215 × 160 mm).
- 7 sizes of polyester wall-mounting enclosures.
- Monobloc body including the canopies (seal protection), except for wall-mounting enclosure ref. **NSYPLM3025**.
- Doors with polyurethane seal.
- 2 types of doors.

– Smooth.
– Transparent (for the ABS/PC enclosure) or glazed (for the polyester enclosures).

- Reversible door opening direction by turning the enclosure over.
- Degree of protection IP 66 according to standard IEC 60529.
- Impact resistance IK 10 for the plain doors and surfaces and IK 08 for the glazed doors of the polyester versions, according to standard IEC 62262.
- Many accessories in common with the range of steel wall-mounting enclosures, Spacial S3D or Spacial CRN.

Properties of the material of the polyester versions

The wall-mounting enclosures are made from polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 colour.
This material:

- Is insulating: several kV per mm.
- Withstands cold and heat in the range of –50 °C...+150 °C.
- Does not soften under intense heat (ball resistance at +150 °C).
- Is self-extinguishing (does not propagate fire): HB40 classification and self-extinguishing in several seconds during the glow-wire test at 960 °C –30 sec.
- Does not contain halogens.
- Releases little smoke and no toxic smoke in the event of combustion.
- Is light.
- Can be machined easily.
- Is corrosion-resistant: no rusting, and can withstand many chemical agents.
- Can resist bad weather.

Characteristics of the production process of the polyester version

The components of the enclosure (body and doors) are moulded by hot compression: the parts have an excellent finish on both sides and can include bosses for accommodating inserts and accessories for mounting or cable-management.

Certificate of conformity with enclosure standard IEC 62208 for:

IP, IK, resistance to heat and fire, insulation 5000 V, resistance to bad weather and corrosion and resistance to internal loads (150 kg/m^2) and loads on the door (30 kg/m^2).

UL certification and NEMA classification 4x and 13 for the polyester wall-mounting enclosures

Full insulation to produce class II units according to IEC 61439-1

Complies with the RoHS directive

ABS/PC wall-mounting enclosures 310 × 215 mm IP 66
Introduction

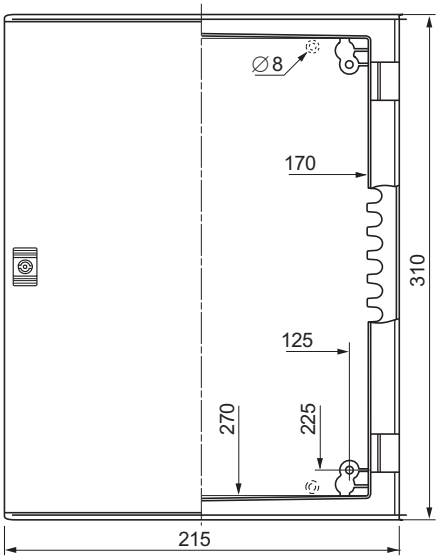
Technical characteristics

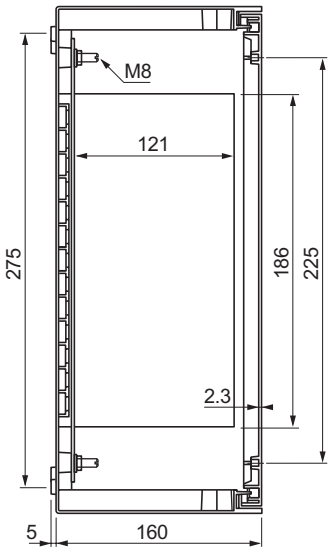
- Monobloc wall-mounting enclosure made from ABS/PC, RAL 7032 colour.
- Version with transparent polycarbonate door.
- Closes with a 3-mm double-bar lock.
- Door opening: 180°.
- Degree of protection: –35 °C...+90 °C.
- Protection rating IP 66 according to IEC 60529.
- Resistance to external mechanical impacts of IK 10 (20 joules) according to IEC 62262.
- Direct fixing of symmetrical rails ref. **NSYCS200PLM** with plastic nuts ref. **NSYTCSPLM**, to be installed in the notches on the rear of the body, with a pitch of 25 mm.
- Fixing of installation plates on the studs at the rear of the enclosure.
- Back of the door with a 25-mm grid pattern.

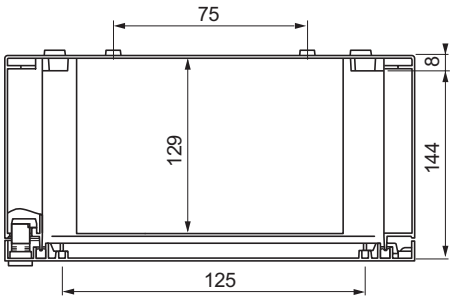
External dimensions (mm)			References of wall-mounting enclosures with door	
Height	Width	Depth	Plain*	Transparent
310	215	160	**NSYPLM32**	**NSYPLM32T**

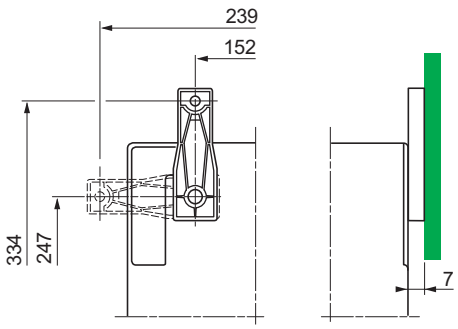
*These enclosures are also available equipped with metallic or insulating mounting plates. See summary guide of the references on page **6/22**.

Dimensions









6

Polyester wall-mounting enclosures 308 × 255 mm IP 66
Introduction

Technical characteristics

- Monobloc wall-mounting enclosure made from polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 grey colour.
- Version with transparent tempered-glass door.
- Degree of protection IP 66 according to IEC 60529.
- Resistance to external mechanical impacts:

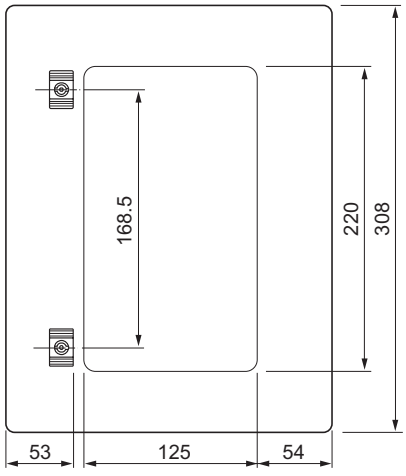
– Plain door enclosures IK 10 (20 joules).
– Glazed door enclosures IK 08 (5 joules) according to IEC 62262.

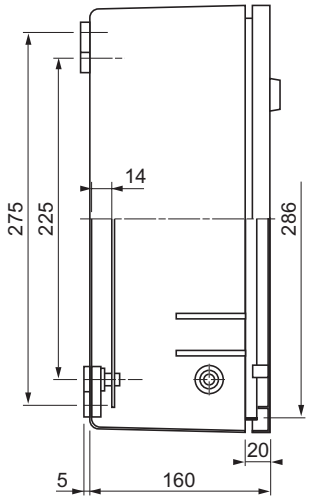
- Closes with two 3-mm double-bar locks.
- Door opening angle: 120°.
- Fixing of rear accessories on 4 M8 × 18 studs.
- Grid pattern with a pitch of 50 mm on the back of the door.

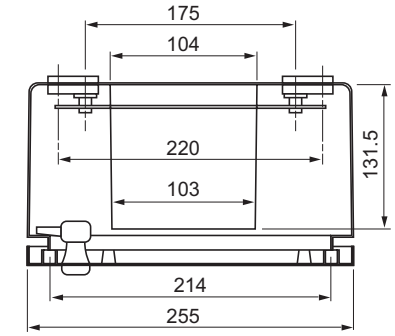
External dimensions (mm)			References of wall-mounting enclosures with door	
Height	Width	Depth	Plain*	Transparent
308	255	160	**NSYPLM3025**	**NSYPLM3025T**

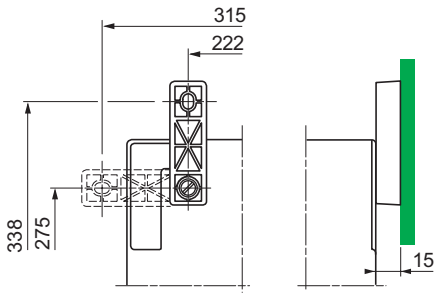
*These enclosures are also available equipped with metallic or insulating mounting plates. See summary guide of the references on page **6/22**.

Dimensions









6

Polyester wall-mounting enclosures IP 66
Introduction

Technical characteristics

- Monobloc wall-mounting enclosure made from polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 grey colour.
- Version with transparent tempered-glass door.
- Degree of protection IP 66 according to IEC 60529.
- Resistance to external mechanical impacts:
– Plain door enclosures IK 10 (20 joules).
– Glazed door enclosures IK 08 (5 joules) according to IEC 62262.
- Locking device outside the sealed area, guaranteeing the tightness of IP 66 over time.
- Locking system:
– Enclosure height ≤ 847 mm: 2 locks with double-bar insert or 1 handle with key lock and 3-point closure.
– Enclosure height 1056 mm: 1 lock with double-bar insert and 4-point closure.
- Door opening angle: 180°.
- Bosses for accessory-fixing inserts: M6 inside the enclosure, M5 in the door for enclosure heights of 430 and 530 mm, M6 in the door for enclosure heights ≥ 647 mm.
- Fixing of rear accessories on 4 M8 studs, included in the standard supply.
- Direct fixing of symmetrical rails ref. **NSYCS●●●PLM**, with plastic nuts, ref. **NSYTCSPLM**, to be installed in the notches on the rear of the body, with a pitch of 25 mm.
- Grid pattern with a pitch of 25 mm on the back of the door.

Built-in canopy protecting the door and the sealing gasket.
Two double-bar 3-mm locks outside the sealed zone.

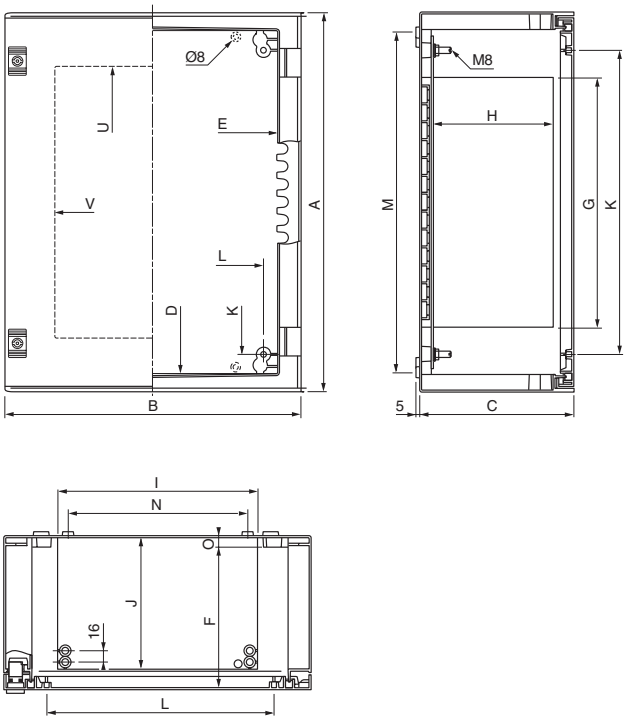
Polyamide hinge pin, easily removable and captive.

External dimensions (mm)			References of wall-mounting enclosures with door			
Height (A)	**Width** (B)	**Depth** (C)	**Plain** (3)	**Plain** (1)	**Transparent**	**Transparent** (1)
430	330	200	**NSYPLM43**	**NSYPLM43V**	**NSYPLM43T**	**NSYPLM43TV**
530	430	200	**NSYPLM54**	**NSYPLM54V**	**NSYPLM54T**	**NSYPLM54TV**
647	436	250	**NSYPLM64**	**NSYPLM64V**	**NSYPLM64T**	**NSYPLM64TV**
747	536	300	**NSYPLM75**	**NSYPLM75V**	**NSYPLM75T**	**NSYPLM75TV**
847	636	300	**NSYPLM86**	**NSYPLM86V**	**NSYPLM86T**	**NSYPLM86TV**
1056	852	350	**NSYPLM108** (2)	-	**NSYPLM108T** (2)	-

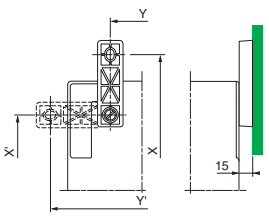
(1) Wall-mounting enclosure with handle and lock with 3-point closure and key 1242 E delivered as standard.
(2) Wall-mounting enclosure with standard 5-mm double-bar lock and lock with 4-point closure.
(3) These enclosures are also available equipped with metallic or insulating mounting plates. See summary guide of the references table on page **6/22**.

Polyester wall-mounting enclosures IP 66
Dimensions

A: Height
B: Width
C: Depth



Dimensions (mm)										Bottom screw and door bosses (mm)		Internal fixing (m)			Glazed door (mm)		References
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	U	V	
430	330	200	380	260	181	247	150	179	168	325	225	375	150	13	273	194	**NSYPLM43**
530	430	200	480	360	181	347	150	279	168	425	325	475	250	13	373	294	**NSYPLM54**
647	436	250	580	360	228	388	192	279	212	525	325	575	250	13	473	294	**NSYPLM64**
747	536	300	680	460	278	487	241	379	261	325	425	675	350	15	573	394	**NSYPLM75**
847	636	300	780	560	278	587	241	479	261	725	525	775	450	15	673	494	**NSYPLM86**
1056	852	350	980	760	327	775	280	680	300	925	725	975	650	15	854	661	**NSYPLM108**



External fixing with lugs (mm)				References
Vertical		Horizontal		
X	Y	X'	Y'	
490	225	355	360	**NSYPLM43**
590	325	455	460	**NSYPLM54**
690	330	555	465	**NSYPLM64**
790	430	655	565	**NSYPLM75**
890	530	755	665	**NSYPLM86**
1090	750	955	885	**NSYPLM108**

Polyester wall-mounting enclosure
Selection guide

Summary guide of the references

External dimensions (mm)			ABS/PC wall-mounting enclosures IP 66		Polyester wall-mounting enclosures IP 66				Wall-mounting enclosures with plain door and mounting plate	
H	W	D	Plain door	Transp. door	Plain door	Transp. door	Plain door 3-point closure	Transp. door 3-point closure	Plain	Bakelite
			Page 6/18		Page 6/19 and 6/20		Page 6/20			
310	215	160	**NSYPLM32**	**NSYPLM32T**	-	-	-	-	**NSYPLM32P**	**NSYPLM32B**
308	255	160	-	-	**NSYPLM3025**	**NSYPLM3025T**	-	-	**NSYPLM3025P**	**NSYPLM3025B**
430	330	200	-	-	**NSYPLM43**	**NSYPLM43T**	**NSYPLM43V**	**NSYPLM43TV**	**NSYPLM43P**	**NSYPLM43B**
530	430	200	-	-	**NSYPLM54**	**NSYPLM54T**	**NSYPLM54V**	**NSYPLM54TV**	**NSYPLM54P**	**NSYPLM54B**
647	436	250	-	-	**NSYPLM64**	**NSYPLM64T**	**NSYPLM64V**	**NSYPLM64TV**	**NSYPLM64P**	**NSYPLM64B**
747	536	300	-	-	**NSYPLM75**	**NSYPLM75T**	**NSYPLM75V**	**NSYPLM75TV**	**NSYPLM75P**	**NSYPLM75B**
847	636	300	-	-	**NSYPLM86**	**NSYPLM86T**	**NSYPLM86V**	**NSYPLM86TV**	**NSYPLM86P**	**NSYPLM86B**
1056	852	350	-	-	**NSYPLM108**	**NSYPLM108T**	-	-	-	**NSYPLM108B**

Summary guide of the characteristics

References	NSYPLM32	NSYPLM3025	NSYPLM43/54/64/75/86	NSYPLM108
Dimensions (mm)	310 × 215 × 160	308 × 255 × 160	430 × 330 × 200 to 847 × 636 × 300	1056 × 852 × 350
Material	ABS/PC	Polyester	Polyester	Polyester
Degree of protection	IP 66	IP 66	IP 66	IP 66
Impact protection (1)	IK 10	IK 10	IK 10	IK 10
Built-in canopy	Yes	No	Yes	Yes
Lock (2)	1	2	2	1 (4-point closure)
Closing with handle (3)	-	-	1 (3-point closure)	-
Lock outside the sealed area	No	No	Yes	Yes
Door opening	180°	120°	180°	180°
Notches every 25 mm (4)	Yes	No	Yes	Yes
Grid pattern on the back of the door	25 mm	50 mm	25 mm	25 mm

(1) IK 08 glazed door of the polyester enclosures.
(2) With double-bar insert.
(3) Handle with insert for key 1242 E.
(4) Notches in the rear of the enclosure for quick installation of DIN rails.

Specific

Configured

Wall-mounting enclosures with polyester mounting plate, machined or not, see customised offer.

Polyester wall-mounting enclosure
Selection guide

Mounting accessories

External dimensions of the enclosures (mm)			Metallic mounting plates				Insulating mounting plates		Modular distribution chassis	Step slides	Symmetrical DIN rail
H	W	D	Plain	Silkscreened	Microperforated	Telequick	Bakelite	Polyester			
			Page 7/2		Page 7/3	Page 7/4	Page 7/5		Page 6/32	Page 6/29	Page 6/29
310	215	160	NSYMM32	-	-	NSYMR32	NSYMB32	NSYMPP32	-	-	NSYCS200PLM
308	255	160	NSYMM3025	-	-	NSYMR3025	NSYMB3025	NSYMPP3025	NSYDLPLM18	-	-
430	330	200	NSYMM43	NSYMS43	NSYMF43	NSYMR43	NSYMB43	NSYMPP43	NSYDLA24	NSYDPLM200	NSYCS300PLM
530	430	200	NSYMM54	NSYMS54	NSYMF54	NSYMR54	NSYMB54	NSYMPP54	NSYDLA48	NSYDPLM200	NSYCS400PLM
647	436	250	NSYMM64	NSYMS46	NSYMF64	NSYMR64	NSYMB64	NSYMPP64	NSYDLA48P	NSYDPLM250	NSYCS400PLM
747	536	300	NSYMM75	NSYMS75	NSYMF75	NSYMR75	NSYMB75	NSYMPP75	NSYDLA66 and NSYDLA88	NSYDPLM300	NSYCS500PLM
847	636	300	NSYMM86	NSYMS86	NSYMF86	NSYMR86	NSYMB86	NSYMPP86	NSYDLA84 and NSYDLA112	NSYDPLM300	NSYCS600PLM
1056	852	350	NSYMM108	-	NSYMF108	NSYMR108	NSYMB108	NSYMPP108	NSYDLA234	NSYDPLM350	NSYCS800PLM

Main accessories

External dimensions (mm)			Fixing lugs	Post-fixing device	Floor-mounting pillar	Coupling frame	Cable-gland plate	Internal door	Blanking plates
H	W	D							
			Page 6/25	Page 6/25	Page 6/24	Page 6/24	Page 6/24	Page 6/26	Page 6/25
310	215	160	NSYPFPLM32	-	-	-	-	-	NSYCEPLMA
308	255	160	NSYPFPLM	-	-	-	-	NSYPA3025PLM	-
430	330	200	NSYPFPLM	NSYSFP300	-	-	-	NSYPAP43	NSYCEPLMB
530	430	200	NSYPFPLM	NSYSFP400	NSYSFSPLM	-	-	NSYPAP54	NSYCEPLMB
647	436	250	NSYPFPLM	NSYSFP400	NSYSFSPLM	-	-	NSYPAP64	NSYCEPLMC
747	536	300	NSYPFPLM	NSYSFP500	-	NSYBUPLM	NSYTLA4420	NSYPAP75	NSYCEPLMC
847	636	300	NSYPFPLM	NSYSFP600	-	NSYBUPLM	NSYTLA4420	NSYPAP86	NSYCEPLMC
1056	852	350	NSYPFPLM	-	-	NSYBU108PLM	NSYTLA6420	NSYPAP108	-

Water drain plug	Rail-fixing nuts	Ventilation louvre
Page	Page	Page
6/30	6/29	6/30

Composition accessories

Coupling accessories

Coupling frame

- Allows the lateral coupling of 2 enclosures.
- Polyester frame, RAL 7032 colour and fixings.
- A built-in sealing gasket guarantees a protection rating of IP 66.

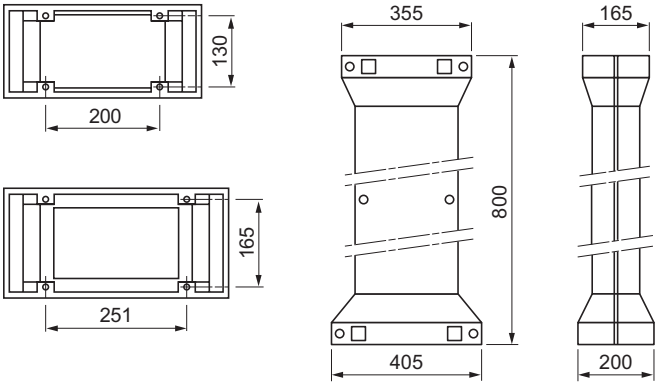
External dimensions (mm)	Entry	For wall-mounting enclosure	References
435 × 185 × 15	398 × 148	NSYPLM75 and NSYPLM86	**NSYBUPLM**
635 × 185 × 15	598 × 148	NSYPLM108	**NSYBU108PLM**

Base accessories

Floor-mounting pillar

- To protect cables entering the enclosure in outdoor installations.
- Material: polyester reinforced with fibreglass. RAL 7032 grey colour.
- Delivered with steel frame for secure fixing to the floor.
- Cable entry section: 165 × 100 mm.
- For enclosures ref. **NSYPLM54**, **NSYPLM54T**, **NSYPLM64** and **NSYPLM64T**.

Name	Reference
Floor-mounting pillar	**NSYSFSPLM**



Cable-entry accessories

Cable-gland plates

- Material: polyester.
- Dimensions: 435 × 185 mm and 635 × 185 mm.

For wall-mounting enclosures	References
NSYPLM75 and NSYPLM86	**NSYTLA4420**
NSYPLM108	**NSYTLA6420**

See also the accessories

Cable entries page **7/102**

Composition accessories
Fixing accessories

The enclosures can be mounted directly on the walls. The seals and caps supplied as standard with the enclosure guarantee that it maintains its degrees of protection and insulation.

Wall-fixing lugs

- Set of 4 wall-fixing lugs.
- Mounted directly on the enclosure, either in horizontal position or in vertical position.
- Available in 2 versions, polyester loaded with fibreglass or stainless steel.
- Delivered with fixings.
- Acceptable load of 300 kg in vertical position and 100 kg in horizontal position.

Material	References
Polyester*	**NSYPFPLM**
Stainless steel	**NSYPFXPLM**

*Single reference in polyester, ref. **NSYPFPLM32**, for enclosure ref. **NSYPLM32** and **NSYPLM32T**.

Post-fixing device

- For outdoor installations on a post with a maximum circumference of 675 mm, Ø 215 mm.
- Material: galvanised steel.
- Supply of the rail, the strips and the fixings. Maximum load: 100 kg.

For wall-mounting enclosure	References
NSYPLM43	**NSYSFP300**
NSYPLM54 and NSYPLM64	**NSYSFP400**
NSYPLM75	**NSYSFP500**
NSYPLM86	**NSYSFP600**

Blanking plates

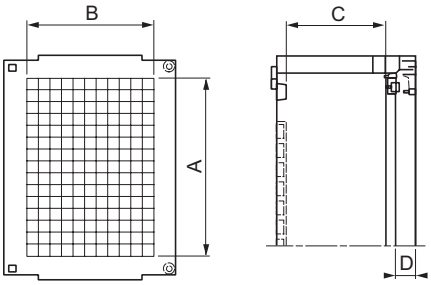
- Made from thermoplastic material, they are positioned on the rear surface of the enclosures to block the openings in the corners in order to improve their appearance or prevent the entry of unwanted elements in the ventilation shaft.
- Supplied as standard for enclosure, ref. **NSYPLM108**.

For wall-mounting enclosure	References
NSYPLM32	**NSYCEPLMA**
NSYPLM43 and NSYPLM54	**NSYCEPLMB**
NSYPLM64, 75 and 86	**NSYCEPLMC**

Composition accessories
Door and door accessories

Internal door

- Reversible door made from polyester reinforced with fibreglass, self-extinguishing, RAL 7032 grey.
- Grid pattern with a pitch of 25 mm for easier marking out before drilling.
- Closes with 2 double-bar locks.
- Door handle.
- Delivered with fixings and brass inserts.
- Steel internal door, without grid pattern and locking by a screw, for enclosures ref. **NSYPLM3025**.
- Incompatible with the modular distribution chassis.



For wall-mounting enclosure (mm)		Dimensions (mm)				References
Height	Width	A	B	C	D	
308	255	248	165	62	76	**NSYPA3025PLM**
430	330	315	205	152	26	**NSYPAP43**
530	430	415	305	152	26	**NSYPAP54**
645	435	515	305	194	32	**NSYPAP64**
745	535	615	405	244	32	**NSYPAP75**
845	635	715	505	244	32	**NSYPAP86**
1055	850	850	650	269	37	**NSYPAP108**

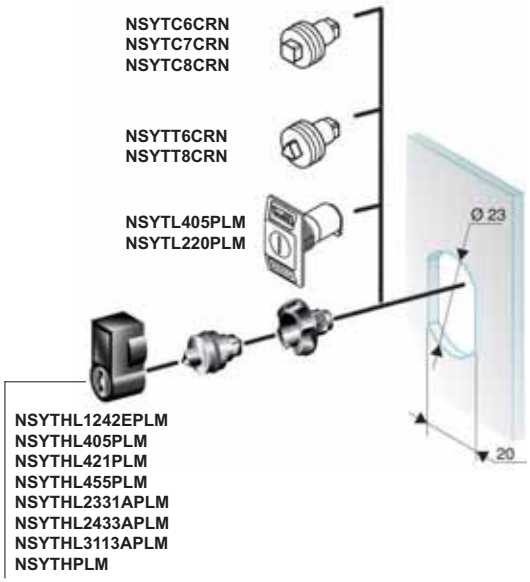
Composition accessories
Locking system

Locks and inserts for enclosures with H ≤ 847 mm

- The ABS/PC 310 × 215 mm enclosure is supplied with a lock with a double-bar insert as standard.
- The 308 × 255 mm enclosure is supplied with two locks with a double-bar insert as standard.
- The polyester enclosures from 430 to 847 mm high are delivered as standard with:

– 2 locks with double-bar insert, ref. **NSYCDBPLM**.
– Or a 3-point closure with handle and lock with key 1242 E (enclosures **NSYPLM••V**).

- Double-bar insert ref. **NSYTDBCRN**, is placed in a rectangular escutcheon.
- A plastic key, ref. **NSYDBP**, enabling the opening of the double-bar insert, is included in the standard supply. This key can be fixed to the double-bar system to remain on the enclosure and be used as a handle.



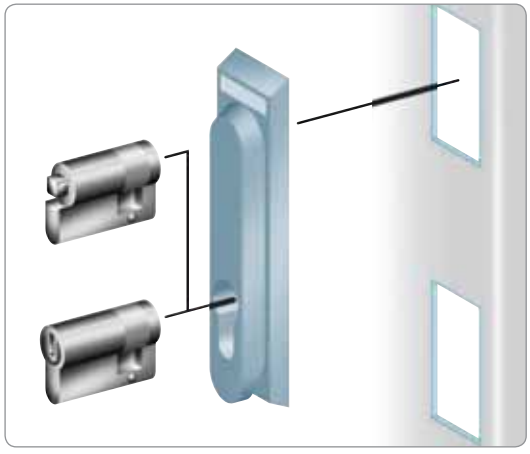
Options to transform the locks with double-bar inserts

- Changing the shape inserts for locks with keys according to the following table:

Name	References
6-mm male square	**NSYTC6CRN**
7-mm male square	**NSYTC7CRN**
8-mm male square	**NSYTC8CRN**
6.5-mm male triangle	**NSYTT6CRN**
8-mm male triangle	**NSYTT8CRN**
Lock and key 405	**NSYTL405PLM**
Lock and key 220	**NSYTL220PLM**

- Replacement for locking handle with cylindrical barrel, delivered with all the parts required to change the lock.

Type of barrel	References
Key 1242 E	**NSYTHL1242EPLM**
Key 405	**NSYTHL405PLM**
Key 421	**NSYTHL421PLM**
Key 455	**NSYTHL455PLM**
Key 2,331 A	**NSYTHL2331APLM**
Key 2,433 A	**NSYTHL2433APLM**
Key 3113 A	**NSYTHL3113APLM**
Manual	**NSYTHPLM**

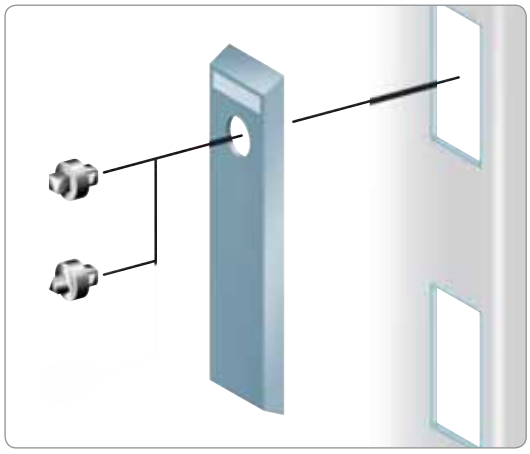


Options to transform versions NSYPLM••V, with retractable handle and 3-point closure

- Transformation of the standard insert (barrel for key 1242E, ref. **NSYTL1242EME**) for other shape inserts or barrels according to the following table:

Name	References
5-mm double bar	**NSYTDB5ME**
6-mm male square	**NSYTC6ME**
7-mm male square	**NSYTC7ME**
8-mm male square	**NSYTC8ME**
6.5-mm male triangle	**NSYTT6ME**
8-mm male triangle	**NSYTT8ME**
Barrel and key 405	**NSYTCL405ME**
Reinforced key and barrel	**NSYTLRME**
JIS key and barrel	**MSYTLJISME**
Manual	**MNSYTMME**

Composition accessories
Locking system



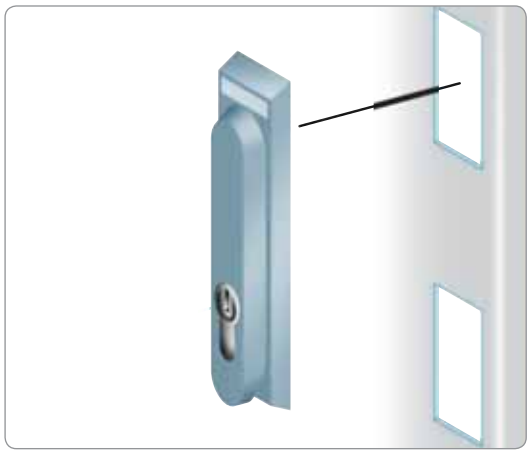
Locks and inserts for enclosures NSYPLM108/T

- Enclosures delivered as standard with 5-mm double-bar insert.
- Insert ref. **NSYTDB5PL**, placed in a long rectangular escutcheon, activates a 4-point closure system.

Options to transform the insert

- The standard insert can be replaced with other shape inserts, according to the following table:

Name	References
6-mm male square	**NSYTC6PL**
7-mm male square	**NSYTC7PL**
8-mm male square	**NSYTC8PL**
6.5-mm male triangle	**NSYTT6PL**
7-mm male triangle	**NSYTT7PL**
8-mm male triangle	**NSYTT8PL**



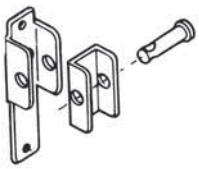
Options to transform for a retractable handle

- The escutcheon and rosette assembly can be replaced with a lock with retractable handle equipped with inserts or barrels, according to the following table:

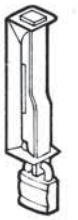
Name	References
5-mm double bar	**NSYTEDB5PL**
6-mm male square	**NSYTEC6PL**
7-mm male square	**NSYTEC7PL**
8-mm male square	**NSYTEC8PL**
6.5-mm male triangle	**NSYTET6PL**
7-mm male triangle	**NSYTET7PL**
8-mm male triangle	**NSYTET8PL**
Lock key 1242 E	**NSYTEL1242EPL**
Barrel and key 405	**NSYTEL405PL**
Reinforced key and barrel	**NSYTERPL**
JIS key and barrel	**NSYTELJISPL**
FAC key and barrel	**NSYTELFACPL**
Manual	**NSYTEMPL**

Padlocking accessories

- Padlocking system, ref. **NSYKPLM**, positioned around the rectangular escutcheon of the enclosures with a height of ≤ 847 mm to block access to the lock; for a ∅ 9 mm padlock.



- Padlocking system, ref. **NSYBCPL**, positioned around the long rectangular escutcheon of the enclosures ref. **NSYPLM108/T**, to block access to the lock; for a ∅ 9 mm padlock.



- Padlocking system, ref. **NSYBCME**, to block access to the retractable handle, for the versions **NSYPLM••V** or optionally for enclosures ref. **NSYPLM108/T**, for a ∅ 9 mm padlock.

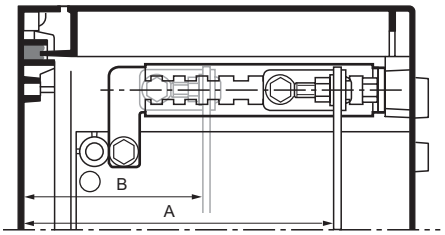
Mounting accessories

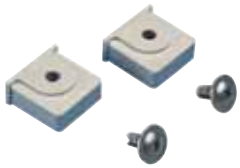
Step slides

For depth adjustment of the mounting plate

- Kit including 4 step slides with brackets, allowing depth adjustment with a pitch of 12.5 mm, and the fixings required for the installation.
- Material: galvanised steel.
- Incompatible with the modular distribution chassis.

For wall-mounting enclosure	Depth adjustment		References
Depth (mm)	Dimension A (mm)	Dimension B (mm)	
200	156	94	**NSYDPLM200**
250	200	100	**NSYDPLM250**
300	250	100	**NSYDPLM300**
350	306	106	**NSYDPLM350**





Plastic nuts for rail fixing

- They slide directly into the notches, with a pitch of 25 mm, which are located on the rear of the enclosures, except enclosure ref. **NSYPLM3025/T**. They allow direct fixing of symmetrical DIN rails by self-tapping screws. Option of raising the rails with an M6 spacer using a plastic nut containing an M6 nut.
- To be ordered in multiples of 20.

Name	References
Plastic nut with self- tapping screw	**NSYTCSPLM**
Plastic nut containing an M6 metal nut	**NSYTCSM6PLM**

35-mm symmetrical DIN rails

- They are fixed to the rear of the enclosure without uprights, with a pitch of 25 mm for the notches on the rear of the enclosure, with the help of direct-fixing nuts ref. **NSYTCSPLM** or **NSYTCSM6PLM**.
- Treated steel.
- To be ordered in multiples of 2.

Rail length (mm)	For wall-mounting enclosure	References
	Width (mm)	
215	180	**NSYCS200PLM**
330	280	**NSYCS300PLM**
430 / 435	380	**NSYCS400PLM**
535	480	**NSYCS500PLM**
635	580	**NSYCS600PLM**
850	795	**NSYCS800PLM**

See also the accessories

Vertical rails page **7/8**

Rails page **7/50**

Screws page **7/67**

Cable management Cable holding page **7/115**

Accessories
Diverse

NSYTEX8 NSYTEX6 NSYTEX5

Fixing inserts

- Expanding inserts for addition to the M6 bosses of the enclosure, the M5 or M6 bosses of the door and the M8 bosses of the external rear part of the enclosure.
- M5 and M6 inserts to be ordered in multiples of 20.
- M8 inserts to be ordered in multiples of 8.

Insert size	For wall-mounting enclosure	References
M5	NSYPLM43 and NSYPLM54	**NSYTEX5**
M6	NSYPLM64 and NSYPLM108	**NSYTEX6**
M8	For the rear of the enclosure	**NSYTEX8**

NSYCAG35LP

Ventilation louvres

- They can be positioned inside the wall-mounting enclosures with heights of 430 to 846 mm, allowing ventilation through the channels of the enclosure.
- The IP on the rear of the enclosures is IP 44.
- The reference consists of two ventilation louvres.

Name	Reference
Ventilation louvres	**NSYCAG35LP**

Ventilation louvres, airing devices with filters, fans and thermal adjustment accessories, see ClimaSys section.

NSYVEA9

Water drain plug

- For drainage of condensation water.
- It is placed in the Ø 9 mm housing at the bottom of the enclosure.
- IP 55.
- To be ordered in multiples of 10.

Name	Reference
Water drain plug	**NSYVEA9**

Renovation and anti-graffiti paint

- Paint system with 2 components (base 80% + hardener 20%), specially designed for polyester enclosures, for their renovation and/or as prevention to allow easy removal of graffiti.
- The 1 kg reference includes 1 pot with 800 g of base paint and 200 g of hardener. It is enough to paint a surface of around 5 m^2.
- The 5 kg reference includes 1 pot with 4 kg of base paint and 1 kg of hardener. It is enough to paint a surface of around 25 m^2.
- RAL 7032 colour.
- Solvent for diluting the paint and cleaning the utensils.

Name	References
Anti-graffiti paint 1 kg	**NSYAUPG1**
Anti-graffiti paint 5 kg	**NSYAUPG5**
Anti-graffiti paint solvent 500 g	**NSYAUPGS**

See also the accessories

Power distribution rails page **7/125**

Lighting page **7/126**

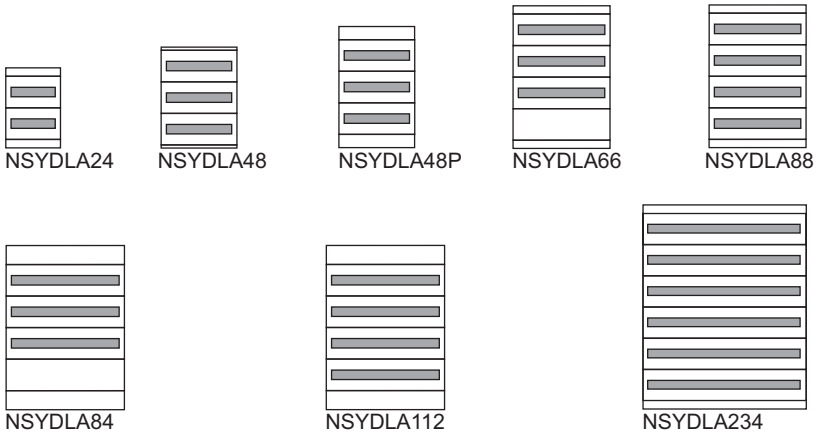
Power distribution accessories
Modular distribution accessories

Technical characteristics

Dinimel DLA modular chassis

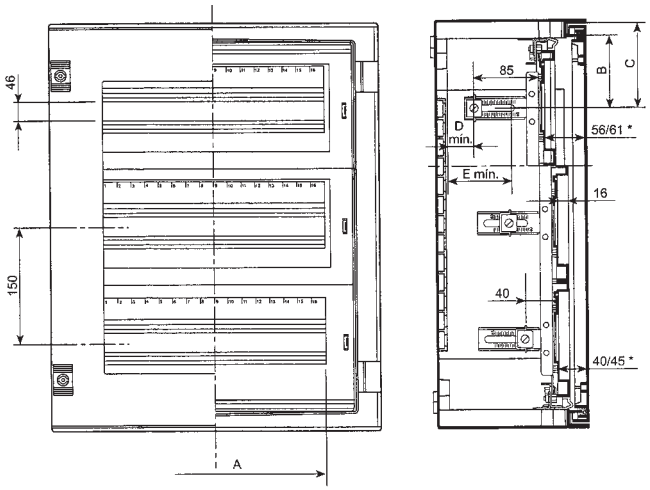
- Front panels and finish covers, made from self-extinguishing insulating material RAL 7032 colour. Rigid galvanised-steel structure, for the installation of modular devices.
- Open front panels with 35-mm DIN rail and plain front panels with mounting plate, according to the model.
- Quick installation with no fixings.
- Shoulder height adjustable from 40 to 85 mm.
- System for standard circuit marking.
- Incompatible with the internal doors and the step slides.
- Neutral / earth strip: 2 × 16 mm^2 + 5 × 6 mm^2.

Dimensions (mm)					Distribution rows				For installation in the enclosures		References
A	B	C	D min.	E min.	No. of rows	Support rail		No. of plates	Plain door	Glazed door	
						Amount	Number of 18-mm modules				
216	115	137	38	88	2	2	24	–	NSYPLM43	NSYPLM43T	**NSYDLA24**
286	90	112	38	88	3	3	48	–	NSYPLM54	NSYPLM54T	**NSYDLA48**
286	140	170	80	130	3	3	48	–	NSYPLM64	NSYPLM64T	**NSYDLA48P**
395	115	145	129	179	4	3	66	1	NSYPLM75	NSYPLM75T	**NSYDLA66**
395	115	145	129	179	4	4	86	–	NSYPLM75	NSYPLM75T	**NSYDLA88**
504	165	195	129	179	4	3	84	1	NSYPLM86	NSYPLM86T	**NSYDLA84**
504	165	195	129	179	4	4	112	–	NSYPLM86	NSYPLM86T	**NSYDLA112**
704	115	146	170	220	6	6	234	–	NSYPLM108	NSYPLM108T	**NSYDLA234**



Power distribution accessories
Modular distribution accessories

Dimensions (mm)

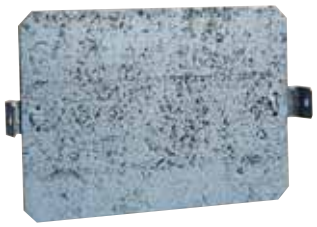


* Models NSYDLA48P, 66, 88, 84 and 112.

Plain front panels for Dinimel DLA chassis

- Front panel made from RAL 7032 self-extinguishing insulating material for non-modular device protection, on one row.
- To be ordered in multiples of 2.

For installing on the chassis	Width (mm)	References
NSYDLA24	256	**NSYCTL300DLA**
NSYDLA48 and NSYDLA48P	356	**NSYCTL400DLA**
NSYDLA66 and NSYDLA88	456	**NSYCTL500DLA**
NSYDLA84 and NSYDLA112	555	**NSYCTL600DLA**
NSYDLA234	755	**NSYCTL800DLA**



Mounting plate for Dinimel DLA chassis

- Galvanised-steel mounting plate for mounting non-modular devices, on one row.
- To be ordered in multiples of 2.

For installing on the chassis	Width (mm)	References
NSYDLA48 and NSYDLA48P	315	**NSYPMP400DLA**
NSYDLA66 and NSYDLA88	415	**NSYPMP500DLA**
NSYDLA84 and NSYDLA112	514	**NSYPMP600DLA**
NSYDLA234	714	**NSYPMP800DLA**

Modular distribution chassis for enclosure ref. PLM3025/T

- Metal chassis and protective plate in insulating material.
- For mounting modular devices on two rows of nine 18-mm modules.

Name	Reference
Modular distribution chassis	**NSYDLPLM18**

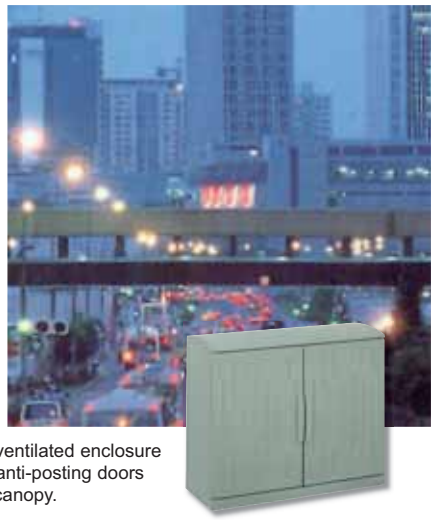
See also the accessories

Modular distribution accessories page **7/73**

Polyester enclosures
Installation examples

Outdoor installation, with exposure to atmospheric conditions: mist, solar radiation, extreme temperatures, etc.

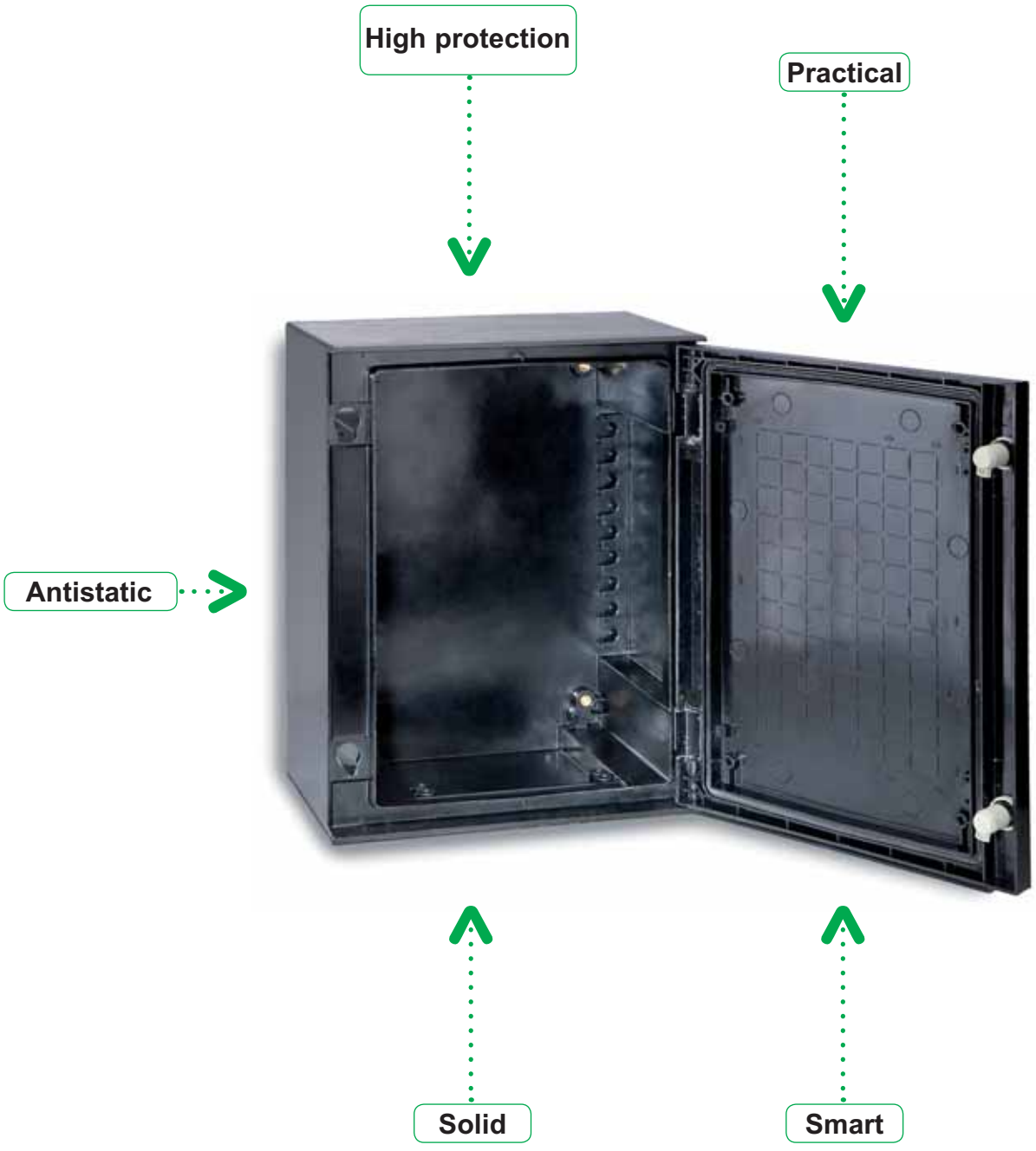
Schneider Electric enclosures made from insulating materials are designed to protect your equipment in harsh environments or in contact with the public:
- Infrastructures: protection against bad weather (solar radiation, rain, etc.), impacts, saline atmospheres, etc.
  - Transport: resistance to UV, salt mist, tightness and impact resistance, etc.
  - Water: resistance to corrosion, resistance to impact and UV, resistance to chemical substances, etc.
  - Outdoor telecom and networks: resistance to UV, resistance to corrosion, protection of 19-inch accessories, etc.
  - Power: resistance to impact, to salt mist, etc.
  - Public lighting: anti-vandalism, anti-posting, UV resistance, etc.
- Industries in aggressive environments: resistance to corrosion, to chemical substances and protection against electrical hazards.



Self-ventilated enclosure with anti-posting doors and canopy.

Indoor or outdoor installation on industrial zones in aggressive environments.

Thalassa PLMEX polyester wall-mounting enclosure compliant with the ATEX directive



High protection:

Built-in canopy.
High degree of protection: IP 66.
Locks outside the sealed zone.

Solid:

Single-piece body.
IK 10.
Corrosion-resistant pin.

Practical:

Opens to 180°.
Can open to right or left by turning the enclosure over.

Smart:

Chequered back of the door.
One notch every 25 mm for easy mounting of a DIN rail.

Antistatic:

No static electricity thanks to the presence of graphite additives in the polyester.

Specific ATEX marking.

Delivered in a reusable cardboard box with technical instructions enclosed.

Thalassa PLMEX polyester wall-mounting enclosure
Introduction

The enclosures must be fixed by 4 stainless-steel lugs, which are mounted in inserts to be placed on the rear of the enclosure, in horizontal or vertical position. Ref.: **NSYPFXPLM**.

Technical characteristics

The Thalassa.ATEX range of polyester enclosures is certified by the LOM with no. LOM 08ATEX3041U (component certificate).

The enclosures have the following marks:
Ex II 2 GD Ex e II Ex tD A21 IP 66 according to ATEX directive 94/9/EC and standards EN 60079-0 (2004), EN 60079-7 (2006), EN 61241-0 (2005) and EN 61241-1 (2004).

Download our ATEX certificates and product sheets over the Internet.

Specifications	NSYPLMEX3025	NSYPLMEX43/ 54/64/75/86	NSYPLMEX108
Degree of protection	IP 66	IP 66	IP 66
Impact resistance	IK 10	IK 10	IK 10
Built-in canopy	No	Yes	Yes
Opening	120°	180°	180°
Pins	Stainless steel	Polyamide	Stainless steel
Locking system	2 double-bar lock	2 double-bar lock	1 lock with double-bar insert and 4-point closure
Lock outside sealed zone	No	Yes	Yes
Notch system for DIN rails every 25 mm	No	Yes	Yes
Mounting plate assembly	Installed studs	Inserts and studs	Inserts and studs

Specific ATEX characteristics

- The surface resistance is < 10^9 Ω.
- Ambient temperature limits:
  –25 °C ≤ Ta ≤ +60 °C.
- Black colour.

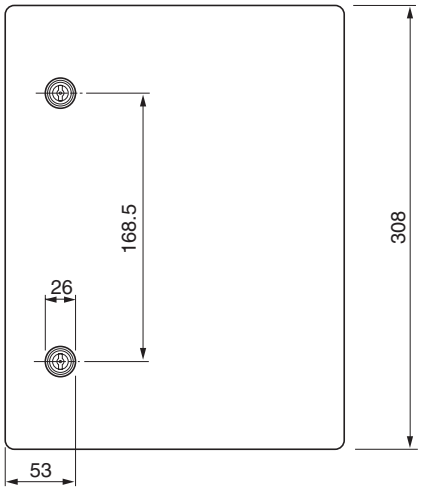
Selection guide for wall-mounting enclosures and main accessories

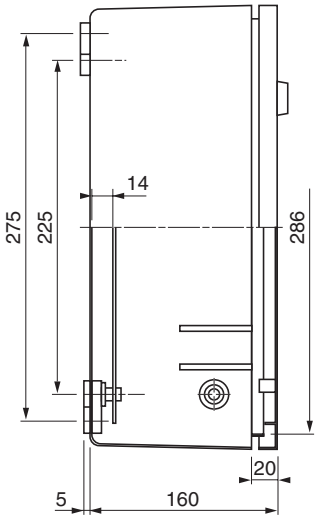
External dimensions (mm)			References	Metallic mounting plate references				References	
Height	Width	Depth	Enclosures	Plain	Silkscreened	Microperforated	Telequick	Step slides	Padlocking
308	255	160	**NSYPLMEX3025**	**NSYMM3025**	-	-	**NSYMR3025**	-	-
430	330	200	**NSYPLMEX43**	**NSYMM43**	**NSYMS43**	**NSYMF43**	**NSYMR43**	**NSYDPLM200**	**NSYKPLM**
530	430	200	**NSYPLMEX54**	**NSYMM54**	**NSYMS54**	**NSYMF54**	**NSYMR54**	**NSYDPLM200**	**NSYKPLM**
647	436	250	**NSYPLMEX64**	**NSYMM64**	**NSYMS64**	**NSYMF64**	**NSYMR64**	**NSYDPLM250**	**NSYKPLM**
747	536	300	**NSYPLMEX75**	**NSYMM75**	**NSYMS75**	**NSYMF75**	**NSYMR75**	**NSYDPLM300**	**NSYKPLM**
847	636	300	**NSYPLMEX86**	**NSYMM86**	**NSYMS86**	**NSYMF86**	**NSYMR86**	**NSYDPLM300**	**NSYKPLM**
1056	852	350	**NSYPLMEX108**	**NSYMM108**	-	**NSYMF108**	**NSYMR108**	**NSYDPLM350**	**NSYBCPL**

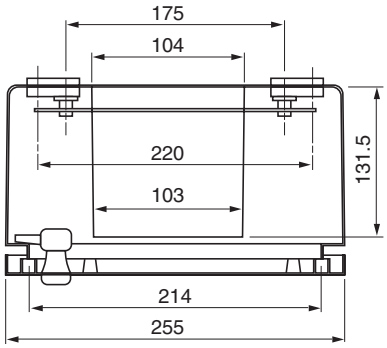
Accessories for Thalassa PLM enclosures can be installed in Thalassa PLM enclosures. However, plastic accessories should not be used, due to the risk of a static charge.

Thalassa PLMEX polyester wall-mounting enclosure
Dimensions

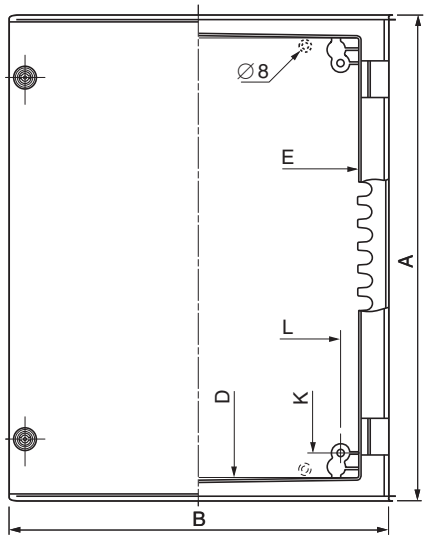
Ref. **NSYPLMEX3025**

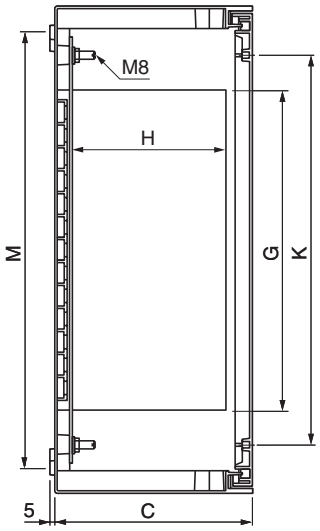


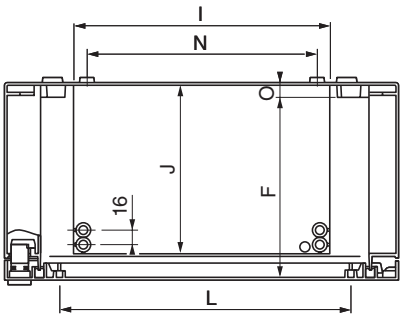




Ref. **NSYPLMEX43/54/64/75/86/108***







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Dimensions										Bottom screw and door bosses		Fixing	References
A	B	C	D	E	F	G	H	I	J	K	L	O	
430	330	200	380	260	181	247	150	179	168	325	225	13	**NSYPLMEX43**
530	430	200	480	360	181	347	150	279	168	425	325	13	**NSYPLMEX54**
647	436	250	580	360	228	388	192	279	212	525	325	13	**NSYPLMEX64**
747	536	300	680	460	278	487	241	379	261	625	425	15	**NSYPLMEX75**
847	636	300	780	560	278	587	241	479	261	725	525	15	**NSYPLMEX86**
1056	852	350	980	760	327	775	280	680	300	925	725	15	**NSYPLMEX108**

Polyester floor-standing enclosures

Service life

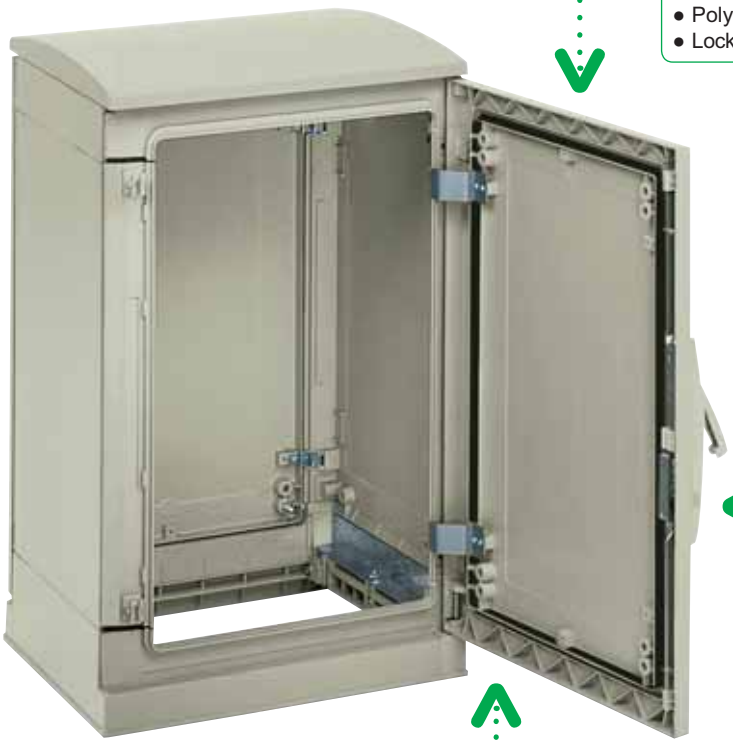
High resistance to corrosion in harsh environments, maintaining its mechanical and insulation properties.

Safety

- Full insulation (to create class II units).
- No risk to the public.
- Lock with 2 or 4-point closure.

Protection

- IP 44 or 54 and IP 65 in the industrial version.
- Polyurethane gasket.
- Lock outside sealed area.



Choice

4 enclosure versions, available in 40 dimensions with 3-door versions.

Smart

- Door with ripped surface to avoid posting.
- Reversible door (1-door enclosure).
- Numerous fixing bosses on the doors and panels.

Easy

- Opening to 120° or 180°.
- The central upright can be removed.
- Numerous fixing points.

Applications

- Industry or infrastructures in harsh environments.
- Accessories for modular distribution and 19".

Customisation

- Configured: machining and accessories.
- Specific: non-standard colours and accessories.
- Every possible combination of versions and doors, front and rear, not included in the standard offer.

General characteristics of the floor-standing enclosure

- Indoor or outdoor use.
- 4 versions:
– Completely sealed enclosure (PLA version).
– Enclosure with ventilated canopy (PLAT version).
– Enclosure with plinth-type open bottom (PLAZ version).
– Enclosure with plinth-type open bottom and ventilated canopy (PLAZT version).
– Note: The first letters of the references relate to the version.
- 40 dimensions:
– 5 heights from 500 to 1500 mm.
– 4 widths: 500 and 750 (1 door), 1000 and 1250 mm (2 doors).
– 2 depths: 320 and 420 mm.
– Note: The figures included in the references of the enclosures and products of the range represent the dimension in dm of the product in question.
– The 2-door enclosures comprise a central upright, which can be removed in certain conditions. Please contact us.
- 3 types of door:
– Plain door.
– Door with transparent window (index T at the end of the reference).
– Door with anti-posting surface (index R at the end of the reference).
- Protection degree IP 65 or IP 54 according to standard IEC 60529.
- Impact resistance IK 10 for the plain doors and all sides and IK 08 for the glazed door.
- 2-point closure for heights of 500 and 750 mm and 4-point closure points for heights ≥ 1000 mm.

Characteristics of the material

The floor-standing enclosures are made from polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 grey. This material:

- Is insulating: several kV per mm.
- Can be machined easily.
- Is resistant to corrosion: does not rust and can withstand many chemical substances.
- Resists bad weather (rain, UV).
- Withstands cold and heat in the range of –50 °C…+150 °C.
- Does not soften under heat (ball resistance at +150 °C).
- Is self-extinguishing (does not propagate fire: HB40 classification and self-extinguishing in several seconds during the glow-wire test at 960 °C during 30 s.).
- Does not contain halogens.
- Releases little smoke and nontoxic smoke in the case of combustion.
- Is light.

Characteristics of the production process

The components of the enclosures (the various sides and doors) are moulded by hot compression: the pieces have an excellent finish on both sides and can include numerous bosses for accommodating inserts and mounting or cable-management accessories.

Complies with enclosure standard IEC 62208 for:

IP, IK, resistance to heat and fire, insulation 5000 V, resistance to bad weather and corrosion and resistance to internal loads (150 kg/m^2) and loads on the door (30 kg/m^2).

Full insulation to create class II units according to IEC 64139-1

UL certification and NEMA classification 4X, 5, 12 and 13, depending on the version

Complies with the RoHS Directive

Completely sealed enclosures, IP 65

Introduction

Completely sealed enclosure with plain door.

Characteristics of the PLA version

- Enclosure obtained by assembling:
  – 1 sealed top part.
  – 1 sealed bottom part.
  – 2 side parts.
  – 1 or 2 rear panels (according to width).
  – 1 or 2 doors (according to width).
- Indoor use.
- Outdoor use possible with a canopy (to be ordered separately).
- Protection degree IP 65 according to IEC 60529.
- Locking system with escutcheon and 5-mm double-bar insert, included in the standard supply. Other inserts or locks with handles optionally available.
- Door opening to 120°.
- Direct fixing to the floor or by means of a plinth with a height of 60 mm, as an option.
- Possibility of fixing on a semi-embedded plinth, see page **6/51**.
- Optional wall-fixing lugs.

Transparent door made from polyester and tempered glass.

Escutcheon with double-bar insert.

Detail from the internal locking system.

External dimensions (mm)				References of enclosures with door		
Height	Width	Depth	N° of doors	Plain	Glazed	Anti-posting
500	500	320	1	NSYPLA553	NSYPLA553T	NSYPLA553R
500	500	420	1	NSYPLA554	NSYPLA554T	NSYPLA554R
500	750	320	1	NSYPLA573	NSYPLA573T	NSYPLA573R
500	750	420	1	NSYPLA574	NSYPLA574T	NSYPLA574R
500	1000	320	2	NSYPLA5103	NSYPLA5103T	NSYPLA5103R
500	1000	420	2	NSYPLA5104	NSYPLA5104T	NSYPLA5104R
500	1250	320	2	NSYPLA5123	NSYPLA5123T	NSYPLA5123R
500	1250	420	2	NSYPLA5124	NSYPLA5124T	NSYPLA5124R
750	500	320	1	NSYPLA753	NSYPLA753T	NSYPLA753R
750	500	420	1	NSYPLA754	NSYPLA754T	NSYPLA754R
750	750	320	1	NSYPLA773	NSYPLA773T	NSYPLA773R
750	750	420	1	NSYPLA774	NSYPLA774T	NSYPLA774R
750	1000	320	2	NSYPLA7103	NSYPLA7103T	NSYPLA7103R
750	1000	420	2	NSYPLA7104	NSYPLA7104T	NSYPLA7104R
750	1250	320	2	NSYPLA7123	NSYPLA7123T	NSYPLA7123R
750	1250	420	2	NSYPLA7124	NSYPLA7124T	NSYPLA7124R
1000	500	320	1	NSYPLA1053	NSYPLA1053T	NSYPLA1053R
1000	500	420	1	NSYPLA1054	NSYPLA1054T	NSYPLA1054R
1000	750	320	1	NSYPLA1073	NSYPLA1073T	NSYPLA1073R
1000	750	420	1	NSYPLA1074	NSYPLA1074T	NSYPLA1074R
1000	1000	320	2	NSYPLA10103	NSYPLA10103T	NSYPLA10103R
1000	1000	420	2	NSYPLA10104	NSYPLA10104T	NSYPLA10104R
1000	1250	320	2	NSYPLA10123	NSYPLA10123T	NSYPLA10123R
1000	1250	420	2	NSYPLA10124	NSYPLA10124T	NSYPLA10124R
1250	500	320	1	NSYPLA1253	NSYPLA1253T	NSYPLA1253R
1250	500	420	1	NSYPLA1254	NSYPLA1254T	NSYPLA1254R
1250	750	320	1	NSYPLA1273	NSYPLA1273T	NSYPLA1273R
1250	750	420	1	NSYPLA1274	NSYPLA1274T	NSYPLA1274R
1250	1000	320	2	NSYPLA12103	NSYPLA12103T	NSYPLA12103R
1250	1000	420	2	NSYPLA12104	NSYPLA12104T	NSYPLA12104R
1250	1250	320	2	NSYPLA12123	NSYPLA12123T	NSYPLA12123R
1250	1250	420	2	NSYPLA12124	NSYPLA12124T	NSYPLA12124R
1500	500	320	1	NSYPLA1553	NSYPLA1553T	NSYPLA1553R
1500	500	420	1	NSYPLA1554	NSYPLA1554T	NSYPLA1554R
1500	750	320	1	NSYPLA1573	NSYPLA1573T	NSYPLA1573R
1500	750	420	1	NSYPLA1574	NSYPLA1574T	NSYPLA1574R
1500	1000	320	2	NSYPLA15103	NSYPLA15103T	NSYPLA15103R
1500	1000	420	2	NSYPLA15104	NSYPLA15104T	NSYPLA15104R
1500	1250	320	2	NSYPLA15123	NSYPLA15123T	NSYPLA15123R
1500	1250	420	2	NSYPLA15124	NSYPLA15124T	NSYPLA15124R

Enclosures with ventilated canopy IP 44
Introduction

Enclosure with ventilated canopy and plain door.

Characteristics of the PLAT version

- Enclosure obtained by assembling:
  – 1 open top part with canopy.
  – 1 sealed bottom part.
  – 2 side parts.
  – 1 or 2 rear panels (according to width).
  – 1 or 2 doors (according to width).
- Outdoor use.
- Protection degree IP 44 according to IEC 60529.
- Protection degree IP 54 with 1 or 2 internal grilles, ref. **NSYCAG125LPF**, to be ordered separately.
- Locking system with handle with a 5-mm double-bar insert block, included in the standard supply. Other blocks with inserts or barrels and keys optionally available.
- Door opening to 120°.
- Direct fixing to the floor or by means of a plinth with a height of 60 mm, as an option.
- Possibility of fixing on a semi-embedded plinth, see page **6/51**.
- Optional wall-fixing lugs.

Open top part with canopy allowing for ventilation.

External handle.

Door with anti-posting surface and additional reinforcement.

Various bosses for M8 inserts.

External dimensions (mm)				References of enclosures with door	
Height	Width	Depth	N° of doors	Plain	Anti-posting
500	500	320	1	**NSYPLAT553**	**NSYPLAT553R**
500	500	420	1	**NSYPLAT554**	**NSYPLAT554R**
500	750	320	1	**NSYPLAT573**	**NSYPLAT573R**
500	750	420	1	**NSYPLAT574**	**NSYPLAT574R**
500	1000	320	2	**NSYPLAT5103**	**NSYPLAT5103R**
500	1000	420	2	**NSYPLAT5104**	**NSYPLAT5104R**
500	1250	320	2	**NSYPLAT5123**	**NSYPLAT5123R**
500	1250	420	2	**NSYPLAT5124**	**NSYPLAT5124R**
750	500	320	1	**NSYPLAT753**	**NSYPLAT753R**
750	500	420	1	**NSYPLAT754**	**NSYPLAT754R**
750	750	320	1	**NSYPLAT773**	**NSYPLAT773R**
750	750	420	1	**NSYPLAT774**	**NSYPLAT774R**
750	1000	320	2	**NSYPLAT7103**	**NSYPLAT7103R**
750	1000	420	2	**NSYPLAT7104**	**NSYPLAT7104R**
750	1250	320	2	**NSYPLAT7123**	**NSYPLAT7123R**
750	1250	420	2	**NSYPLAT7124**	**NSYPLAT7124R**
1000	500	320	1	**NSYPLAT1053**	**NSYPLAT1053R**
1000	500	420	1	**NSYPLAT1054**	**NSYPLAT1054R**
1000	750	320	1	**NSYPLAT1073**	**NSYPLAT1073R**
1000	750	420	1	**NSYPLAT1074**	**NSYPLAT1074R**
1000	1000	320	2	**NSYPLAT10103**	**NSYPLAT10103R**
1000	1000	420	2	**NSYPLAT10104**	**NSYPLAT10104R**
1000	1250	320	2	**NSYPLAT10123**	**NSYPLAT10123R**
1000	1250	420	2	**NSYPLAT10124**	**NSYPLAT10124R**
1250	500	320	1	**NSYPLAT1253**	**NSYPLAT1253R**
1250	500	420	1	**NSYPLAT1254**	**NSYPLAT1254R**
1250	750	320	1	**NSYPLAT1273**	**NSYPLAT1273R**
1250	750	420	1	**NSYPLAT1274**	**NSYPLAT1274R**
1250	1000	320	2	**NSYPLAT12103**	**NSYPLAT12103R**
1250	1000	420	2	**NSYPLAT12104**	**NSYPLAT12104R**
1250	1250	320	2	**NSYPLAT12123**	**NSYPLAT12123R**
1250	1250	420	2	**NSYPLAT12124**	**NSYPLAT12124R**
1500	500	320	1	**NSYPLAT1553**	**NSYPLAT1553R**
1500	500	420	1	**NSYPLAT1554**	**NSYPLAT1554R**
1500	750	320	1	**NSYPLAT1573**	**NSYPLAT1573R**
1500	750	420	1	**NSYPLAT1574**	**NSYPLAT1574R**
1500	1000	320	2	**NSYPLAT15103**	**NSYPLAT15103R**
1500	1000	420	2	**NSYPLAT15104**	**NSYPLAT15104R**
1500	1250	320	2	**NSYPLAT15123**	**NSYPLAT15123R**
1500	1250	420	2	**NSYPLAT15124**	**NSYPLAT15124R**

Enclosures with plinth-type open bottom part, IP 54
Introduction

Enclosure with open bottom part.

Characteristics of the PLAZ version

- Enclosure obtained by assembling:
  – 1 sealed top part.
  – 1 plinth-type open bottom part.
  – 2 side parts.
  – 1 or 2 rear panels (according to width).
  – 1 or 2 doors (according to width).
- Indoor use.
- Outdoor use with a canopy (to be ordered separately).
- Protection degree IP 54 according to IEC 60529, for the 5 sides of the enclosure.
- Locking system with handle with a 5-mm double-bar insert block, included in the standard supply. Other blocks with inserts or barrels and keys optionally available.
- Door opening to 120°.
- The open bottom part forms a 60-mm plinth which is fixed to the floor directly or by means of an optional fixing frame, or else it is installed on a semi-embedded plinth.

Polyurethane sealing gasket and 120° hinge.

Detail from the plinth-type bottom part, equipped with a cable-entry plate (optional).

Plain mounting plate installed on step slides and compulsory adapter plates in all the enclosures with open bottom part.

External dimensions (mm)				References of enclosures with door	
Height	Width	Depth	N° of doors	Plain	Anti-posting
500	500	320	1	NSYPLAZ553	NSYPLAZ553R
500	500	420	1	NSYPLAZ554	NSYPLAZ554R
500	750	320	1	NSYPLAZ573	NSYPLAZ573R
500	750	420	1	NSYPLAZ574	NSYPLAZ574R
500	1000	320	2	NSYPLAZ5103	NSYPLAZ5103R
500	1000	420	2	NSYPLAZ5104	NSYPLAZ5104R
500	1250	320	2	NSYPLAZ5123	NSYPLAZ5123R
500	1250	420	2	NSYPLAZ5124	NSYPLAZ5124R
750	500	320	1	NSYPLAZ753	NSYPLAZ753R
750	500	420	1	NSYPLAZ754	NSYPLAZ754R
750	750	320	1	NSYPLAZ773	NSYPLAZ773R
750	750	420	1	NSYPLAZ774	NSYPLAZ774R
750	1000	320	2	NSYPLAZ7103	NSYPLAZ7103R
750	1000	420	2	NSYPLAZ7104	NSYPLAZ7104R
750	1250	320	2	NSYPLAZ7123	NSYPLAZ7123R
750	1250	420	2	NSYPLAZ7124	NSYPLAZ7124R
1000	500	320	1	NSYPLAZ1053	NSYPLAZ1053R
1000	500	420	1	NSYPLAZ1054	NSYPLAZ1054R
1000	750	320	1	NSYPLAZ1073	NSYPLAZ1073R
1000	750	420	1	NSYPLAZ1074	NSYPLAZ1074R
1000	1000	320	2	NSYPLAZ10103	NSYPLAZ10103R
1000	1000	420	2	NSYPLAZ10104	NSYPLAZ10104R
1000	1250	320	2	NSYPLAZ10123	NSYPLAZ10123R
1000	1250	420	2	NSYPLAZ10124	NSYPLAZ10124R
1250	500	320	1	NSYPLAZ1253	NSYPLAZ1253R
1250	500	420	1	NSYPLAZ1254	NSYPLAZ1254R
1250	750	320	1	NSYPLAZ1273	NSYPLAZ1273R
1250	750	420	1	NSYPLAZ1274	NSYPLAZ1274R
1250	1000	320	2	NSYPLAZ12103	NSYPLAZ12103R
1250	1000	420	2	NSYPLAZ12104	NSYPLAZ12104R
1250	1250	320	2	NSYPLAZ12123	NSYPLAZ12123R
1250	1250	420	2	NSYPLAZ12124	NSYPLAZ12124R
1500	500	320	1	NSYPLAZ1553	NSYPLAZ1553R
1500	500	420	1	NSYPLAZ1554	NSYPLAZ1554R
1500	750	320	1	NSYPLAZ1573	NSYPLAZ1573R
1500	750	420	1	NSYPLAZ1574	NSYPLAZ1574R
1500	1000	320	2	NSYPLAZ15103	NSYPLAZ15103R
1500	1000	420	2	NSYPLAZ15104	NSYPLAZ15104R
1500	1250	320	2	NSYPLAZ15123	NSYPLAZ15123R
1500	1250	420	2	NSYPLAZ15124	NSYPLAZ15124R

Enclosures with plinth-type open bottom part and ventilated canopy, IP 44

Introduction

Enclosure with plinth-type open bottom part, ventilated canopy and anti-posting door.

Characteristics of the PLAZT version

- Enclosure obtained by assembling:
  – 1 open top part with canopy.
  – 1 plinth-type open bottom part.
  – 2 side parts.
  – 1 or 2 rear panels (according to width).
  – 1 or 2 doors (according to width).
- Outdoor use.
- Protection degree IP 44 according to IEC 60529, for the 5 sides of the enclosure.
- Protection degree IP 54 with 1 or 2 internal grilles, ref. **NSYCAG125LPF**, to be ordered separately.
- Locking system with handle with a 5-mm double-bar insert block. Other blocks with inserts or barrels and keys optionally available.
- Door opening to 180°.
- Anti-lever system to prevent forcing of the door.
- The open bottom part forms a 60-mm plinth which is fixed to the floor directly or by means of an optional fixing frame, or else it is installed on a semi-embedded plinth.

Door opening to 180°.

Anti-lever security system.

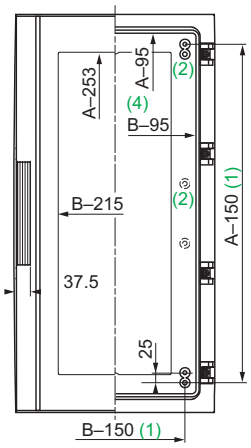
Bottom part open for underground cable access.

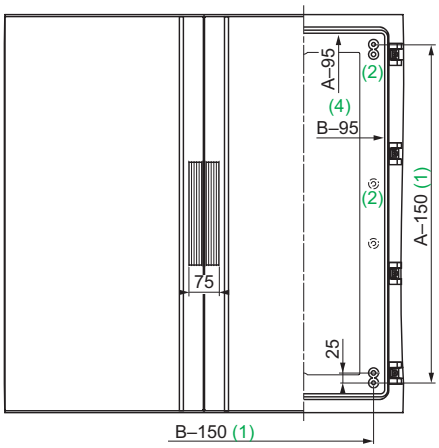
M8 fixing bosses on the inside of the door.

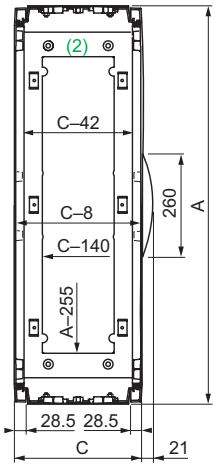
External dimensions (mm)				References of enclosures with door	
Height	Width	Depth	N° of doors	Plain	Anti-posting
500	500	320	1	NSYPLAZT553	NSYPLAZT553R
500	500	420	1	NSYPLAZT554	NSYPLAZT554R
500	750	320	1	NSYPLAZT573	NSYPLAZT573R
500	750	420	1	NSYPLAZT574	NSYPLAZT574R
500	1000	320	2	NSYPLAZT5103	NSYPLAZT5103R
500	1000	420	2	NSYPLAZT5104	NSYPLAZT5104R
500	1250	320	2	NSYPLAZT5123	NSYPLAZT5123R
500	1250	420	2	NSYPLAZT5124	NSYPLAZT5124R
750	500	320	1	NSYPLAZT753	NSYPLAZT753R
750	500	420	1	NSYPLAZT754	NSYPLAZT754R
750	750	320	1	NSYPLAZT773	NSYPLAZT773R
750	750	420	1	NSYPLAZT774	NSYPLAZT774R
750	1000	320	2	NSYPLAZT7103	NSYPLAZT7103R
750	1000	420	2	NSYPLAZT7104	NSYPLAZT7104R
750	1250	320	2	NSYPLAZT7123	NSYPLAZT7123R
750	1250	420	2	NSYPLAZT7124	NSYPLAZT7124R
1000	500	320	1	NSYPLAZT1053	NSYPLAZT1053R
1000	500	420	1	NSYPLAZT1054	NSYPLAZT1054R
1000	750	320	1	NSYPLAZT1073	NSYPLAZT1073R
1000	750	420	1	NSYPLAZT1074	NSYPLAZT1074R
1000	1000	320	2	NSYPLAZT10103	NSYPLAZT10103R
1000	1000	420	2	NSYPLAZT10104	NSYPLAZT10104R
1000	1250	320	2	NSYPLAZT10123	NSYPLAZT10123R
1000	1250	420	2	NSYPLAZT10124	NSYPLAZT10124R
1250	500	320	1	NSYPLAZT1253	NSYPLAZT1253R
1250	500	420	1	NSYPLAZT1254	NSYPLAZT1254R
1250	750	320	1	NSYPLAZT1273	NSYPLAZT1273R
1250	750	420	1	NSYPLAZT1274	NSYPLAZT1274R
1250	1000	320	2	NSYPLAZT12103	NSYPLAZT12103R
1250	1000	420	2	NSYPLAZT12104	NSYPLAZT12104R
1250	1250	320	2	NSYPLAZT12123	NSYPLAZT12123R
1250	1250	420	2	NSYPLAZT12124	NSYPLAZT12124R
1500	500	320	1	NSYPLAZT15104	NSYPLAZT1553R
1500	500	420	1	NSYPLAZT1554	NSYPLAZT1554R
1500	750	320	1	NSYPLAZT1573	NSYPLAZT1573R
1500	750	420	1	NSYPLAZT1574	NSYPLAZT1574R
1500	1000	320	2	NSYPLAZT15103	NSYPLAZT15103R
1500	1000	420	2	NSYPLAZT15104	NSYPLAZT15104R
1500	1250	320	2	NSYPLAZT15123	NSYPLAZT15123R
1500	1250	420	2	NSYPLAZT15124	NSYPLAZT15124R

Polyester floor-standing enclosures
Dimensions

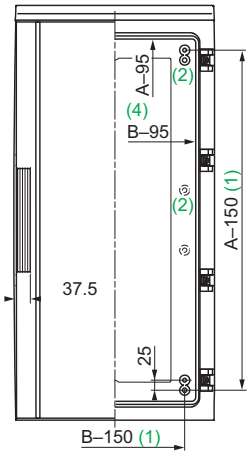
Sealed enclosure

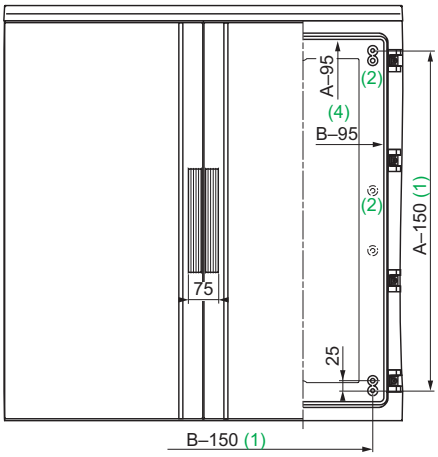


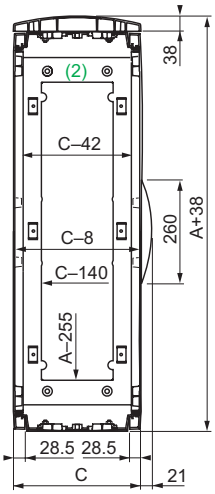




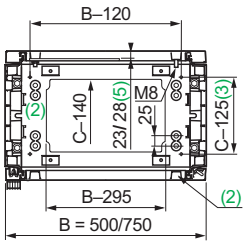
Enclosure with ventilated canopy

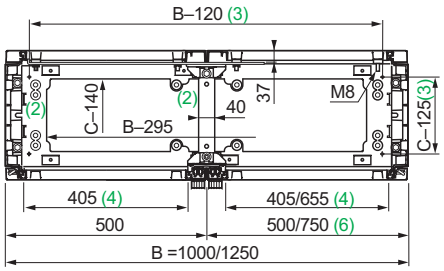






Common top views

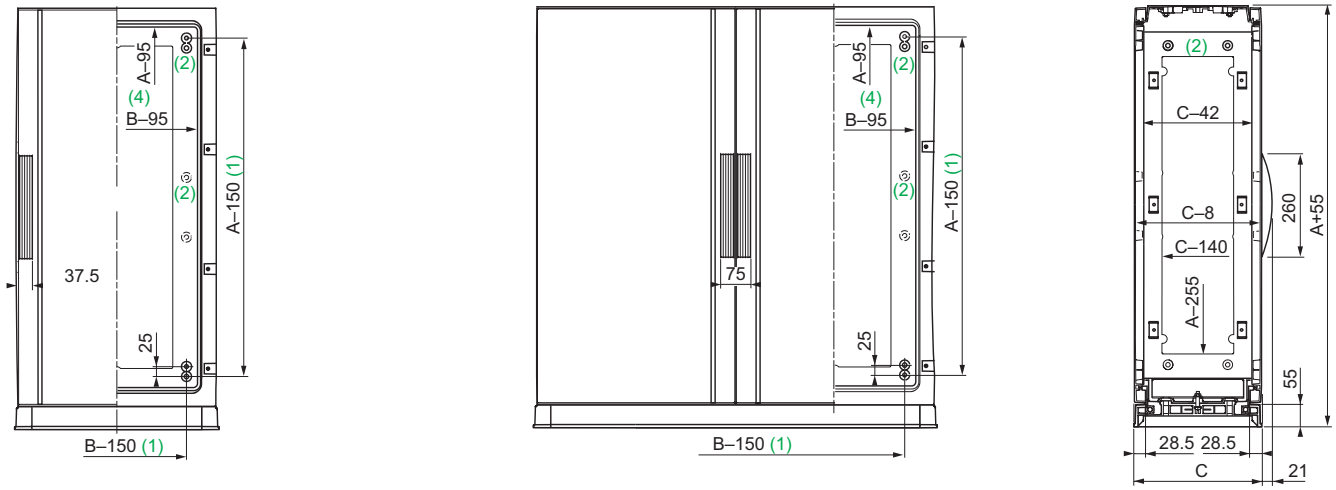




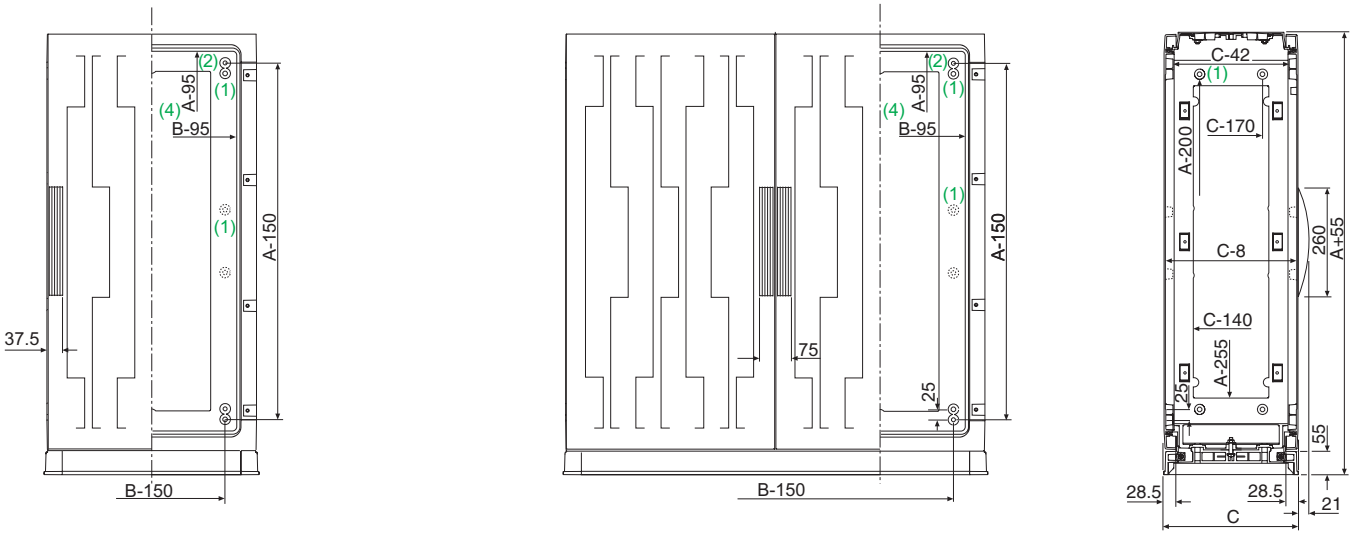
6

Polyester floor-standing enclosures
Dimensions

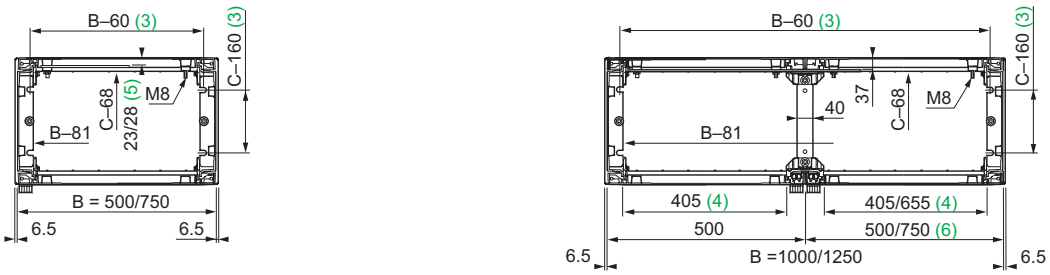
Enclosure with plinth-type open bottom part



Enclosure with ventilated canopy and plinth-type open bottom part



Common top views



(1) 4 bosses with M8 inserts and studs for direct fixing of mounting plates.
(2) Bosses designed to accommodate M8 inserts, ref. **NSYTEX8**. They are placed:
– On the back of the enclosure, from the height of 1000 mm. They allow the fixing of partial mounting plates and assorted equipment.
– On the top and bottom parts of the enclosure. They are used for fixing the step slides, an internal door, 19" chassis, etc.
(3) Dimensions for fixing on the floor or on a plinth.
(4) Entry dimensions, door open.
(5) Dimension of 28 mm for enclosures with heights of more than 1000 mm (height after the installation of the plain mounting plates with reinforcement foldings).
(6) With a width of 1250 mm in standard supply, 500-mm door on the left and 750-mm door on the right.

Polyester floor-standing enclosures
Accessory selection guide

Mounting accessories

Enclosure dimensions (mm)									
Height	Width	N° of doors	Metallic mounting plates		Insulating mounting plates		Modular distribution chassis		Internal door
			Plain	Telequick	Polyester	Bakelite			
			Page 6/58	Page 6/59	Page 6/58		Page 6/65		Page 6/54
500	500	1	**NSYPMM55**	**NSYPMR55**	**NSYPMA55**	**NSYPMB55**	-	-	**NSYPAPLA55**
500	750	1	**NSYPMM75**	**NSYPMR57**	**NSYPMA75**	**NSYPMB75**	-	-	**NSYPAPLA57**
500	1000	2	**NSYPMM510**	2 × **NSYPMR55**	**NSYPMA510**	**NSYPMB510**	-	-	2 × **NSYPAPLA55**
500	1250	2	**NSYPMM55** + **NSYPMM75**	**NSYPMR55** + **NSYPMR57**	**NSYPMA55** + **NSYPMA75**	**NSYPMB55** + **NSYPMB75**	-	-	**NSYPAPLA55** + **NSYPAPLA57**
750	500	1	**NSYPMM75**	**NSYPMR75**	**NSYPMA75**	**NSYPMB75**	**NSYDLP76**	**NSYDLP57**	**NSYPAPLA75**
750	750	1	**NSYPMM77**	**NSYPMR77**	**NSYPMA77**	**NSYPMB77**	**NSYDLP132**	**NSYDLP99**	**NSYPAPLA77**
750	1000	2	**NSYPMM710**	2 × **NSYPMR75**	**NSYPMA710**	**NSYPMB710**	2 × **NSYDLP76**	2 × **NSYDLP57**	2 × **NSYPAPLA75**
750	1250	2	**NSYPMM712**	**NSYPMR75** + **NSYPMR77**	**NSYPMA712**	**NSYPMB712**	**NSYDLP76** + **NSYDLP132**	**NSYDLP57** + **NSYDLP99**	**NSYPAPLA75** + **NSYPAPLA77**
1000	500	1	**NSYPMM105**	**NSYPMR105**	**NSYPMA105**	**NSYPMB105**	**NSYDLP114**	**NSYDLP95**	**NSYPAPLA105**
1000	750	1	**NSYPMM107**	**NSYPMR107**	**NSYPMA107**	**NSYPMB107**	**NSYDLP198**	**NSYDLP165**	**NSYPAPLA107**
1000	1000	2	**NSYPMM1010**	2 × **NSYPMR105**	**NSYPMA1010**	**NSYPMB1010**	2 × **NSYDLP114**	2 × **NSYDLP95**	2 × **NSYPAPLA105**
1000	1250	2	**NSYPMM1012**	**NSYPMR105** + **NSYPMR107**	**NSYPMA1012**	**NSYPMB1012**	**NSYDLP114** + **NSYDLP198**	**NSYDLP95** + **NSYDLP165**	**NSYPAPLA105** + **NSYPAPLA107**
1250	500	1	**NSYPMM125**	**NSYPMR125**	**NSYPMA125**	**NSYPMB125**	**NSYDLP133**	**NSYDLP114P**	**NSYPAPLA125**
1250	750	1	**NSYPMM127**	**NSYPMR127**	**NSYPMA127**	**NSYPMB127**	**NSYDLP231**	**NSYDLP198P**	**NSYPAPLA127**
1250	1000	2	**NSYPMM1210**	2 × **NSYPMR125**	**NSYPMA1210**	**NSYPMB1210**	2 × **NSYDLP133**	2 × **NSYPLD114P**	2 × **NSYPAPLA125**
1250	1250	2	**NSYPMM1212**	**NSYPMR125** + **NSYPMR127**	**NSYPMA1212**	**NSYPMB1212**	**NSYDLP133** + **NSYDLP231**	**NSYDLP114P** + **NSYDLP198P**	**NSYPAPLA125** + **NSYPAPLA127**
1500	500	1	**NSYPMM155**	**NSYPMR155**	**NSYPMA155**	**NSYPMB155**	**NSYDLP171**	**NSYDLP152**	**NSYPAPLA155**
1500	750	1	**NSYPMM157**	**NSYPMR157**	**NSYPMA157**	**NSYPMB157**	**NSYDLP297**	**NSYDLP264**	**NSYPAPLA157**
1500	1000	2	**NSYPMM1510**	2 × **NSYPMR155**	**NSYPMA1510**	**NSYPMB1510**	2 × **NSYDLP171**	2 × **NSYDLP152**	2 × **NSYPAPLA155**
1500	1250	2	**NSYPMM1512**	**NSYPMR155** + **NSYPMR157**	**NSYPMA1512**	**NSYPMB1512**	**NSYDLP171** + **NSYDLP297**	**NSYDLP152** + **NSYDLP264**	**NSYPAPLA155** + **NSYPAPLA157**

Step slides

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Uprights and mounting rails

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Door retainer

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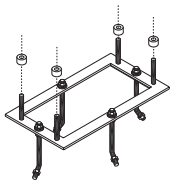
Polyester floor-standing enclosures
Accessory selection guide

Composition accessories



Enclosure dimensions (mm)		N plinth	H plinth	Floor-fixing frame	Canopy	Cable-entry plate
		Height 60 mm	Height 900 mm			
Width	Depth	Page 6/50		Page 6/51	Page 6/52	Page 6/53
500	320	NSYZNPLA53	NSYZHPLA53	NSYMFPLAZ53	NSYTJPLA53	NSYECPLAZ53
500	420	NSYZNPLA54	NSYZHPLA54	NSYMFPLAZ54	NSYTJPLA54	NSYECPLAZ54
750	320	NSYZNPLA73	NSYZHPLA73	NSYMFPLAZ73	NSYTJPLA73	NSYECPLAZ73
750	420	NSYZNPLA74	NSYZHPLA74	NSYMFPLAZ74	NSYTJPLA74	NSYECPLAZ74
1000	320	NSYZNPLA103	NSYZHPLA103	NSYMFPLAZ103	NSYTJPLA103	NSYECPLAZ103
1000	420	NSYZNPLA104	NSYZHPLA104	NSYMFPLAZ104	NSYTJPLA104	NSYECPLAZ104
1250	320	NSYZNPLA123	NSYZHPLA123	NSYMFPLAZ123	NSYTJPLA123	NSYECPLAZ123
1250	420	NSYZNPLA124	NSYZHPLA124	NSYMFPLAZ124	NSYTJPLA124	NSYECPLAZ124

VDI accessories

Enclosure dimensions (mm)		19" fixed chassis	Number of U	19" swing chassis	Number of U
Height	Width	Page 6/68		Page 6/68	
500	750	NSYBRF8PLA	8	NSYBRP7PLA	7
750	750	NSYBRF12PLA + NSYSPLA75	12	NSYBRP11PLA + NSYSPLA75	11
1000	750	NSYBRF17PLA + NSYSPLA100	17	NSYBRP16PLA + NSYSPLA100	16
1250	750	NSYBRF21PLA + NSYSPLA125	21	NSYBRP20PLA + NSYSPLA125	20
1500	750	NSYBRF26PLA + NSYSPLA150	26	NSYBRP25PLA + NSYSPLA150	25

Door switch

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Insert

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Document pocket

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VDI accessories and fixings

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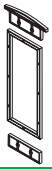
Coupling Kit



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Anti-graffiti paint

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Handles and inserts

Page 6/56

Wall-fixing lug

Page 6/52

6

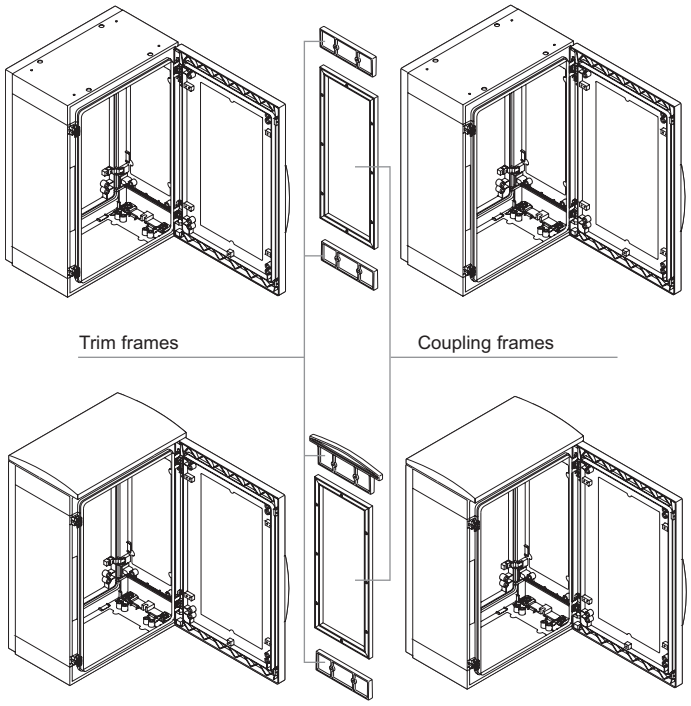
Composition accessories
Coupling accessories

Horizontal coupling kits

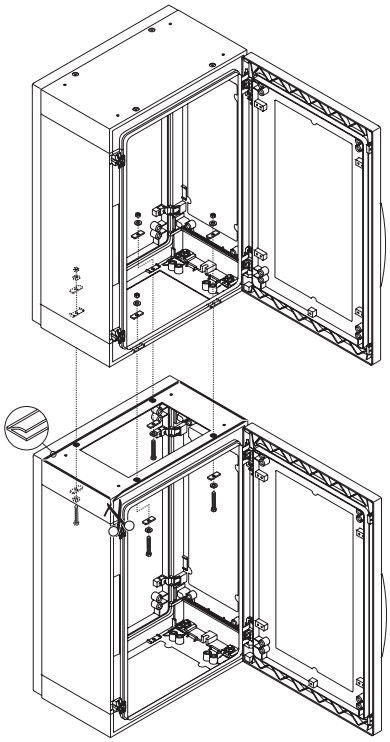
- For coupling 2 enclosures side by side.
- Coupling frame kit: made up of a coupling kit and the fixings required for installation.
- IP 55 at the coupling point.
- Trim kit: made up of 2 frames for aesthetic fitting of the 2 coupled enclosures.

For enclosure	References of coupling frame kit for enclosure (mm)	
Height (mm)	Depth 320	Depth 420
500	**NSYMUPLA53**	**NSYMUPLA54**
750	**NSYMUPLA73**	**NSYMUPLA74**
1000	**NSYMUPLA103**	**NSYMUPLA104**
1250	**NSYMUPLA123**	**NSYMUPLA124**
1500	**NSYMUPLA153**	**NSYMUPLA154**

For enclosure	References of trim kit for enclosure (mm)	
	Depth 320	Depth 420
Without canopy	**NSYSUPLA3**	**NSYSUPLA4**
With canopy	**NSYSUPLA3T**	**NSYSUPLA4T**



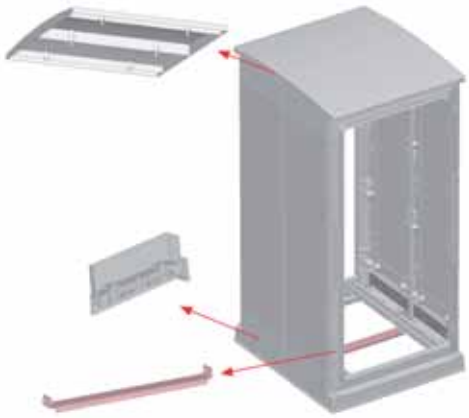
Composition accessories
Coupling accessories



Vertical coupling kit

- For coupling 2 enclosures on top of one another.
- Kit made up of 3.5 m of adhesive seal and the fixings required for mounting.
- IP 55 at the coupling point.

Description	Reference
Vertical coupling kit	**NSYUVPLA**

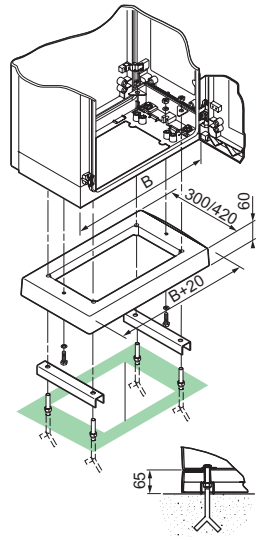


Specific

Enhanced depth enclosure

- After industrial machining, the frames of the standard enclosures are coupled in the factory to obtain very deep floor-standing enclosures.
- 3 possible depths: 575, 675 and 775 mm.
- The internal volume of the standard enclosures remains unaffected.
- Possible for the 4 enclosure versions, in particular for 19" applications with widths of 750 and 1250 mm.
- IP 44 in the version with ventilated canopy, IP 54 for the other versions.
- Roof made from polyester reinforced with fibreglass, for dimensions: 750 × 575 mm, 750 × 775 mm, 1250 × 575 mm and 1250 × 775 mm.
- A rear door can be installed in the coupled enclosures. Option of installing 2 sets of step slides (at the front and at the rear).
- Supply or installation in the enclosures of a 19" chassis with side trim plate installed on the step slides:
  - 19 U, height 1000 mm
  - 23 U, height 1250 mm
  - 25 U, height 1500 mm

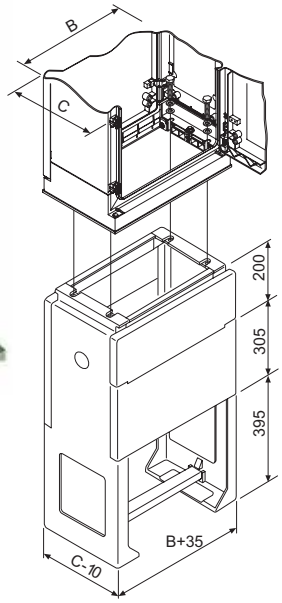
Composition accessories
Base accessories



N plinth height 60 mm

- Designed to be installed under the enclosures with sealed bottom part (version PLA or PLAT).
- Polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 grey.

For enclosure (mm)		Reference
Width (B)	Depth	
500	320	**NSYZNPLA53**
750	320	**NSYZNPLA73**
1000	320	**NSYZNPLA103**
1250	320	**NSYZNPLA123**
500	420	**NSYZNPLA54**
750	420	**NSYZNPLA74**
1000	420	**NSYZNPLA104**
1250	420	**NSYZNPLA124**

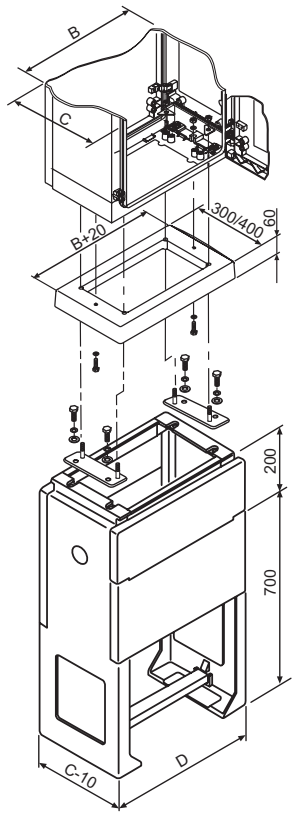


H plinth height 900 mm partly embedded

- Designed to be installed under the enclosures with open bottom part (version PLAZ or PLAZT).
- Polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 grey.
- Front panel with a height of 170 mm, retractable, providing easy access to the inside.
- Fixed front panel with a height of 305 mm, corresponding to the finished floor height area.
- The height above the floor after building-in varies between 200 and 500 mm.
- A metal rail helps to fix the entry cables.
- Lateral uprights with knock-out auxiliary output with ∅ Pg 36 (48 mm).
- A knock-out area is provided at the bottom of the side uprights for cable entry, if necessary.
- Delivered with the fixings required for installation.

For enclosure (mm)		Reference
Width (B)	Depth (C)	
500	320	**NSYZHPLA53**
750	320	**NSYZHPLA73**
1000	320	**NSYZHPLA103**
1250	320	**NSYZHPLA123**
500	420	**NSYZHPLA54**
750	420	**NSYZHPLA74**
1000	420	**NSYZHPLA104**
1250	420	**NSYZHPLA124**

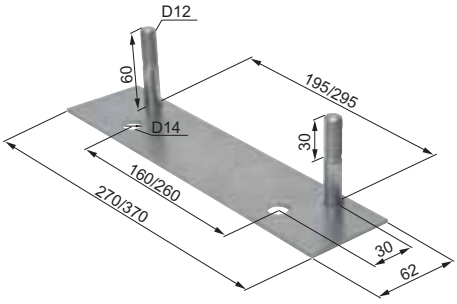
Composition accessories
Base accessories

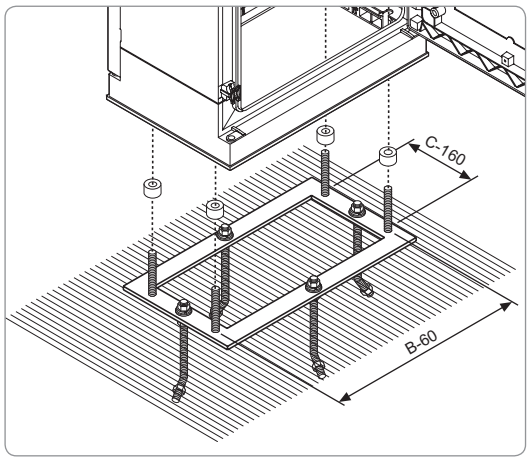


Connectors between plinths

- Designed to allow the adaptation of an enclosure with sealed bottom part + N plinth on a H-type partly embedded plinth.
- Supply: 2 pieces for adapting the centre-to-centre distances.

For enclosure (mm) Depth	Description	Reference
320	Adapter pieces for N plinth on 320-mm H plinth	**NSYAZ3PLA**
420	Adapter pieces for N plinth on 420-mm H plinth	**NSYAZ4PLA**

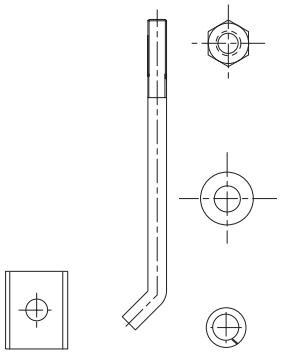




Floor-fixing frame

- Frame for direct fixing on the floor for installing enclosures with open bottom part (version PLAZ or PLAZT).
- Material: passivated zinc-coated steel.

For enclosure (mm)		Reference
Width (B)	Depth (C)	
500	320	**NSYMFPLAZ53**
750	320	**NSYMFPLAZ73**
1000	320	**NSYMFPLAZ103**
1250	320	**NSYMFPLAZ123**
500	420	**NSYMFPLAZ54**
750	420	**NSYMFPLAZ74**
1000	420	**NSYMFPLAZ104**
1250	420	**NSYMFPLAZ124**



Floor-fixing studs

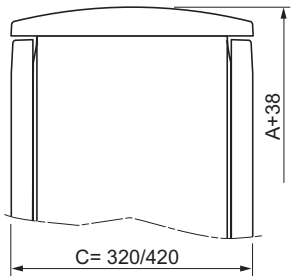
Set of 4 threaded parts and fixings, for fixing the enclosures in concrete plinths.

Description	Reference
Fixing studs	**NSYFSPLAZ**

Composition accessories
Top-mounting accessories
Fixing accessories

Canopy

- Polyester material reinforced with fibreglass, moulded by hot compression, self-extinguishing, RAL 7032 grey.
- It can be installed in all enclosure models.
- High resistance to impacts, temperature and bad weather.
- Delivered with the fixings required for installation.
- Increases the height (A) of the enclosure by 38 mm, without modifying its width or depth.
- Essential for outdoor use.



For enclosure (mm)		Reference
Width	Depth (C)	
500	320	**NSYTJPLA53**
750	320	**NSYTJPLA73**
1000	320	**NSYTJPLA103**
1250	320	**NSYTJPLA123**
500	420	**NSYTJPLA54**
750	420	**NSYTJPLA74**
1000	420	**NSYTJPLA104**
1250	420	**NSYTJPLA124**

Grille for IP 54 instead of IP 44

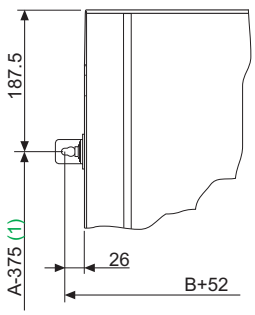
- For enclosure versions PLAT and PLAZT.
- It is installed from the inside in the upper ventilation opening.
- Delivered with G2 M1 standard synthetic filter, see **ClimaSys** section.
- 1 grille for 500 and 750-mm-wide enclosures, 2 grilles for 1000 and 1250-mm-wide enclosures.
- Prevents the entry of dust and provides the enclosure with IP 5X protection at the top.
- Maintains the possibility of ventilation.

Description	Reference
Outlet grille	**NSYCAG125LPF**

Wall-fixing lugs

- Fixing on the sides by 4 or 6 lugs in horizontal position (6 lugs for enclosures with height ≥ 1000 mm).
- Drilling positions and marks inside the side panels.
- Passivated zinc-coated material.
- Maximum acceptable load: 180 kg.
- Set of 6 lugs and fixings.
- 10-mm fixing plane on the rear of the enclosure plane.

Description	Reference
Wall-fixing lugs	**NSYFMPLA**



(1) For enclosures with height ≥ 1000 mm, 1 extra lug at the centre of the A-375 side.

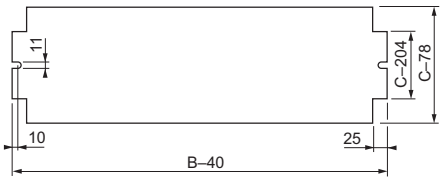
Composition accessories
Cable-entry accessories

Cable-entry plate

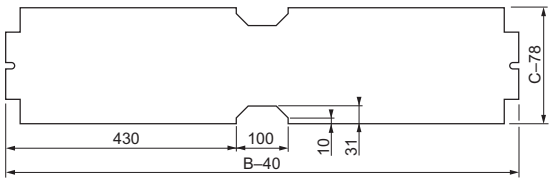
- Designed to be installed inside the enclosures with open bottom part (version PLAZ or PLAZT).
- Polyester material reinforced with fibreglass, thickness 4 mm.
- Easy drilling in specific customised version.
- Delivered with the fixings required for installation.
- Incompatibility with: adapter plates, step slides, internal door and chassis for modular distribution.

For enclosure (mm)		Reference
Width (B)	Depth (C)	
500	320	**NSYECPLAZ53**
750	320	**NSYECPLAZ73**
1000	320	**NSYECPLAZ103**
1250	320	**NSYECPLAZ123**
500	420	**NSYECPLAZ54**
750	420	**NSYECPLAZ74**
1000	420	**NSYECPLAZ104**
1250	420	**NSYECPLAZ124**

Cable-entry plate (1-door enclosure)



Cable-entry plate (2-door enclosure)



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See also the accessories

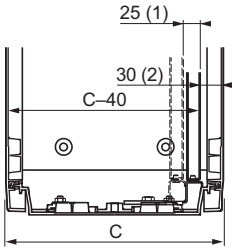
Cable-management
Cable entries page **7/102**

Cable holding page **7/115**

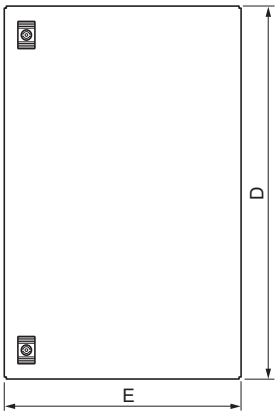
Composition accessories
Door and door accessories

Internal door

- Aluminium door, RAL 7032 grey.
- Designed for direct installation in enclosures with sealed bottom part. In the enclosures with the bottom part open, installation can be performed by ordering the necessary adapter plates, ref. **NSYPTZ●●●**.
- 2 depthwise mounting positions (1) according to the chosen M8 impressions, on the top and bottom parts of the enclosure, for fixing.
- Lock with 5-mm double-bar inserts.
- Delivered with M8 brass inserts and fixings.
- Incompatibility with: modular distribution chassis, 19" chassis, cable-entry plate and door retainer, ref. **NSYRETPLAU**.



(1) Two positions for depthwise installation.
(2) The 2nd position moves the position of the internal door back by 25 mm.



For enclosure (mm)		Reference	Internal door dimensions		Weight (kg)
Height	Width		D	E	
500	500	**NSYPAPLA55**	398	398	1.6
500	750	**NSYPAPLA57**	398	648	2.2
500	1000	2 × **NSYPAPLA55**	398	796 (2 × 398)	3.2 (2 × 1.6)
500	1250	**NSYPAPLA55** + **NSYPAPLA57**	398	1046 (398 + 648)	3.8 (1.6 + 2.2)
750	500	**NSYPAPLA75**	648	398	2.2
750	750	**NSYPAPLA77**	648	648	3.1
750	1000	2 × **NSYPAPLA75**	648	796 (2 × 398)	4.4 (2 × 2.2)
750	1250	**NSYPAPLA75** + **NSYPAPLA77**	648	1046 (398 + 648)	5.3 (2.2 + 3.1)
1000	500	**NSYPAPLA105**	898	398	2.8
1000	750	**NSYPAPLA107**	898	648	4.1
1000	1000	2 × **NSYPAPLA105**	898	796 (2 × 398)	5.4 (2 × 2.8)
1000	1250	**NSYPAPLA105** + **NSYPAPLA107**	898	1046 (398 + 648)	6.9 (2.8 + 4.1)
1250	500	**NSYPAPLA125**	1148	398	3.4
1250	750	**NSYPAPLA127**	1148	648	5
1250	1000	2 × **NSYPAPLA125**	1148	796 (2 × 398)	6.8 (2 × 3.4)
1250	1250	**NSYPAPLA125** + **NSYPAPLA127**	1148	1046 (398 + 648)	8.4 (3.4 + 5)
1500	500	**NSYPAPLA155**	1398	398	4
1500	750	**NSYPAPLA157**	1398	648	6
1500	1000	2 × **NSYPAPLA155**	1398	796 (2 × 398)	8 (2 × 4)
1500	1250	**NSYPAPLA155** + **NSYPAPLA157**	1398	1046 (398 + 648)	10 (4 + 6)

NSYRETPLA

NSYRETPLAU

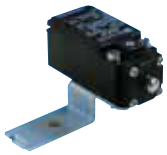
Door retainer

- Designed to adapt directly to the enclosure.
- 2 models available according to the type of enclosure:
– 1 model opening to 110° for enclosure versions PLA, PLAZ and PLAT.
– 1 model with 2 positions, 90° and 120°, for all the versions (warning: this solution is incompatible with certain accessories), see below.
- Can be installed on a door opening to the left or right indistinctly.
- Material: galvanised steel.
- Delivered with the fixings required for installation.

For enclosure	Reference
Version PLA, PLAZ, PLAT	**NSYRETPLA**
For all versions	**NSYRETPLAU**

Note: Ref. **NSYRETPLAU** is incompatible with internal doors, modular distribution chassis, step slides, adapter plates and cable-entry plates. In the event of incompatibility, use ref. **NSYRETPLAZ**.

Composition accessories
Door and door accessories



Door switch

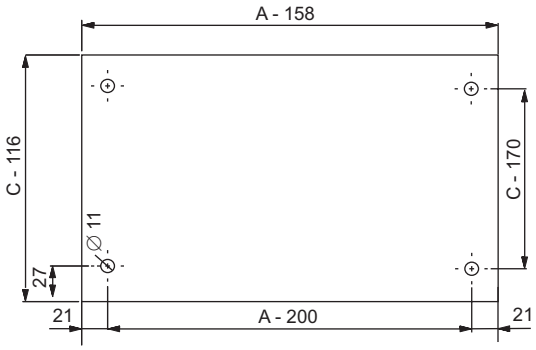
- Supply: switch, fixing bracket and fixings.
- NC + NO switch.
- Incompatible with the rear door and modular distribution chassis.

Description	Reference
Door switch	**NSYSNLPLA**

Protection and support screen

- Protective screen made from transparent polycarbonate, protecting access to the switchgear of small enclosures.
- The screen is fixed using accessory, ref. **NSYSPTR77**, to be ordered separately.
- The screens and fixing accessories are to be ordered in multiples of 5.

For enclosure (mm)		Reference
Width (A)	Height (C)	
500	500	**NSYPPTR55**
750	500	**NSYPPTR57**
500	750	**NSYPPTR75**
750	750	**NSYPPTR77**

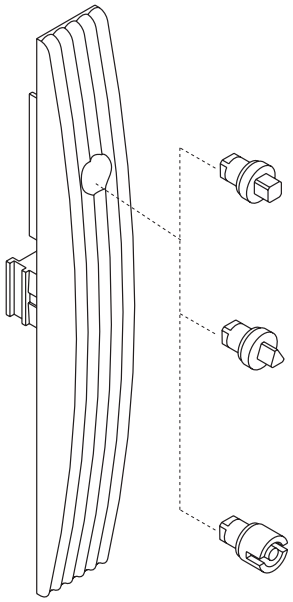


6

See also the accessories

Document pocket page **7/130**

Composition accessories
Locking system



Locks with escutcheon and without handle

- Standard supply for the enclosures with sealed top and bottom parts (PLA version).
- With 5-mm double-bar insert.
- PA6 material charged with fibreglass.
- RAL 7032 grey.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK 10.
- Insert breakage torque: 15 daN.

Options of changing the form inserts (supplied with the required operating key)

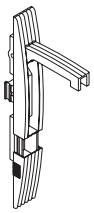
Description	Reference
7-mm square insert	**NSYTC7CRN**
8-mm square insert	**NSYTC8CRN**
6.5-mm triangular insert	**NSYTT6CRN**
8-mm triangular insert	**NSYTT8CRN**
5-mm double-bar insert	**NSYTDB5PLA**

NSYBCPLA

Padlocking device

- Padlocking accessory, preventing access to the lock-control insert. Opening diameter: 14 mm.

Description	Reference
Padlocking device	**NSYBCPLA**

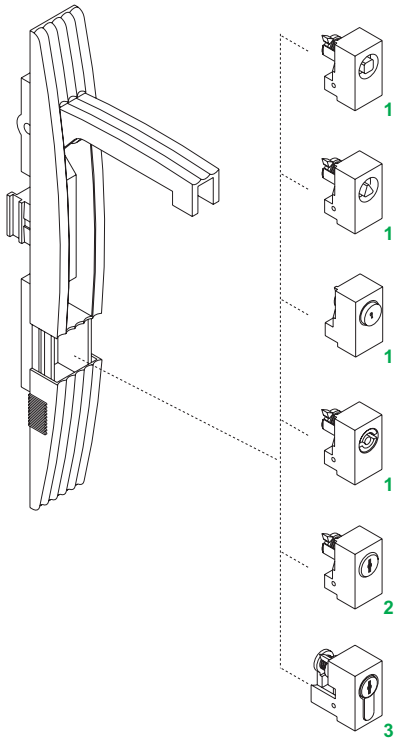


NSYEBMPLA

Options of changing for a handle lock

- Option of changing the escutcheon and the insert for a handle lock, ref. **NSYEBMPLA**, delivered without barrel or insert block.
- The insert or barrel are to be chosen from the option table on the next page.

Composition accessories
Locking system



1 Block with form insert.
2 Block with cylindrical barrel.
3 Block with semi-cylindrical barrel.

Lock with handle

- Ergonomic locking system with pivoting handle installed as standard on enclosures with ventilated canopy and/or open bottom part (versions PLAT, PLAZ and PLAZT), with a 5-mm double-bar insert block.
- Material: PA6 charged with 30% fibreglass.
- RAL 7032 grey.
- Fire resistance: 650 °C.
- Resistance to external mechanical impacts: IK 10.

Options of changing the form-insert blocks (supplied with the required operating key)

Description	Reference
Block, 6-mm square insert	**NSYINS61**
Block, 7-mm square insert	**NSYINS71**
Block, 8-mm square insert	**NSYINS81**
Block, 6.5-mm triangular insert	**NSYINT61**
Block, 8-mm triangular insert	**NSYINT81**
Push-button	**NSYTSPLA**
Double bar	**NSYINDB51**

Options of changing for blocks with cylindrical barrels

Type of key	Reference
405 E key	**NSYIN405E1**
421 E key	**NSYIN421E1**
455 key	**NSYIN4551**
1242 E key	**NSYIN1242E1**
1332 E key	**NSYIN1332E1**
2131 A key	**NSYIN2131A1**
2132 A key	**NSYIN2132A1**
2331 A key	**NSYIN2331A1**
2433 A key	**NSYIN2433A1**

Type of key	Reference
2452 E key	**NSYIN2452E1**
3113 A key	**NSYIN3113A1**
3122 E key	**NSYIN3122E1**
3123 A key	**NSYIN3123A1**
3133 A key	**NSYIN3133A1**
3422 E key	**NSYIN3422E1**
3432 E key	**NSYIN3432E1**
EDF 1300 key	**NSYINF1301**
EDF 1400 key	**NSYINF1401**

Options of changing for blocks with semi-cylindrical barrels

Description	Reference
1242 E key	**NSYIN1242E1**
DIN adapter	**NSYINDIN2**
JIS key	**NSYINKJIS2**
Reinforced key	**NSYINKR2**
FAC key	**NSYINKFAC2**

NSYCBCMPLA

NSYEBPLA

Options of changing the handle

- Changing the handle for a handle including a padlocking device (∅ 10 mm) allowing the handle to be locked.
- Option of changing the handle lock for a lock with an escutcheon and without handle, delivered without insert. The insert is to be chosen from the option table on the previous page:

Description	Reference
Padlocking handle	**NSYCBCMPLA**
Escutcheon without handle and insert	**NSYEBPLA**

Mounting accessories
Installation accessories

Metallic mounting plate and insulating mounting plate

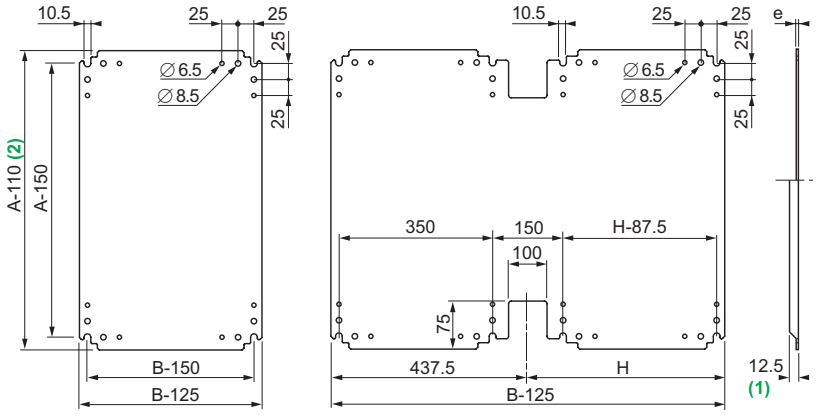
Plain mounting plate

- Galvanised sheet-steel mounting plate.
- Direct installation on M8 inserts at the rear of the enclosure or on step slides for depth adjustment (see page **6/60**). The enclosures with height of ≥ 1000 mm have intermediate impressions for installing mounting plates of a lesser height (M8 inserts, ref. **NSYTEX8**, to be ordered separately).
- In the 2-door enclosures, it is possible to install 1 complete mounting plate or 2 individual mounting plates.
- Maximum acceptable load: 150 kg/m².
- Thickness: 2.5 mm.

Insulating mounting plate

- Bakelite mounting plate, RAL 9005 black.
- Polyester mounting plate, RAL 7035.
- Maximum acceptable load: 150 kg/m².
- Thickness: 4 mm for the 55 and 75 plates, 5 mm for the other plates.

For enclosure (mm)		Mounting plate references			Surf. (dm²)	H (mm)
Height (A)	Width (B)	Plain	Insulating			
			Bakelite	Polyester		
500	500	**NSYPMM55**	**NSYPMB55**	**NSYPMA55**	14	-
500	750	**NSYPMM75**	**NSYPMB75**	**NSYPMA75**	24	-
500	1000	**NSYPMM510**	**NSYPMB510**	**NSYPMA510**	32	437.5
500	1250	**NSYPMM55** + **NSYPMM75**	**NSYPMB55** + **NSYPMB75**	**NSYPMA55** + **NSYPMA75**	-	-
750	500	**NSYPMM75**	**NSYPMB75**	**NSYPMA75**	24	-
750	750	**NSYPMM77**	**NSYPMB77**	**NSYPMA77**	40	-
750	1000	**NSYPMM710**	**NSYPMB710**	**NSYPMA710**	54	437.5
750	1250	**NSYPMM712**	**NSYPMB712**	**NSYPMA712**	70	687.5
1000	500	**NSYPMM105**	**NSYPMB105**	**NSYPMA105**	33	-
1000	750	**NSYPMM107**	**NSYPMB107**	**NSYPMA107**	55	-
1000	1000	**NSYPMM1010**	**NSYPMB1010**	**NSYPMA1010**	74	437.5
1000	1250	**NSYPMM1012**	**NSYPMB1012**	**NSYPMA1012**	96	687.5
1250	500	**NSYPMM125**	**NSYPMB125**	**NSYPMA125**	42	-
1250	750	**NSYPMM127**	**NSYPMB127**	**NSYPMA127**	70	-
1250	1000	**NSYPMM1210**	**NSYPMB1210**	**NSYPMA1210**	96	437.5
1250	1250	**NSYPMM1212**	**NSYPMB1212**	**NSYPMA1212**	124	687.5
1500	500	**NSYPMM155**	**NSYPMB155**	**-**	51	-
1500	750	**NSYPMM157**	**NSYPMB157**	**-**	85	-
1500	1000	**NSYPMM1510**	**NSYPMB1510**	**-**	118	437.5
1500	1250	**NSYPMM1512**	**NSYPMB1512**	**-**	152	687.5

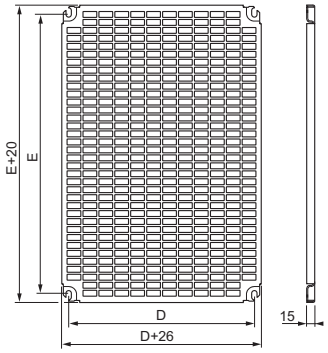


(1) Reinforcing fold for steel mounting plate with heights and widths ≥ 1000 mm.
(2) A-125 for references **NSYPMM1010** to **NSYPMM1512**, A-120 for the polyester mounting plate, ref. **NSYPMA●●●**.
Note: The diagrams above relate to the metal mounting plates. The mounting plates made from insulating material only have 4 or 8 main fixing points and the external dimensions of the diagrams.

Mounting accessories
Installation accessories

Telequick mounting plate

- It allows any switchgear to be mounted on the same plane without drilling or tapping.
- Grille made from galvanised sheet steel, with 11 × 26 mm drill holes, with a step of 15 × 30 mm, for direct installation, with clip nuts, of all the devices with fixing at 2, 3 or 4 points, by screws with diameters of 3, 4, 5 or 6 mm.
- Direct installation on M8 inserts at the rear of the enclosure or on step slides for depth adjustment (see page **6/60**). The enclosures with height of ≥ 1000 mm have intermediate impressions for installing mounting plates of a lesser height (M8 inserts, ref. **NSYTEX8**, to be ordered separately).
- Maximum acceptable load: 150 kg/m^2.



For enclosure (mm)		Reference	Dimensions (mm)		Surface (dm^2)
Height	Width		E	D	
500	500	**NSYPMR55**	350	350	15.3
500	750	**NSYPMR57**	350	600	24.6
500	1000	2 × **NSYPMR55**	350	2 × 350	30.6 (2 × 15.3)
500	1250	**NSYPMR55** + **NSYPMR57**	350	350 600	39.9 (15.3 + 24.6)
750	500	**NSYPMR75**	600	350	25.5
750	750	**NSYPMR77**	600	600	51.1
750	1000	2 × **NSYPMR75**	600	2 × 350	51 (2 × 25.5)
750	1250	**NSYPMR75** + **NSYPMR77**	600	350 600	76.6 (25.5 + 51.1)
1000	500	**NSYPMR105**	850	350	35.7
1000	750	**NSYPMR107**	850	600	57.5
1000	1000	2 × **NSYPMR105**	850	2 × 350	71.4 (2 × 35.7)
1000	1250	**NSYPMR105** + **NSYPMR107**	850	350 600	93.2 (35.7 + 57.5)
1250	500	**NSYPMR125**	1100	350	45.9
1250	750	**NSYPMR127**	1100	600	74
1250	1000	2 × **NSYPMR125**	1100	2 × 350	91.8 (2 × 45.9)
1250	1250	**NSYPMR125** + **NSYPMR127**	1100	350 600	119.9 (45.9 + 74)
1500	500	**NSYPMR155**	1350	350	56.1
1500	750	**NSYPMR157**	1350	600	90.4
1500	1000	2 × **NSYPMR155**	1350	2 × 350	112.2 (2 × 56.1)
1500	1250	**NSYPMR155** + **NSYPMR157**	1350	350 600	146.5 (56.1 + 90.4)

See also the accessories

Telequick mounting plate accessories page **7/27**

Mounting accessories
Installation accessories

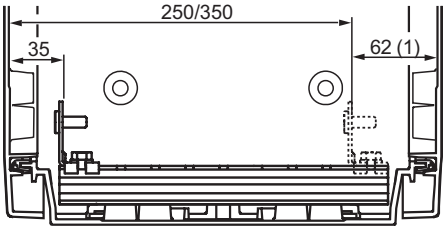
Step slides

- Set of 4 step slides with brackets allowing continuous depth adjustment of the mounting plate, with a pitch of 25 mm.
- Designed for direct installation in the enclosures with sealed bottom part (versions PLA or PLAT).
- In the enclosures with open bottom part (versions PLAZ or PLAZT), installation is made possible by adding the relevant adapter plates (see tables below and description on the next page).
- Material: bracket with steel M8 stud on aluminium rail.
- Fixing on the top and bottom parts of the enclosure by means of M8 inserts and screws (supplied).
- Incompatibility with: internal door, modular distribution chassis, 19" chassis, cable-entry plate and door retainer, ref. **NSYRETPLAU**.

For enclosure		Reference	
Depth (mm)	N° of doors	Step slides	Adapter plates
320	1	**NSYDPLA3**	**NSYPTZ3**
420	1	**NSYDPLA4**	**NSYPTZ4**
320	2	2 × **NSYDPLA3**	**NSYPTZ32P**
420	2	2 × **NSYDPLA4**	**NSYPTZ42P**

NSYDPLA

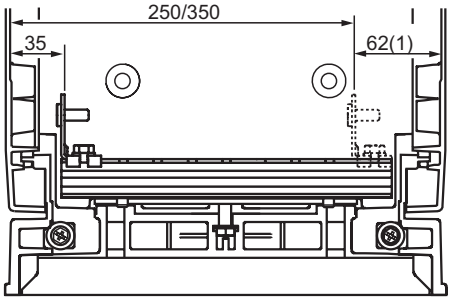
Installation of step slide ref. NSYDPLA●●●



(1) 57 mm with one transparent door.

NSYDPLA and NSYPTZ

Installation of step slide ref. NSYDPLA●●●, with adapter plate ref. NSYPTZ●●●



(1) 57 mm with one transparent door.

Mounting accessories
Installation accessories

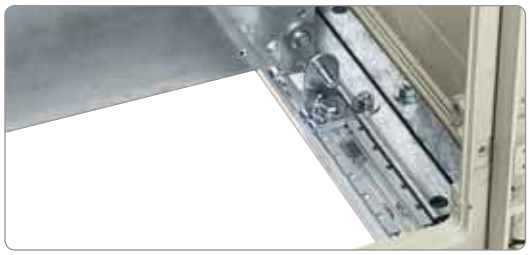
NSYPTZ●●●

NSYPTZ●●●2P

Adapter plates

- The enclosures with open bottom part (versions PLAZ and PLAZT) require a set of adapter plates for mounting:
– an internal door
– step slides
– modular chassis and 19" chassis
- Material: galvanised steel.
- Fixing on the bottom part of the enclosure by means of M8 inserts and screws (supplied).

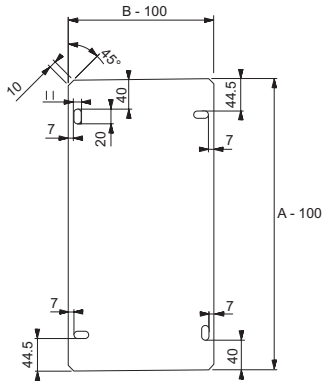
For enclosure		Reference
Depth (mm)	N° of doors	
320	1	**NSYPTZ3**
420	1	**NSYPTZ4**
320	2	**NSYPTZ32P**
420	2	**NSYPTZ42P**



Additional support

- Set of 4 additional brackets, to be slid into the step slides, for the installation of an additional mounting plate.

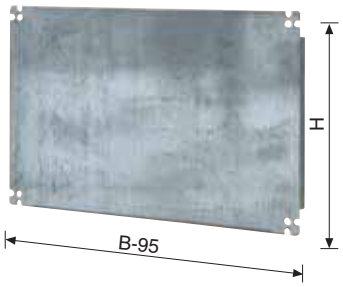
Description	Reference
Additional support	**NSYEDPLA**



Side mounting plates

- Polyester mounting plates fixed to the sides of the enclosure for additional installations. Installation on the M8 bosses by adding inserts, ref. **NSYTEX8**.
- Order by multiples of 2 (2, 4, 6...).

For enclosure (mm)		Reference
Height (A)	Depth (B)	
500	320	**NSYPMLA53**
500	420	**NSYPMLA54**
750	320	**NSYPMLA73**
750	420	**NSYPMLA74**
1000	320	**NSYPMLA103**
1000	420	**NSYPMLA104**
1250	320	**NSYPMLA123**
1250	420	**NSYPMLA124**



Partial plain mounting plate

- Galvanised sheet-steel mounting plate.
- Direct fixing on the uprights, with the notched sliding nuts or pivoting nuts, see common accessories section.
- Maximum acceptable load: 150 kg/m^2.

For enclosure	Mounting plate height H (mm)	Fixing centre-to-centre distance		Reference
Width B (mm)		Vertical	Horizontal	
750	247	600	200	**NSYSPMP2575**
1000	247	850	200	**NSYSPMP25100**
1000	397	850	350	**NSYSPMP40100**

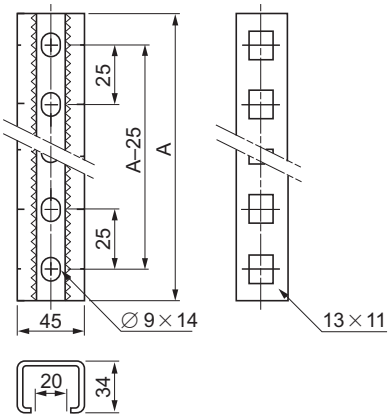
Mounting accessories
Installation accessories

Technical uprights

- Supports for fixing rails, perforated grilles and plain partial mounting plates.
- Use the suitable fixings and accessories shown in the common accessory section.
- Material: steel, 2-mm thick.
- Batch of 2 pieces.
- Fixing at the rear on the M8 inserts or on the step slides.

For enclosure Height (mm)	References	Dimensions
750	**NSYTVR7**	625
1000	**NSYTVR10**	875
1250	**NSYTVR125**	1125
1500	**NSYTVR15**	1375

Note: Enclosures with widths of 1000 and 1250 allow the installation of 4 uprights to integrate 2 mounting plates of 500 mm or of 500 and 750 mm.



Rails

- Symmetric or asymmetric DIN rails for mounting on the technical uprights, ref. **NSYTVR●●●**.
- Fixings and accessories: see common accessories.
- To be ordered by multiples of 5 (5, 10, 15...).

For installation in enclosures with width (B) (mm)	DIN rail references	
	Symmetrical 35 × 15	Asymmetrical
500	**NSYCSPLA50**	**NSYCAPLA50**
750	**NSYCSPLA75**	**NSYCAPLA75**
1000 (1)	**NSYCSPLA100**	**NSYCAPLA100**

(1) Enclosures with a width of 1000 mm can accommodate 2 mounting plates with rail types **NSYCSPLA50** or **NSYCAPLA50**.

M8 inserts

- To be placed in the bosses moulded on the doors, uprights, rear panels and bottom and top parts, for fixing accessories and assorted devices.
- Order by multiples of 8 (8, 16, 24...).

Description	Reference
M8 inserts	**NSYTEX8**

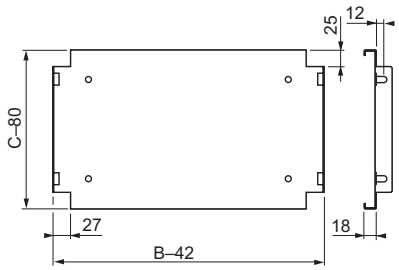
See also the accessories

Other uprights page **7/23**

Rails and fixings page **7/52**

Fixing accessories page **8/87**

Mounting accessories
Equipment support accessories



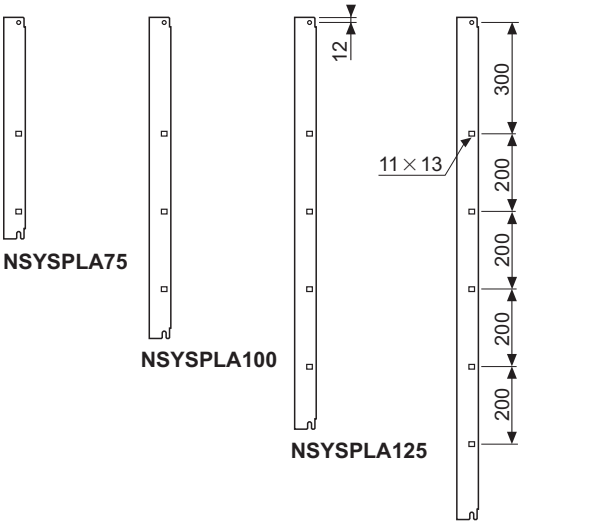
Support plate

- Designed to support assorted equipment or simply to install a separation.
- It is installed directly on the bottom part of the enclosure.
- For the installation of one or several support plates, use 2 sets of 2 uprights suitable for the height (to be ordered separately). These uprights offer the option of adjusting the height with a step of 200 mm (see drawing below).
- Galvanised-steel material.
- Delivered with the fixings required for installation.
- In the 2-door enclosures, the installation of the plate or the uprights requires the prior installation of an intermediate support, ref. **NSYSBPLA**, presented below.

For enclosure (mm)		Max. load	Plate Reference
Depth (C)	Width (B)		
320	500	60 kg	**NSYBANPLA53**
320	750	60 kg	**NSYBANPLA73**
420	500	50 kg	**NSYBANPLA54**
420	750	50 kg	**NSYBANPLA74**

NSYSPLA100

For enclosure Height (mm)	N° of adjustments	Upright Reference
500	-	-
750	2	2 × **NSYSPLA75**
1000	3	2 × **NSYSPLA100**
1250	4	2 × **NSYSPLA125**
1500	5	2 × **NSYSPLA150**

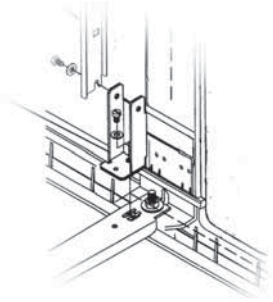


NSYSPLA75

NSYSPLA100

NSYSPLA125

NSYSPLA150



Intermediate support in the 2-door enclosures

- Required accessory for installing support plates, ref. **NSYBANPLA•••** or uprights, ref. **NSYSPLA•••** in the 2-door enclosures.

Description	Reference
Intermediate support	**NSYSBPLA**

Accessories

Renovation and anti-graffiti paint

- 2-component paint system, specially formulated for polyester enclosures. Renews enclosures and allows easy removal of graffiti.
- Paint composed of: base (80%) and hardener (20%).
- RAL 7032 grey.
- 2 references available:
  - 1 kg:
    - 800 g tin of base paint
    - 200 g tin of hardener
  - 5 kg:
    - 4 kg tin of base paint
    - 1 kg tin of hardener
- Coverage
  - 1 kg = 5 m^2
  - 5 kg = 25 m^2
- Solvent in 500 g bottles to be used as a paint thinner or to clean brushes.

Description	Reference
Anti-graffiti paint 1 kg	**NSYAUPG1**
Anti-graffiti paint 5 kg	**NSYAUPG5**
Anti-graffiti paint solvent 500 g	**NSYAUPGS**

Discover our ClimaSys thermal management offer

- Ventilation accessories.
- Filters.
- Regulation accessories.

See also the accessories

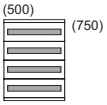
Lighting accessories pages **7/125** and **7/126**

Power distribution accessories
Modular distribution accessories

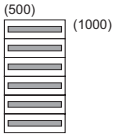
Details of the depth adjustment.

Modular distribution chassis

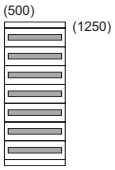
- Chassis for modular switchgear, installed directly in the sealed enclosures (PLA version). For installation in enclosures with open bottom part (PLAZ version) it is necessary to use a set of adapter plates (ref. **NSYPTZ**).
- Chassis made up of cover plates, made from self-extinguishing insulating material, RAL 7032 grey, on a rigid galvanised-steel structure.
- Quick installation without fixings.
- Distance between rail and front panel with adjustable depth from 40 to 85 mm.
- System for identifying electrical circuits supplied.
- Neutral/earth strip: 2×16 mm^2 + 5×6 mm^2 included in the standard offer.
- Incompatibility with: cable-entry plate, internal door, door switch and door retainer (ref. **NSYRETPLAU**).



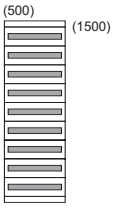
NSYDLP76



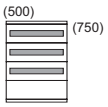
NSYDLP114



NSYDLP133



NSYDLP171



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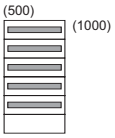

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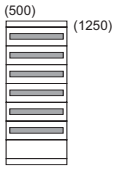

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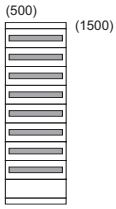

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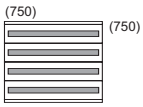

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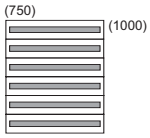

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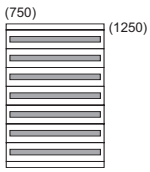

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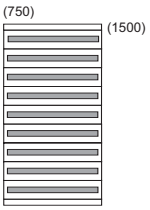

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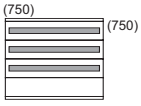

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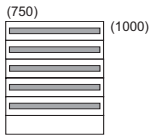

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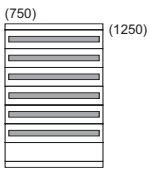

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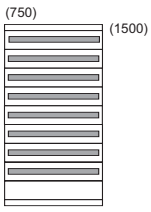


NSYDLP264

Power distribution accessories
Modular distribution accessories

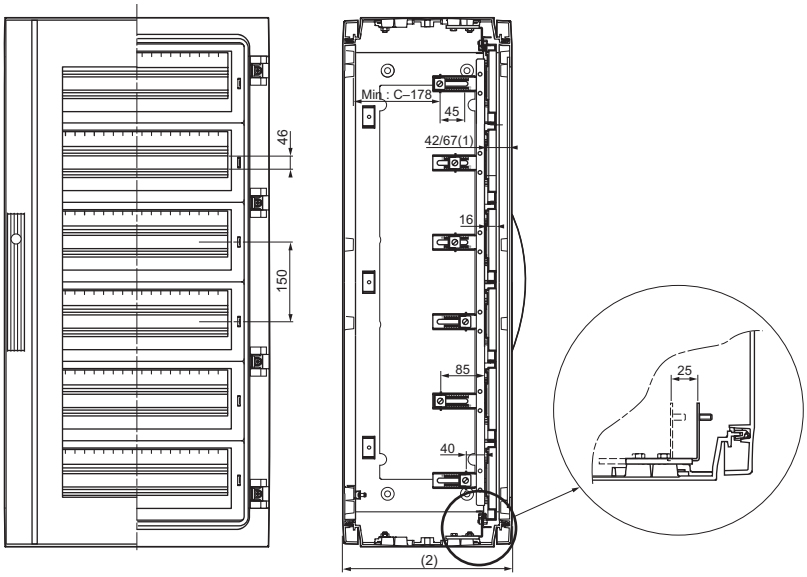
For enclosures (mm)		N° of doors	Reference	Row distribution			
				N° of rows	Rows for module		Number of plates
Height	Width				Number	Number of 18-mm modules	
750	500	1	**NSYDLP76**	4	4	76	-
750	500	1	**NSYDLP57**	4	3	57	1
750	750	1	**NSYDLP132**	4	4	132	-
750	750	1	**NSYDLP99**	4	3	99	1
750	1000	2	2 × **NSYDLP76**	4 + 4	4 + 4	152	-
750	1000	2	2 × **NSYDLP57**	4 + 4	3 + 3	114	1 + 1
750	1250	2	**NSYDLP76** + **NSYDLP132**	4 + 4	4 + 4	208	-
750	1250	2	**NSYDLP57** + **NSYDLP99**	4 + 4	3 + 3	156	1 + 1
1000	500	1	**NSYDLP114**	6	6	114	-
1000	500	1	**NSYDLP95**	6	5	95	1
1000	750	1	**NSYDLP198**	6	6	198	-
1000	750	1	**NSYDLP165**	6	5	165	1
1000	1000	2	2 × **NSYDLP114**	6 + 6	6 + 6	228	-
1000	1000	2	2 × **NSYDLP95**	6 + 6	5 + 5	190	1 + 1
1000	1250	2	**NSYDLP114** + **NSYDLP198**	6 + 6	6 + 6	312	-
1000	1250	2	**NSYDLP95** + **NSYDLP165**	6 + 6	5 + 5	260	1 + 1
1250	500	1	**NSYDLP133**	7	7	133	-
1250	500	1	**NSYDLP114P**	7	6	114	1
1250	750	1	**NSYDLP231**	7	7	231	-
1250	750	1	**NSYDLP198P**	7	6	198	1
1250	1000	2	2 × **NSYDLP133**	7 + 7	7 + 7	266	-
1250	1000	2	2 × **NSYDLP114P**	7 + 7	6 + 6	228	1 + 1
1250	1250	2	**NSYDLP133** + **NSYDLP231**	7 + 7	7 + 7	364	-
1250	1250	2	**NSYDLP114P** + **NSYDLP198P**	7 + 7	6 + 6	312	1 + 1
1500	500	1	**NSYDLP171**	9	9	171	-
1500	500	1	**NSYDLP152**	9	8	152	1
1500	750	1	**NSYDLP297**	9	9	297	-
1500	750	1	**NSYDLP264**	9	8	264	1
1500	1000	2	2 × **NSYDLP171**	9 + 9	9 + 9	342	-
1500	1000	2	2 × **NSYDLP152**	9 + 9	8 + 8	304	-
1500	1250	2	**NSYDLP171** + **NSYDLP297**	9 + 9	9 + 9	468	1 + 1
1500	1250	2	**NSYDLP152** + **NSYDLP264**	9 + 9	8 + 8	416	1 + 1

Power distribution accessories
Modular distribution accessories

Detail from front-panel mounting.

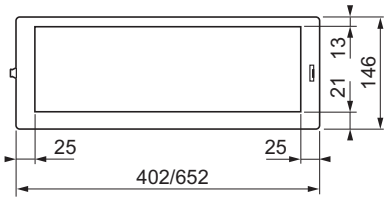
Detail from the circuit-marking system.

Dimensions



(1) Dimensions of 42 or 67 mm or a pitch of 25 mm, according to the M8 boss chosen for the installation. See details in the enlarged image on the right. In the enclosures with glazed doors, the 2 dimensions are reduced by 5 mm.
(2) C = Depth of the enclosure.

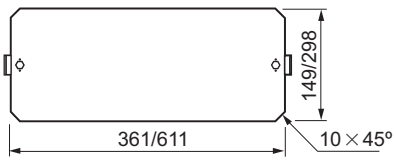
Plain cover plate



- Self-extinguishing insulating material, RAL 7032 grey, for non-modular switchgear protection.
- Nominal height: 150 mm.
- Order by multiples of 2 (2, 4, 6...).

For enclosure width (mm)	Dimensions (mm)		Reference
	Height	Width	
500	146	402	**NSYCTL500DLP**
750	146	652	**NSYCTL750DLP**

Plain mounting plate



- Plate for fixing non-modular devices.
- Material: galvanised steel, 2 mm thick.
- Depth-adjustable fixing on the supports from 40 to 85 mm.
- Nominal height: 150 mm or 300 mm.
- Order by multiples of 2 (2, 4, 6...).

For enclosure width (mm)	Dimensions (mm)		Reference
	Height	Width	
500	149	361	**NSYPMP500DLP**
750	149	361	**NSYPMP750DLP**
500	298	611	**NSYPMP5002DLP**
750	298	611	**NSYPMP7502DLP**

19" accessories

19” chassis

- Very sturdy 19" metal chassis, designed for installation in enclosures with a width of 750 and 1250 mm (in the 750-mm enclosure, with a intermediate support, ref. **NSYSBPLA**).
- These chassis are available in 2 versions: fixed and swing.
- These chassis can be used as partial mounting plates in enclosures with higher-than-nominal height.
- Incompatible with the internal doors and the step slides.

Enclosure with 19” fixed chassis.

19” fixed chassis

- Fixed chassis made up of 2 uprights with fixings.
- For heights from 750 to 1500 mm, the installation requires ordering 1 batch of 2 matching uprights. If a chassis is installed in an enclosure with a greater height, it is necessary to use the suitable uprights for the size of the enclosure.
- Material: sheet steel, thickness 20 / 10 mm, RAL 7032 grey epoxy-polyester paint.
- Maximum load: 3 kg per U.

For enclosure (mm)		Number of U	Reference	
Height	Width		19” fixed chassis	Batch of 2 uprights
500	750	8	**NSYBRF8PLA**	-
750	750	12	**NSYBRF12PLA**	**NSYSPLA75**
1000	750	17	**NSYBRF17PLA**	**NSYSPLA100**
1250	750	21	**NSYBRF21PLA**	**NSYSPLA125**
1500	750	26	**NSYBRF26PLA**	**NSYSPLA150**

Enclosure with 19” swing chassis.

19” swing chassis

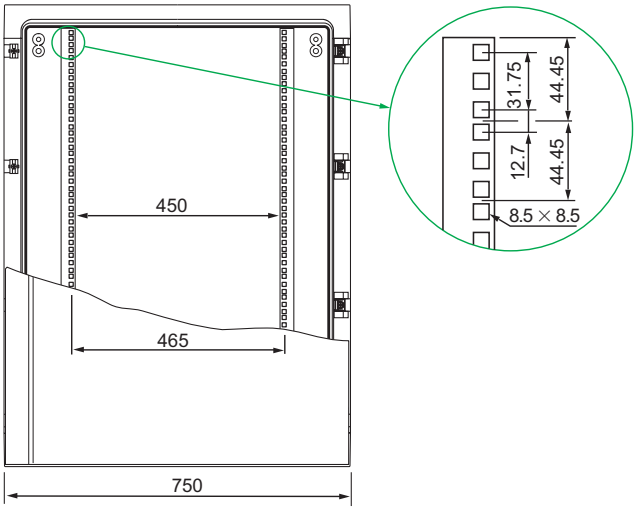
- Swing chassis opening to 120° with 5-mm double-bar key lock.
- For heights from 750 to 1500 mm, the installation requires ordering 1 batch of 2 matching uprights. If a chassis is installed in an enclosure with a greater height, it is necessary to use the suitable uprights for the size of the enclosure.
- Material: sheet steel, thickness 20 / 10 mm, RAL 7032 grey epoxy-polyester paint.
- Maximum load: 3 kg per U.

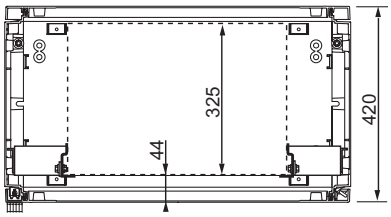
For enclosure (mm)		Number of U	Reference	
Height	Width		19” swing chassis	Batch of 2 uprights
500	750	7	**NSYBRP7PLA**	-
750	750	11	**NSYBRP11PLA**	**NSYSPLA75**
1000	750	16	**NSYBRP16PLA**	**NSYSPLA100**
1250	750	20	**NSYBRP20PLA**	**NSYSPLA125**
1500	750	25	**NSYBRP25PLA**	**NSYSPLA150**

19" accessories

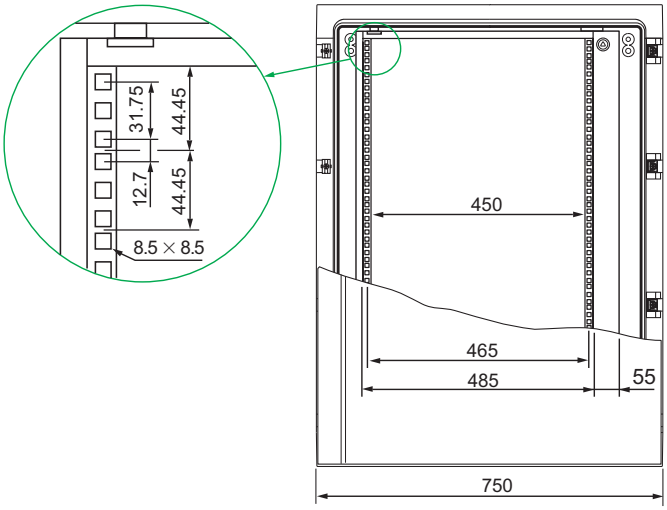
Dimensions

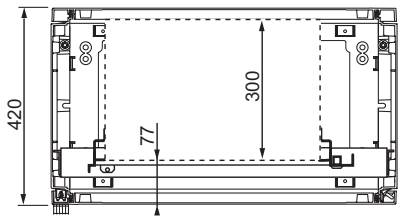
19” fixed chassis

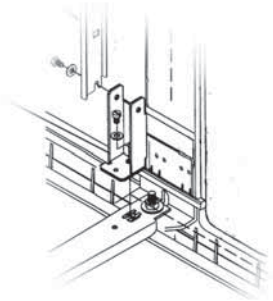




19” swing chassis







Intermediate support in the 2-door enclosures

- Accessory required for installing uprights, ref. **NSYSPLA●●●**, in the 2-door enclosures.

Description	Reference
Intermediate support	**NSYSBPLA**

6

Polyester DIN floor-standing enclosure

Safety
– Full insulation for class II units.
– No risk to the public.
– Lock with 3-point closure.

Application
Designed to accommodate busbars.

Service life
High resistance to corrosion in harsh environments, maintaining its mechanical and insulation properties.

Installation on semi-embedded plinth
Facilitates the entry and positioning of cables.

Customisation
– Horizontal or depthwise coupling.
– Rear door.

Smart
Removable cross rail.

Easy
– Bosses for fixing inserts on the rear, the door and the side walls.
– Removable hinges.

Smart
Removable cross rail.

Polyester DIN floor-standing enclosure
Introduction

Floor-standing enclosures designed mainly to accommodate busbars and DIN-type three-pole LV fuse blocks, for distributing power from the public grids.
The properties of the material and the manufacturing process are identical to those of the Thalassa PLA range.

Technical characteristics

- Floor-standing enclosures, made from polyester reinforced with fibreglass, moulded by hot compression, RAL 7032 grey colour.
- Direct fixing to the floor or on a plinth, with a height of 900 mm, partially embedded.
- Resistance to external mechanical impacts: IK 10 (20 joules).
- Ventilated floor-standing enclosures with a degree of protection of IP 43, according to IEC 60529 (IP 54 with sealing kit, see page **6/74**).
- Floor-standing enclosure with built-in canopy, not overhanging, allowing the coupling of enclosures side-to-side or back-to-back.
- Easily removable inner hinges, allowing the door to be reversed and to open to more than 180°.
- Doors equipped with impressions allowing the integration of inserts for M6 screws.
- Closing by handle with lever and 1242 E cylindrical safety lock. Other locks optionally available (see page **6/74**).
- Fixing points at the rear of the enclosure with:
– M10 inserts: for installing, direct or on insulators, distribution bars for DIN-type three-pole fuse-holder strips and for a neutral bar.
– M6 inserts: for installing a mounting plate.
- 2-door floor-standing enclosure with central upright:
– Fixed to the enclosure and removable: one lock on each door.
– Fixed to the left door: a single lock on the right door.
- M8 boss for installation on the lateral surfaces, inserts ref. **NSYTEX8** not supplied.
- M6 bosses in the roof for fixing the lighting or auxiliary equipment, inserts ref. **NSYTEX6** not supplied.

Enclosure ref. **NSYPLD8122** with the central upright fixed to the left door.

Enclosure ref. **NSYPLD8122C** with central upright, 2 doors and 2 locks.

Selection guide for floor-standing enclosures and accessories

External dimensions (mm)			Floor-standing enclosures	Size DIN	No. of doors	No. of locks	Insulating mounting plates	Plinths	Number of fittings*
Height	Width (B)	Depth	Page 6/71				Page 6/75	Page 6/72	
850	465	320	**NSYPLD8500**	00	1	1	**NSYAPLD85**	**NSYZD5300**	3 + N
850	590	320	**NSYPLD860**	0	1	1	**NSYAPLD86**	**NSYZD630**	4 + N
850	785	320	**NSYPLD881**	1	1	1	**NSYAPLD88**	**NSYZD831**	6 + N
850	1115	320	**NSYPLD8122**	2	2	1	**NSYAPLD812**	**NSYZD1232**	9 + N
850	1115	320	**NSYPLD8122C**	2	2	2	**NSYAPLD812**	**NSYZD1232**	9 + N

*Number of fuse-holder blocks + N = nut for direct connection fitting (e.g. 3 + N).

Plinth for DIN floor-standing enclosure
Introduction

Plinth height 900 mm

- Polyester plinth, reinforced with fibreglass, moulded by hot compression, RAL 7032 grey colour.
- Easy machining.
- Embeddable plinth ready for direct fixing of DIN floor-standing enclosures.
- Retractable top front panel, providing easy access to the inside of the enclosure.
- On the rear panel, housings with M6 inserts, allowing the fixing of the plate, DIN rail or assorted hardware.
- Lateral uprights with knock-out auxiliary outlet with a diameter of Pg 36 (48 mm).
- Internal U- and L-shaped metal uprights, adjustable, for fixing cables.
- A knock-out zone is provided at the bottom of the lateral uprights for cable entry.

For floor-standing enclosure Width (mm)	References
465	**NSYZD5300**
590	**NSYZD630**
785	**NSYZD831**
1115	**NSYZD1232**

Knock-out Pg 36 auxiliary outlet.

Lateral knock-out is removed.

Removable top front panel (not hinged).

Specific

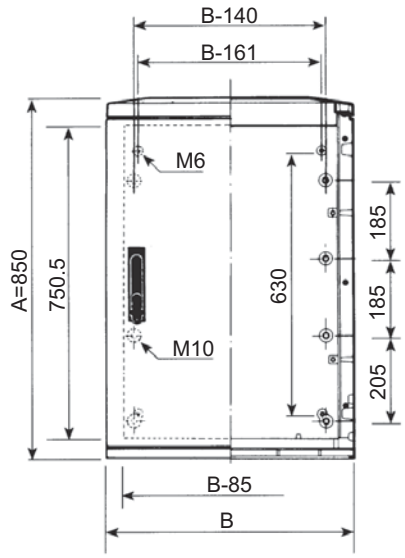
- Other needs, other constraints? Please contact us.
- A specific offer will meet your requirements.

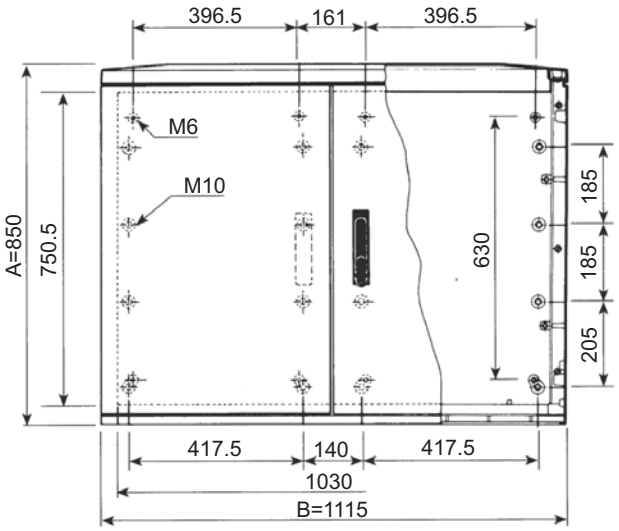
Polyester DIN floor-standing enclosure
Dimensions

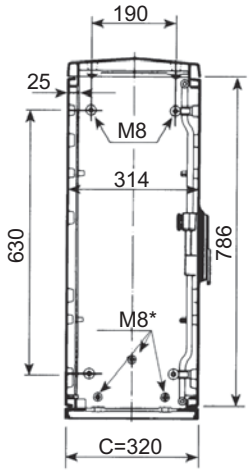
B (mm)	D* (mm)	References	
		Floor-standing enclosures	Plinths
465	360	**NSYPLD8500**	**NSYZD5300**
590	495	**NSYPLD860**	**NSYZD630**
785	690	**NSYPLD881**	**NSYZD831**
1115	1020	**NSYPLD8122**	**NSYZD1232**

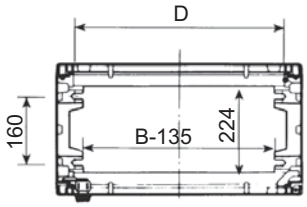
*Distance between the points for fixing the enclosure to the plinth.

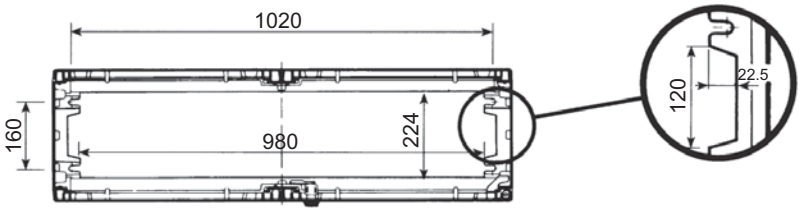
Floor-standing enclosures





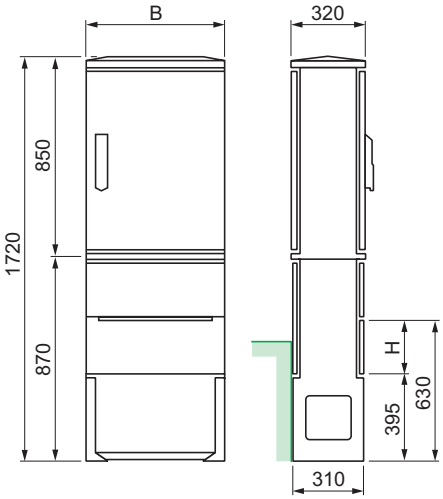




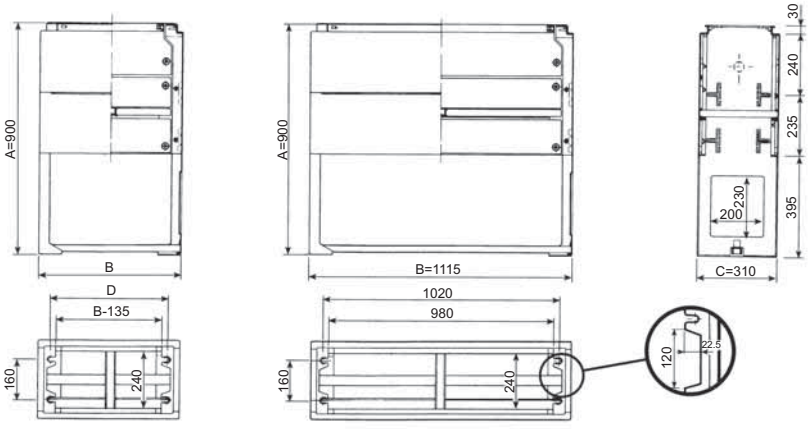


*Housing for M8 inserts, ref. **NSYTEPLDM8**.

Floor-standing enclosure plus plinth



Plinths



The H dimension relates to the finished floor height area.

Polyester DIN floor-standing enclosure
Composition accessories

IP 54 sealing kit

- Placed directly on the door and on the rear of the enclosure.
- Provides a degree of protection of IP 54.
- Seal made from black synthetic rubber.

For floor-standing enclosure Width (mm)	References
465	**NSYJED8500**
590	**NSYJED860**
785	**NSYJED881**
1115	**NSYJED8122**

Floor-standing supports

- Set of 2 metal supports for fixing the enclosure directly to the floor.

Name	Reference
Floor-standing support	**NSYSPLD**

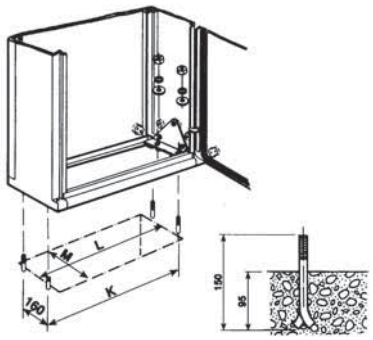


Table of fixing and opening dimensions			
K	L	M	For floor-standing enclosures
360	320	224	**NSYPLD8500**
495	455	224	**NSYPLD860**
690	650	224	**NSYPLD881**
1020	980	224	**NSYPLD8122** and **NSYPLD8122C**

Locks and inserts

Locks

- Standard lock with retractable plastic handle and 1242 E semi-cylindrical safety lock.
- Other optional shape inserts or barrels and keys.

Inserts for optional change

Name	References
5-mm double bar	**NSYTDB5ME**
6-mm male square	**NSYTC6ME**
7-mm male square	**NSYTC7ME**
8-mm male square	**NSYTC8ME**
6.5-mm male triangle	**NSYTT6ME**
8-mm male triangle	**NSYTT8ME**
Barrel and key 405	**NSYTCL405ME**
Reinforced semi-cylindrical barrel and key	**NSYTLRME**

Padlocking accessory

- Padlocking system, for ∅ 9 mm padlock, preventing access to the handle.

Name	Reference
Padlocking accessory	**NSYBCME**

Polyester DIN floor-standing enclosure
Mounting accessories

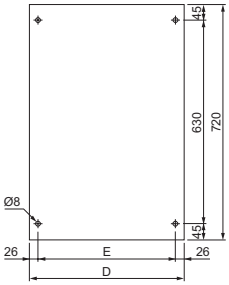
Insulating mounting plate

- It is placed directly on the rear of the enclosure.
- Insulating material, RAL 9005 black bakelite, thickness 5 mm.

For floor-standing enclosure Width (mm)	D (mm)	E (mm)	Weight (kg)	References
465	356	304	2	**NSYAPLD85**
590	481	429	2.7	**NSYAPLD86**
785	676	624	3.8	**NSYAPLD88**
1115	448.5	396.5	5	**NSYAPLD812***

*The reference includes 2 mounting plates with the dimensions of the table.

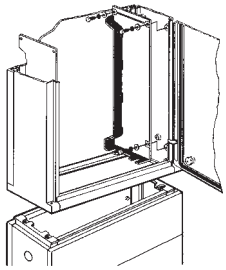
Dimensions



Lateral uprights for busbars

- Made from RAL 7032 grey polyester.
- They are fixed to the plinth, ref. **NSYZD●●●**.
- They are designed to accommodate busbars, fixed to the built-in inserts.
- This installation is used with a polyester DIN floor-standing enclosure previously machined to obtain a completely open bottom part. This machining is available in the customised offer.
- The enclosure is positioned from the top on the set made of both lateral uprights plus the plinth.
- The fixings supplied allow the attachement of the 2 uprights to the enclosure.

Name	Reference
Lateral uprights	**NSYBPLDN**



LV public distribution application with DIN three-pole fuse blocks: floor-standing enclosure and plinth

See also the accessories

Inserts page **6/62**

Document pocket page **7/130**

Lighting pages **7/125** and **7/126**

7

Accessories

Mounting 7/2

Power distribution 7/70

Cable management 7/101

Lighting and power socket 7/125

Door accessories 7/130

Earthing accessories 7/139

Floor accessories 7/142

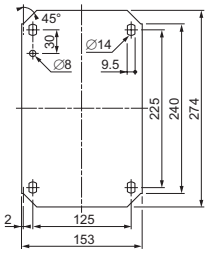
Paint accessories 7/144

Mounting
Installation accessories

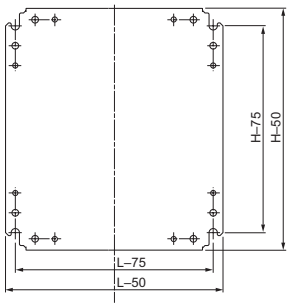
Metal

Silkscreened

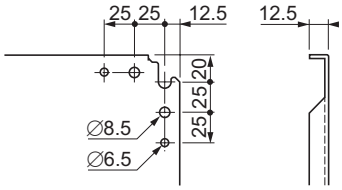
For ranges
S3D, CRN, S3X, PLM, S57



NSYMM32



NSYMM33, NSYMM36, NSYMM3025, NSYMM66, NSYMM55



From the size of 1000 × 1000

Mounting plate with sliding supports.

Plain and silkscreened mounting plates

- Galvanised-steel mounting plates.
- Galvanised-steel mounting plates, silkscreened for easier distribution of the products to be installed.
- Centimetric grid pattern.

Supply: 1 mounting plate and fixing elements.

For floor-standing enclosure (mm)		Height (mm)	Width (mm)	Surface (dm^2)	Maximum load (kg)	Weight (kg)	Reference	
Height	Width						Metal	Silkscreened
200	200	165	150	2.5	40	0.4	**NSYMM22**	-
200	300	265	150	4	40	0.6	**NSYMM23**	-
250	200	215	150	3.2	40	0.5	**NSYMM2520**	-
250	400	150	350	5.3	60	0.8	**NSYMM2540**	-
250	500	150	450	6.8	60	1.1	**NSYMM2550**	-
300	200	274	153	3.8	60	0.6	**NSYMM32**	-
300	250	250	200	5	60	0.7	**NSYMM3025**	-
300	300	250	250	6.3	60	0.9	**NSYMM33**	-
300	400	250	350	8.8	60	1.25	**NSYMM43***	**NSYMS43**
300	450	250	400	10.0	60	1.4	**NSYMM3045**	-
300	600	250	550	13.8	60	2	**NSYMM36**	-
400	400	350	350	12.3	60	1.7	**NSYMM44**	**NSYMS44**
400	600	350	550	19.3	90	2.7	**NSYMM64***	**NSYMS64**
400	800	350	750	26.3	90	3.8	**NSYMM48**	-
500	300	450	250	11.3	60	1.65	**NSYMM53***	**NSYMS53**
500	400	450	350	15.8	90	2.2	**NSYMM54**	**NSYMS54**
500	500	450	450	20.3	90	2.95	**NSYMM55***	**NSYMS55**
600	400	550	350	19.3	90	2.70	**NSYMM64**	**NSYMS64**
600	500	550	450	24.8	90	3.6	**NSYMM65**	-
600	600	550	550	30.3	135	4.4	**NSYMM66**	**NSYMS66**
700	500	650	450	29.3	135	4.25	**NSYMM75**	**NSYMS75**
700	600	650	550	35.8	135	5.2	**NSYMM76**	-
800	600	750	550	41.3	135	8.1	**NSYMM86***	**NSYMS86**
800	800	750	750	56.3	150	11	**NSYMM88**	-
1000	600	950	550	52.3	150	10.2	**NSYMM106**	-
1000	800	950	750	71.3	150	13.9	**NSYMM108***	-
1000	1000	950	950	93.1	180	18.1	**NSYMM1010**	-
1200	600	1150	550	65.8	180	12.8	**NSYMM126**	-
1200	800	1150	750	89.1	180	17.35	**NSYMM128***	-
1200	1000	1150	950	112.4	180	21.9	**NSYMM1210***	-
1200	1200	1150	1150	135.7	180	26.45	**NSYMM1212**	-
1400	1000	1350	950	131.7	180	25.7	**NSYMM1410**	-

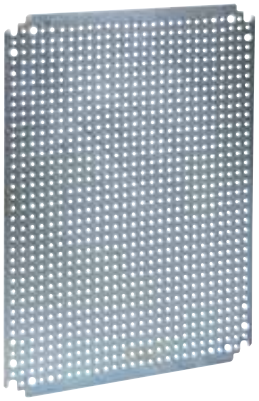
* Plate with reversible dimensions; it can be installed in enclosures with inverted dimensions.
Example:
Plate ref. **NSYMM64** can be used for the following enclosures:
- H 600 × W 400 mm.
- H 400 × W 600 mm.

See also the accessories

Step slides
page **7/7**

Rails and uprights
page **7/50**

Mounting
Installation accessories

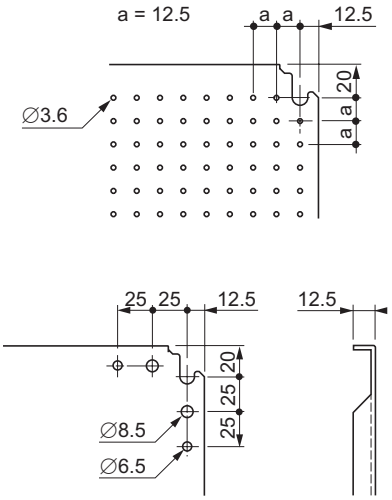


For ranges S3D, CRN, S3X, PLM, S57

Microperforated mounting plate

- Galvanised-steel microperforated mounting plates.
- They considerably reduce the products installation time thanks to the holes prepared to receive the self-tapping screws.
- Holes with ∅ 3.6 mm in steps of 12.5 mm.

Supply: 1 mounting plate and fixing elements.

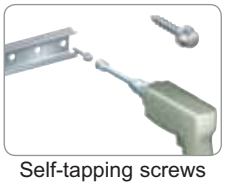


From the size of 1000 × 1000

For enclosures		Height (mm)	Width (mm)	Surface (dm²)	Maximum load (kg)	Weight (kg)	Reference
Height (mm)	Width (mm)						
300	200	265	150	4	60	0.55	**NSYMF32**
300	300	265	250	6.6	60	0.95	**NSYMF33**
300	400	250	350	9.3	60	1.35	**NSYMF43***
400	400	365	350	12.8	60	1.85	**NSYMF44**
500	300	450	250	11.6	60	1.70	**NSYMF53**
500	400	465	350	16.3	90	2.40	**NSYMF54**
500	500	465	450	20.9	90	3.05	**NSYMF55**
600	400	550	365	20.1	90	2.95	**NSYMF64***
600	500	550	450	24.5	90	3.60	**NSYMF65**
600	600	565	550	31.1	135	4.55	**NSYMF66**
700	500	665	450	29.9	135	4.40	**NSYMF75**
800	600	765	550	42.1	135	7.70	**NSYMF86***
800	800	765	750	57.4	150	10.55	**NSYMF88**
1000	600	965	550	53.1	150	9.75	**NSYMF106**
1000	800	965	750	91.7	150	13.30	**NSYMF108***
1000	1000	965	965	93.1	180	17.10	**NSYMF1010**
1200	600	1165	565	65.8	180	12.05	**NSYMF126**
1200	800	1165	765	89.1	180	16.35	**NSYMF128**
1200	1000	1165	965	112.4	180	20.65	**NSYMF1210***

* Reversible mounting plate; it can be installed in enclosures with inverted dimensions.
Example:
Plate ref. **NSYMF64** can be used for the following enclosures:
- H 400 × W 600 mm.
- H 600 × W 400 mm.

See also the accessories

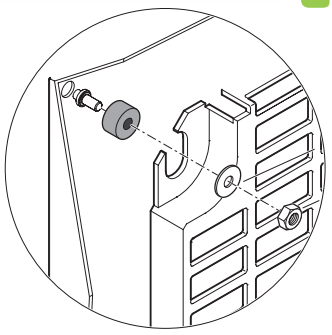


Self-tapping screws ref. **NSYS16M5HS** page **7/67**

Step slides page **7/7**

Mounting
Installation accessories

For ranges S3D, CRN, S3X, PLM, S57

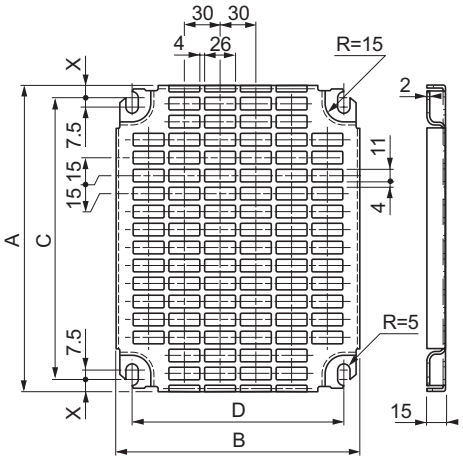


Mounting-plate elevators. Supply: 6 elevators.
Ref. **NSYEMR**

Telequick mounting plate

- Zinc-coated-steel Telequick mounting plates. They allow cable guides and ducting and other installation accessories to be clipped on, making it easier to install switchgear.
- 11 × 26 mm slots.
- Switchgear fixing by clip-on nuts.

Supply: 1 mounting plate and fixing elements.



For enclosures (mm)		Dimensions (mm)					Surface (dm²)	Load (kg)	No. of perforations in		Reference
Height	Width	A	B	C	D	X			Height	Width	
300	200	255	153.7	231.3	125	11.85	3.3	0.30	16	5	**NSYMR32**
300	250	253	228	231.3	175	10.85	5.1	0.40	16	8	**NSYMR3025**
300	300	255	251	231.3	225	11.85	5.8	0.50	16	9	**NSYMR33**
300	400	255	354	235	325	10	8.3	0.75	18	11	**NSYMR34**
400	300	348.7	251	325	225	11.85	8.1	0.70	22	9	**NSYMR43**
400	400	345	351	325	325	10	11.5	1	24	11	**NSYMR44**
400	600	345	551	325	525	10	18.4	1.55	24	19	**NSYMR46**
500	300	453.7	251	430	225	11.85	10.7	0.85	29	9	**NSYMR53**
500	400	450	351	430	325	10	15.2	1.30	31	11	**NSYMR54**
500	500	450	451	430	425	10	19.7	1.60	31	14	**NSYMR55**
600	400	555	351	530	325	12.5	18.8	1.50	38	11	**NSYMR64**
600	500	555	451	535	425	10	24.4	2	38	14	**NSYMR65**
600	600	555	551	535	625	10	29.9	2.50	38	17	**NSYMR66**
600	800	551	750	531	724	10	40.7	3.10	36	24	**NSYMR68**
700	500	645	451	625	425	10	28.4	2.35	44	14	**NSYMR75**
800	600	750	551	730	525	10	40.7	3.20	51	17	**NSYMR86**
800	800	750	751	730	725	10	55.7	3.95	51	24	**NSYMR88**
800	1000	751	951	731	925	10	70.8	5.30	49	31	**NSYMR810**
1000	600	945	551	925	525	10	51.4	4.05	64	17	**NSYMR106**
1000	800	945	751	925	725	10	70.3	5	64	24	**NSYMR108**
1000	1000	945	951	925	925	10	89.2	6.50	62	31	**NSYMR1010**
1000	1200	951	1151	931	1125	10	108.8	7.45	62	37	**NSYMR1012**
1200	600	1145	551	1125	525	10	62.4	5.70	75	17	**NSYMR126**
1200	800	1145	751	1125	725	10	85.3	6.40	75	24	**NSYMR128**
1200	1000	1145	951	1125	925	10	108.2	7.80	75	31	**NSYMR1210**
1400	1000	1345	951	1325	925	10	127.3	9.10	88	31	**NSYMR1410**

To install two mounting plates in a single enclosure, also order reference **NSYCRNGSDR**.
To install the plate in an enclosure with 6 studs, also order reference **NSYEMR**.

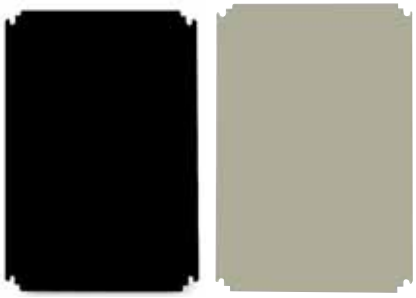
See also the accessories

Clip-on nuts
page **7/27**

Lyre-shaped clamp for plate
ref. **NSYGCR**
page **7/123**

Plastic cable support
ref. **NSYSPC**
page **7/122**

Mounting
Installation accessories



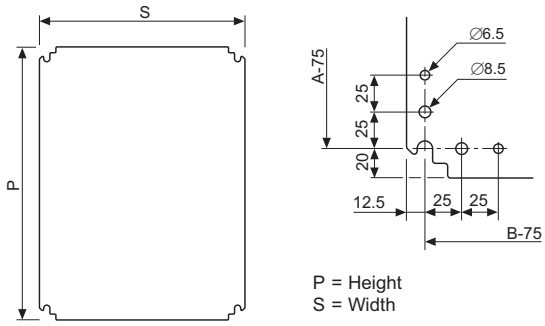
Bakelite Polyester

For ranges S3D, CRN, S3X, PLM

Bakelite and polyester mounting plate

- Made in black bakelite RAL-9005 or from polyester reinforced with fibreglass, RAL-7035 grey colour.
- They are coupled directly to the rear of the actual enclosure or to the sliding plate supports.
- Double-door enclosures offer the option of installing one full plate or two individual plates. See guide below.

Supply: 1 mounting plate and fixing elements.



P = Height
S = Width

For floor-standing enclosure (mm)		Dimensions (mm)		Thickness (mm)		Weight (kg)		Reference	
Height (A)	Width (B)	Height (P)	Width (S)	Bakelite	Polyester	Bakelite	Polyester	Bakelite	Polyester
300	200	265	150	4	4	0.2	0.3	**NSYMB32**	**NSYMPP32**
300	250	265	200	4	4	0.2	0.4	**NSYMB3025**	**NSYMPP3025**
300	300	265	250	4		0.3		**NSYMB33**	-
400	300	325	250	4	4	0.5	0.7	**NSYMB43**	**NSYMPP43**
500	400	465	350	4	4	0.9	1.2	**NSYMB54**	**NSYMPP54**
600	400	565	350	4	4	1.1	1.4	**NSYMB64**	**NSYMPP64**
600	500	565	450	4		1.4		**NSYMB65**	-
700	500	665	450	4	4	1.7	2.1	**NSYMB75**	**NSYMPP75**
800	600	765	550	4	5	2.3	3.8	**NSYMB86**	**NSYMPP86**
1000	600	965	550	5		4.2		**NSYMB106**	-
1000	800	965	750	5	5	5.7	6.5	**NSYMB108**	**NSYMPP108**
1200	1000	1150	950	5		8.3		**NSYMB1210**	-

*To install 2 individual plates, you will need reference **NSYCRNGSDR**; see details on page **7/7**.

Insertable nuts

For devices installation on the mounting plate.

Supply: 50 units.

References per unit. To be ordered in multiples of 50 (50, 100, 150, etc.).

Insertable nuts	
Thread	Reference
M3	**NSYTE3**
M4	**NSYTE4**
M5	**NSYTE5**
M6	**NSYTE6**
M8	**NSYTE8**
M10	**NSYTE10**
M12	**NSYTE12**

7

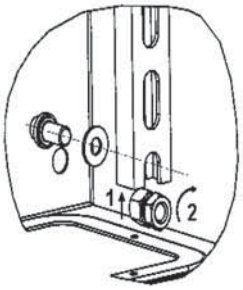
See also the accessories

Step slides for polyester enclosures pages **6/29** and **6/60**

Step slides page **7/7**

Mounting
Installation accessories

For ranges
S3D, CRN, S3X,
PLM



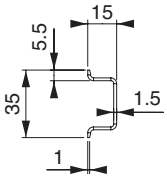
DIN mounting plate adapter
Ref. **NSYAMCSF**

DIN-rail chassis

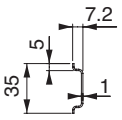
- Aluminium uprights.
- Steel profiles (symmetric section type A or B according to the reference).
- Screws, washers and nuts required to install the mounting plate, supplied.
- Gasket adapters, ref. **NSYAMCSF** (batch of 4 adapters, non supplied).

Composition: 1 DIN-rail chassis and fixings.

For enclosure		Type of rails	Number of rails	Reference
Height	Width			
300	300	B	4	**NSYMD33**
400	300	B	4	**NSYMD43**
500	400	B	4	**NSYMD54**
600	400	B	6	**NSYMD64**
600	600	A	6	**NSYMD66**
700	500	B	6	**NSYMD75**
800	600	A	6	**NSYMD86**
1000	800	A	6	**NSYMD108**
1200	800	A	7	**NSYMD128**
Batch of 4 adapters				**NSYAMCSF**



Type A



Type B

See also the accessories

Slides
page **7/7**

Stand-offs
page **7/64**

Profiles
page **7/50**

Mounting
Installation accessories

Step slides for mounting plate

Set of 4 supports intended for installation in enclosures with depths of 200, 250, 300 and 400 mm. The rail allows the depth of the plate and other accessories to be adjusted in steps of 12.5 mm.

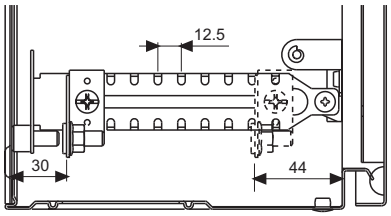
Supply: 4 sliding supports.

For enclosure depth (mm)	Reference
200	**NSYSDCR200**
250	**NSYSDCR250**
300	**NSYSDCR300**
400	**NSYSDCR400**
300	**NSYSDRSDCR300***
400	**NSYSDRSDCR400***

*For installation in enclosures from 1000 to 1200 mm.

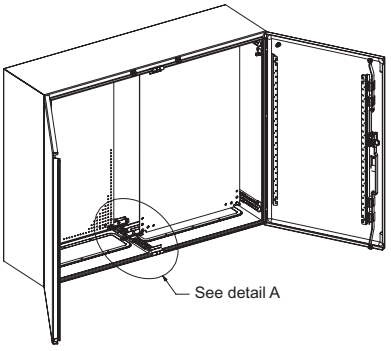
Set of 2 sliding supports
NSYCRNGSDR

For ranges
S3D, CRN, S3X

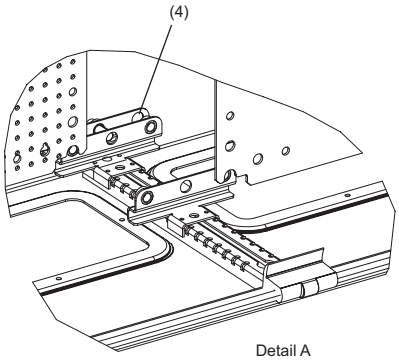


Installation of 2 plates in enclosures with a width of 1200 mm.
1. Installation on the 6 backstuds. 2. Two plates at different depths

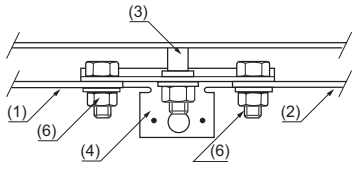
Installation of 2 mounting plates in enclosures with a width of 1000 or 1200 mm, depth of 300 mm.



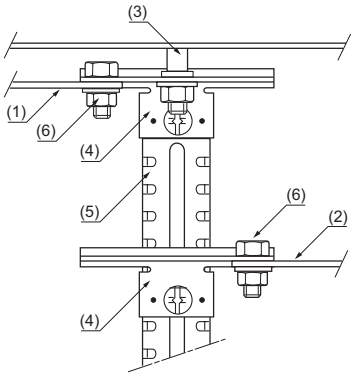
1. Installation on the backstuds.



2. Installation of two sliding plates with adjustable depth.



(1) Left plate
(2) Right plate
(3) Central backstud
(4) NSYCRNGSDR bracket (includes fixings)
(5) NSYSDRSDCR sliding rail
(6) M8 × 20-mm screw

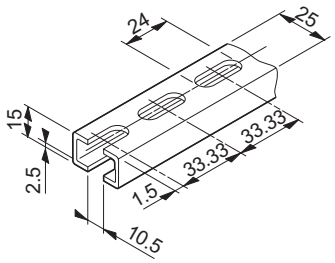


See also the accessories

Step slides for polyester enclosures
pages **6/29** and **6/60**

Mounting
Installation accessories

For ranges
S3D, CRN, PLM,
S3X



Aluminium vertical rails

- Fixing in the enclosure with M8 nuts, ref. **NSYAMCSF** (batch of 4 adapters to be ordered separately).
- Material: aluminium (length: 1200 mm, in steel).

Height	Material	Reference	Composition
300	Aluminium	**NSYMDVR3**	10
400	Aluminium	**NSYMDVR4**	10
500	Aluminium	**NSYMDVR5**	10
600	Aluminium	**NSYMDVR6**	10
700	Aluminium	**NSYMDVR7**	10
800	Aluminium	**NSYMDVR8**	10
1000	Aluminium	**NSYMDVR10**	10
1200	Steel	**NSYMDVR12**	2
Length: 3 m	Aluminium	**NSYMDVR3M**	10

Screw with slotted hexagonal head and captive washer

Type	Reference				
	10 mm	12 mm	16 mm	18 mm	Nut
M4	**NSYS10M4H**	-	**NSYS16M4H**	-	**NSYNM4**
M5	-	**NSYS12M5H**	-	**NSYS16M4H**	**NSYNM5**
M6	-	**NSYS12M6H**	-	**NSYS18M6H**	**NSYNM6**

Mounting
Installation accessories

For ranges
S3D, CRN, S3X,
PLM

Slides and brackets

They allow the depth of the plates and rails to be adjusted.
- Length of 90 mm, with bracket for enclosures with depths of 150 and 200 mm.
- Length of 130 mm, with bracket for enclosures with depths of 250 and 300 mm.
- Bracket for slides (customised mounting plate).

Composition: 10 units.

References per unit. To be ordered in multiples of 10 (10, 20, 30, etc.).

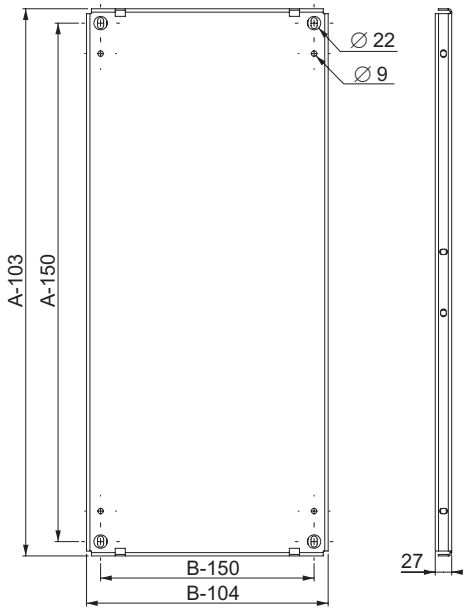
Description	Reference
90-mm slide	**NSYSB90**
130-mm slide	**NSYSB130**
Bracket	**NSYFB**

See also the accessories

Fixings
page **7/67**

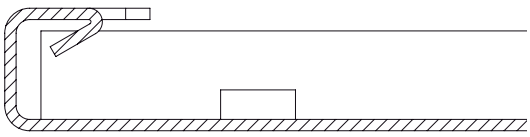
Mounting
Installation accessories

For ranges
SF, SM, SFX, SMX



> Advantage:

The Spacial.pro tool helps determine the optimum dimensions of the mounting plate.



> Advantage:

The triple fold of the vertical edges of the mounting plate contributes to increasing the latter's rigidity and increases handling safety by preventing finger cuts.

Mounting plate

- Plate provided with reinforcement flange around the entire perimeter. The vertical edges are provided with a triple fold, to prevent finger cuts.
- Depth adjustable with a pitch of 25 mm, provided with plastic shoe for easier sliding.
- Once the plate is fixed, in advanced position, the sliding shoe can be easily removed, to increase the available plate surface.
- Material: galvanised steel.
- Maximum load: 600 kg in the back of the enclosure and 500 kg in the intermediate position.
- Installation options:

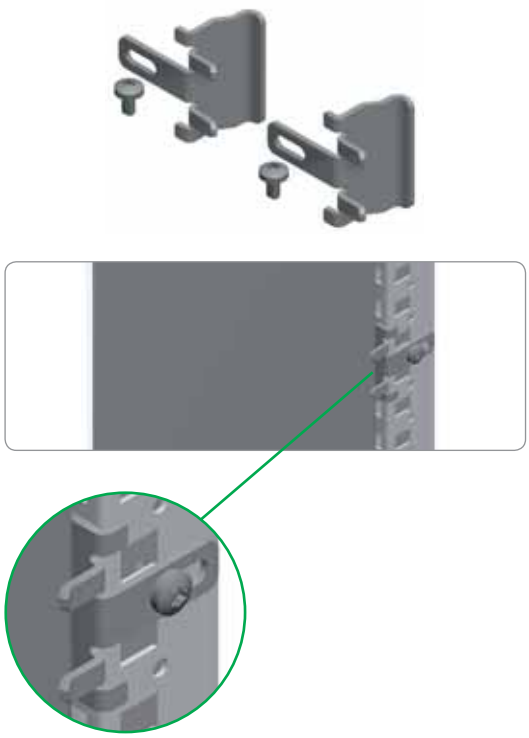
– At the sides of the enclosure with the orthogonal brackets (see page **7/13**).
– Back-to-back, with the brackets for fixing the mounting plates in back-to-back position (see page **7/16**).

- In sets made up of two or more enclosures with mounting plates, it is possible to obtain a continuous plate surface using intermediate mounting plates (see page **7/15**).

Supply: one mounting plate and sliding shoes.

Nominal dimensions (mm)		Reference
Height (A)	Width (B)	
1200	600	**NSYMP126**
	800	**NSYMP128**
	1000	**NSYMP1210**
	1200	**NSYMP1212**
1400	600	**NSYMP146**
	800	**NSYMP148**
	1000	**NSYMP1410**
	1200	**NSYMP1412**
1600	600	**NSYMP166**
	800	**NSYMP168**
	1000	**NSYMP1610**
	1200	**NSYMP1612**
1800	600	**NSYMP186**
	800	**NSYMP188**
	1000	**NSYMP1810**
	1200	**NSYMP1812**
	1600	**NSYMP1816**
2000	600	**NSYMP206**
	800	**NSYMP208**
	1000	**NSYMP2010**
	1200	**NSYMP2012**
	1600	**NSYMP2016**
2200	600	**NSYMP226**
	800	**NSYMP228**
	1000	**NSYMP2210**
	1200	**NSYMP2212**

Mounting
Installation accessories



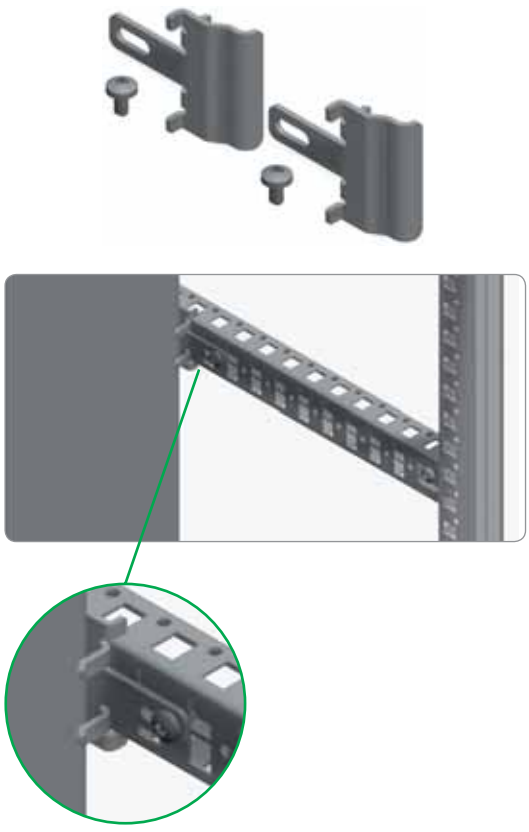
Intermediate fixing of the mounting plate, located in the back of the enclosure

- Support for additional fixing of the mounting plate, at any height of the plate, when the plate is mounted in the back of the enclosure.
- The supports minimise the vibration of the plate during the transport and operation of the panel.
- The supports are fixed to the structure when the plate is already located in the back of the enclosure.
- **Spacial SM:** fixing to 40-mm universal cross rails (1 row), installed vertically in the back of the enclosure, see page **7/36**.
- Material: zinc-coated steel.

Supply: ten units and fixing elements.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYSMPFB



Intermediate fixing of the mounting plate, in advanced position

- Support for additional fixing of the mounting plate, at any height of the plate, when the plate is mounted in advanced position.
- The supports minimise the vibration of the plate during the transport and operation of the panel.
- The supports are mounted on light cross rails or on 40-mm (1 row) universal or quick-fixing cross rails (not supplied) (see page **7/36**).
- Material: zinc-coated steel.

Supply: ten units and fixing elements.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYSMPFA

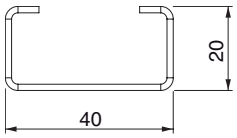
Mounting
Installation accessories

Reinforcement for mounting plate

- Reinforcement kit for transversal mounting plate.
- Provides extra rigidity to the mounting plates and absorbs vibrations.
- Can be used as a support for fixing very heavy elements.
- Material: zinc-coated steel.
- Thickness: 1.5 mm.

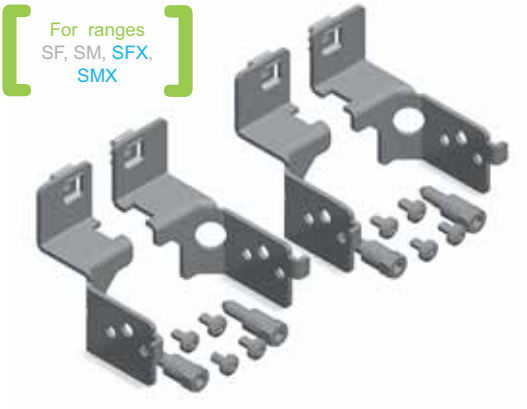
Supply: two profiles, four supports for fixing to the mounting plate and fixing elements.

Nominal dimensions (mm)	Reference
Width	
800	**NSYMPRK8**
1000	**NSYMPRK10**
1200	**NSYMPRK12**
1600	**NSYMPRK16**



Mounting
Installation accessories

For ranges SF, SM, SFX, SMX



Mounting plate fixing brackets

- Mounting plate fixing brackets for direct mounting on the structure of the enclosure.
- Adjustable depth with a pitch of 25 mm.
- Maximum load (4 brackets): 600 kg.
- Material: zinc-coated steel.

Supply: four brackets and fixing elements.

Reference	For enclosure
NSYSFPB	Spacial SF
NSYSMPB	Spacial SM, Spacial SFX, Spacial SMX

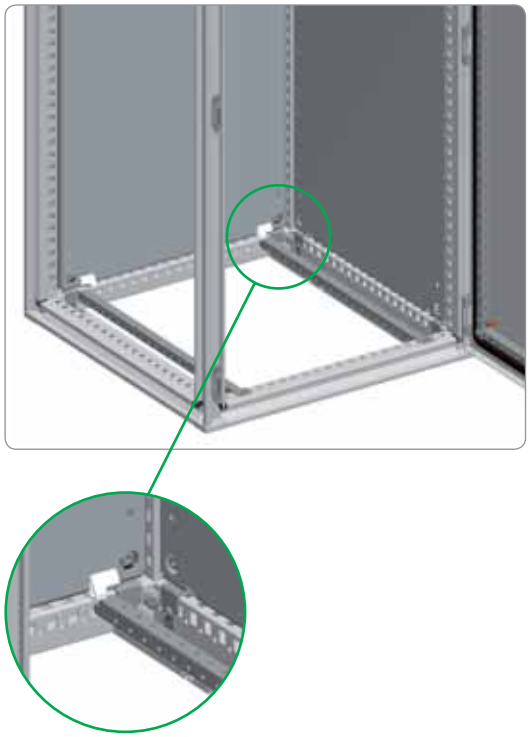
For ranges SF, SFX

Orthogonal brackets

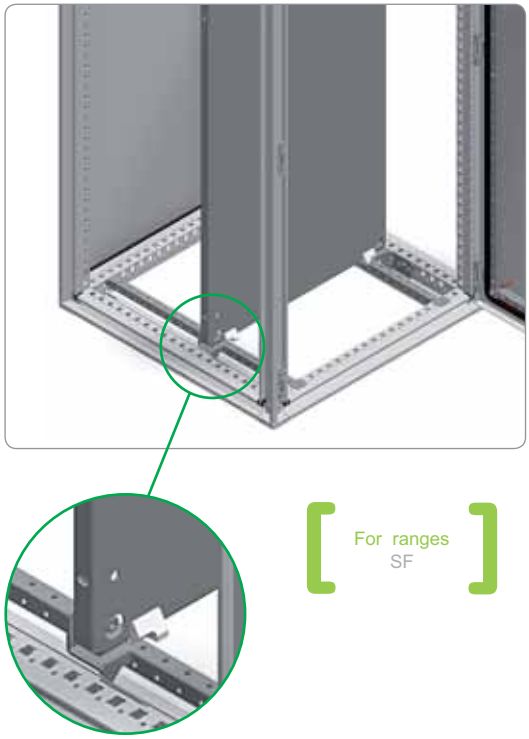
- Orthogonal brackets designed for the installation of mounting plates on the sides of the enclosure.
- In the event of installing one plate in the back of the enclosure and one plate at the side, they must both be installed using orthogonal brackets.
- Maximum load (4 brackets): 600 kg.
- Material: zinc-coated steel.
- Spacial SFX: in order to mount the lateral mounting plate is necessary to remove the one on the back and its fixing brackets.

Supply: four brackets and fixing elements.

Reference
NSYSMPSB



Mounting
Installation accessories



For ranges SF

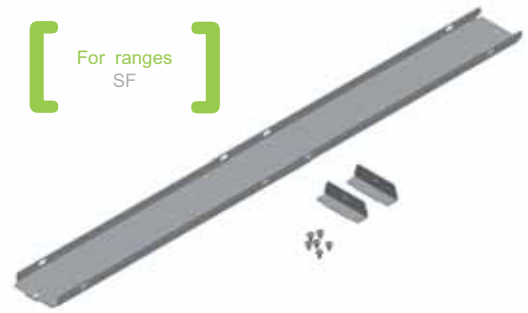
Mounting plate sliding rails

- Rails which the mounting plate slides along when inserted in the enclosure.
- Once the mounting plate is installed and fixed to the brackets, the sliding rails can be removed to maximise the cable passage surface, and can be installed depthwise in other positions.
- Material: zinc-coated steel.

Supply: two rails and fixing elements.

Nominal dimensions (mm) Depth	Reference
400	**NSYSMPS4**
500	**NSYSMPS5**
600	**NSYSMPS6**
800	**NSYSMPS8**

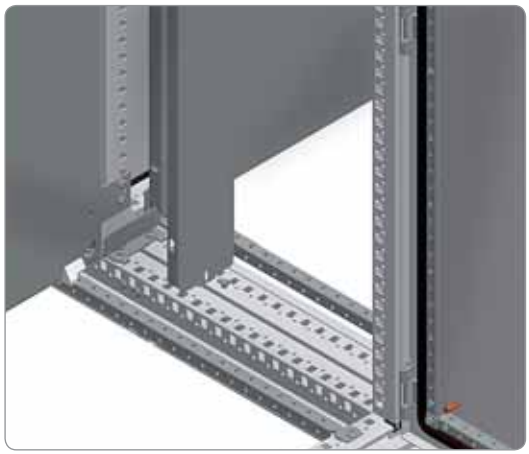
Mounting
Installation accessories



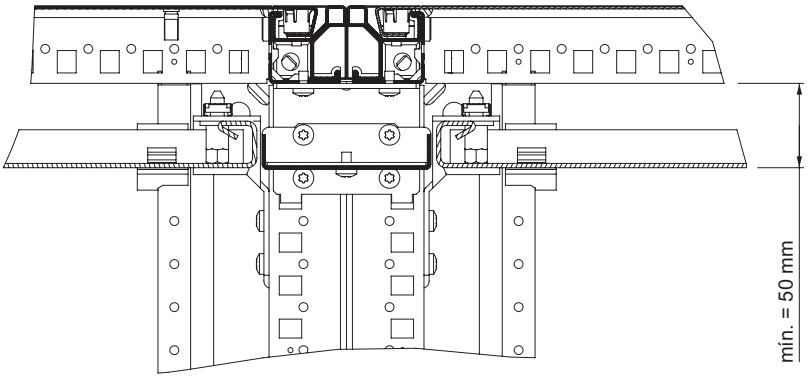
Intermediate mounting plate

- Intermediate plate used to obtain a continuous surface of the mounting plate at enclosure suites.
- Adjustable depth with a pitch of 25 mm. When the mounting plates are located in the back of the enclosure, the vertical profiles of the structure are flush with the plates, acting as an intermediate mounting plate. In this case the intermediate plate cannot be installed.
- Material: galvanised steel.

Supply: one intermediate plate and fixing elements.

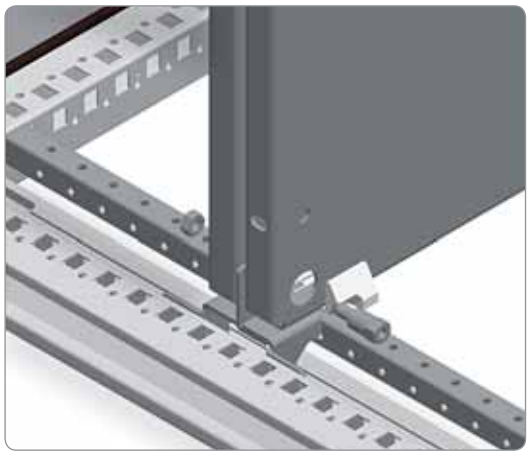


Nominal dimensions (mm) Height (A)	Reference
1200	**NSYSIMP12**
1400	**NSYSIMP14**
1600	**NSYSIMP16**
1800	**NSYSIMP18**
2000	**NSYSIMP20**
2200	**NSYSIMP22**



Mounting
Installation accessories

For ranges SF

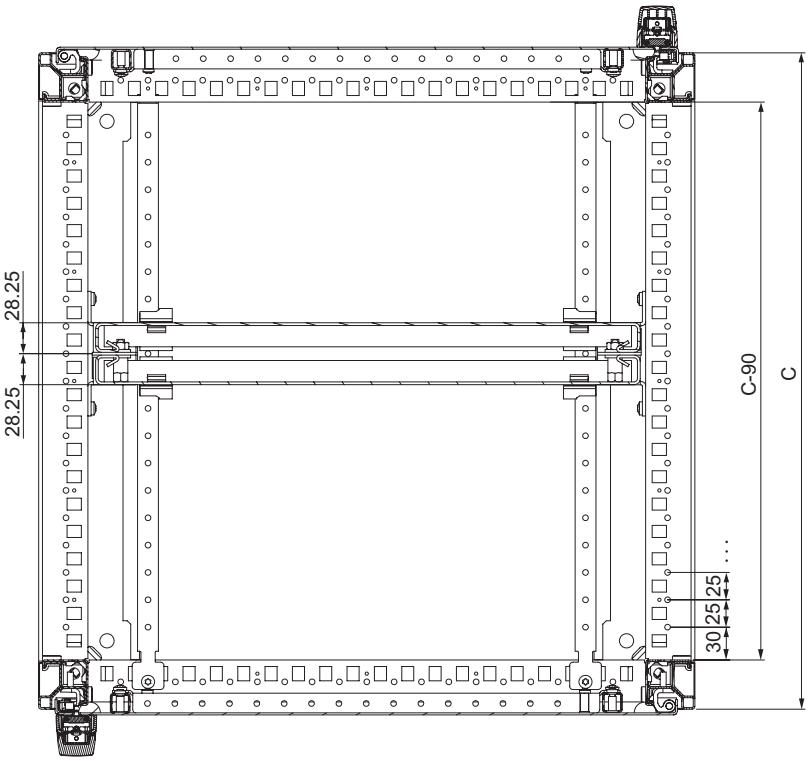


Brackets for fixing mounting plates in back-to-back position

- Brackets for fixing two mounting plates, in back-to-back position, doubling the mounting surface.
- Adjustable with a pitch of 25 mm.
- Material: zinc-coated steel.

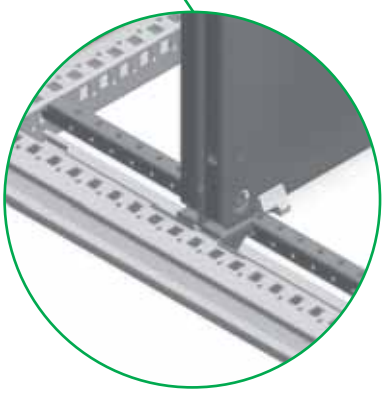
Supply: four brackets for fixing back-to-back and fixing elements.

Reference
NSYSBTB



Mounting
Installation accessories

For ranges SF

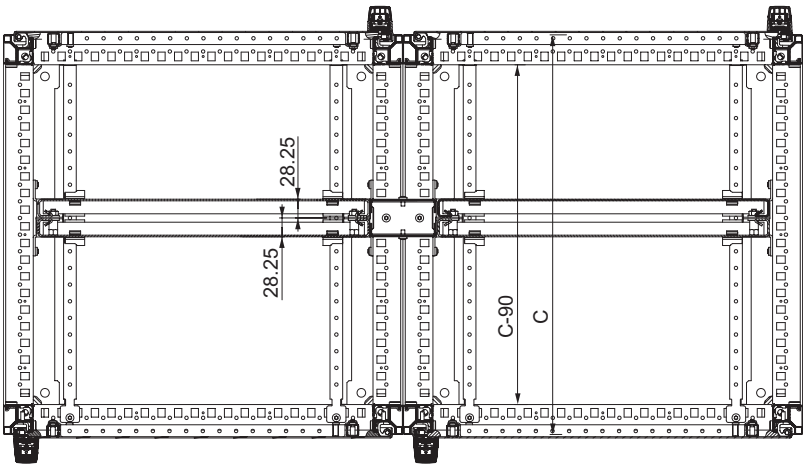


Brackets for fixing intermediate mounting plates in back-to-back position

- Brackets for fixing two intermediate mounting plates, in back-to-back position, doubling the mounting surface.
- Adjustable with a pitch of 25 mm.
- Material: zinc-coated steel.

Supply: 2 brackets for fixing intermediate plates back-to-back and fixing elements.

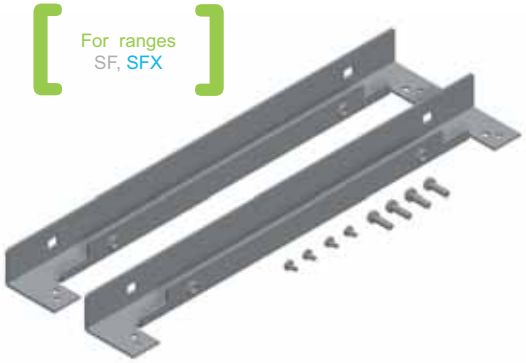
Reference
NSYSIBTB



7

Mounting
Installation accessories

For ranges SF, SFX



Side entry rails for the mounting plate

- Side entry device for the mounting plates when coupling **Spacial SF** enclosures or **Spacial SFX**.
- The mounting plates can be coupled with one another, and are fixed to the side entry guide by pressure.
- Material: zinc-coated steel.

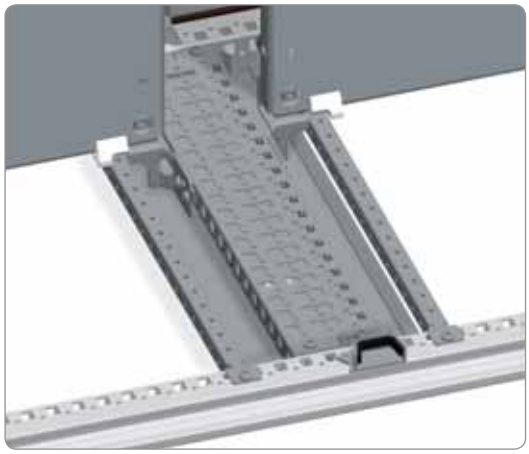
Supply: two rails and fixing elements.

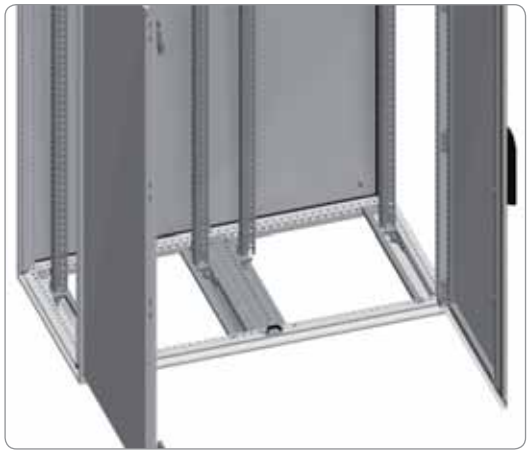
Nominal dimensions (mm) Width (B)	Reference
600	**NSYSMPSE6**
800	**NSYSMPSE8**
1000	**NSYSMPSE10**
1200	**NSYSMPSE12**

Length of joined Spacial SF enclosures (mm)	Example of Spacial SF enclosure combination width (mm) (B)	Example of combining mounting plates by width (mm)	Useful length (mm)
1200	1200	600 + 800	1192
1400	600 + 800	600 + 1000	1392
1600	2 × 800	800 + 1000	1592
1800	3 × 600	800 + 1200	1792
2000	2 × 1000	1000 + 1200	1992
2200	600 + 2 × 800	1200 + 1200	2192
2400	3 × 800	1600 + 1000	2392
		3 × 600 + 1000	2384
2600	2 × 1000 + 600	1600 + 1200	2592
		3 × 600 + 1200	2584
2800	2 × 1000 + 800	4 × 800	2784
3000	3 × 1000	3 × 800 + 1000	2984
3200	2 × 1000 + 1200	3 × 800 + 1200	3184
3400	3 × 800 + 1000	800 + 3 × 1000	3384
3600	3 × 1200	4 × 1000	3584
3800	800 + 3 × 1000	600 + 3 × 1200	3784
4000	4 × 1000	800 + 3 × 1200	3984

Mounting
Installation accessories

For ranges SF





Kit for adapting two-door enclosures

- Allows the installation of two mounting plates as if in two independent enclosures.
- A set of brackets for fixing mounting plates ref. **NSYSMPB** is required for this.
- Option of installing an intermediate mounting plate.
- Valid for enclosures with widths of 1200 and 1600 mm.
- In the event of installing a cable-gland plate for a width of 1200 mm, it is necessary to install two with a width of 600 mm, and for widths of 1600 mm, two with a width of 800 mm.

Supply: two 90-mm cross rails, cable-gland plate support, 2 brackets for central fixing of the roof and fixing elements.

Nominal dimensions (mm)	Reference
Depth (C)	
400	**NSYSMP2D4**
500	**NSYSMP2D5**
600	**NSYSMP2D6**
800	**NSYSMP2D8**

Mounting
Installation accessories

For ranges SF

Partial mounting plate

- Partial mounting plate, provided with reinforcement flange on its four sides.
- Fixing options:

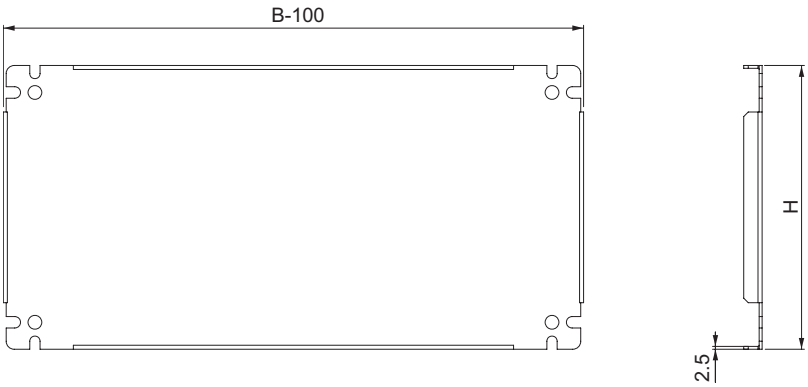
– **Spacial SF, SFX:**
  - Fixing to the vertical uprights of the structure.
  - Fixing to the technical or standard vertical uprights, see page **7/23**.
  - For installations in advanced position, fixing to cross-rails, see page **7/36**.

– **Spacial SM:**
  - Fixing by means of adaptation profiles and 40-mm universal cross-rails (1 row) in vertical position, or also on horizontal universal cross-rails.
  - It can be mounted horizontally, as a tray, by means of depthwise cross rails, see page **7/36**.

- Material: galvanised steel.

Supply: partial mounting plate and fixing elements.

Nominal dimensions (mm) Width (B)	Plate height (mm) (H)	Plate length (mm) (B-100)	Reference
600	247	500	**NSYSPMP2560**
	247	750	**NSYSPMP2575**
	397	500	**NSYSPMP4060**
	597	500	**NSYSPMP6060**
800	247	700	**NSYSPMP2580**
	397	700	**NSYSPMP4080**
	597	700	**NSYSPMP6080**
1000	247	900	**NSYSPMP25100**
	397	900	**NSYSPMP40100**
	597	900	**NSYSPMP60100**
1200	247	1100	**NSYSPMP25120**
	397	1100	**NSYSPMP40120**
	597	1100	**NSYSPMP60120**
1600	397	1100	**NSYSPMP40160**



Self-tapping screw

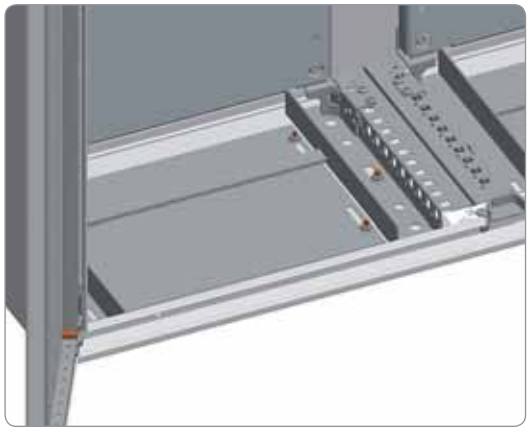
- Self-tapping screw, hexagonal head, 4.8 × 16 mm thread.
- Drilling capacity: thicknesses between 1.75 and 4 mm.

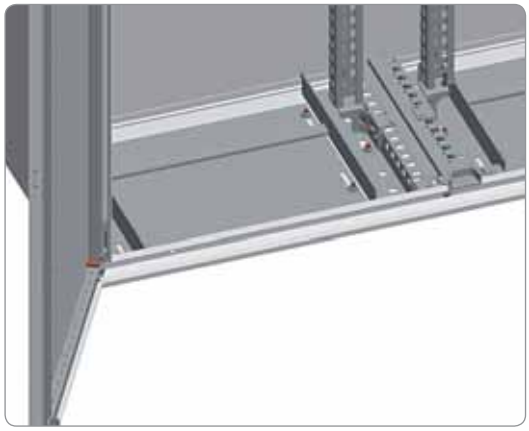
Supply: 100 units.

To be ordered in multiples of 100 (100, 200, 300, etc.).

Reference
NSYS16M5HS

Mounting
Installation accessories





Top/bottom adjustment rails

- Allows the installation of two mounting plates or vertical uprights in enclosures with a width of 1200 mm, as if in two independent enclosures.
- A set of mounting plate fixing brackets ref. **NSYSMPB** is required for this.
- Optional installation of an intermediate mounting plate.

Supply: 2 rails, top and bottom, and fixing elements.

Nominal dimensions (mm)	Reference
Depth	
300	**NSYSTBR3**
400	**NSYSTBR4**
500	**NSYSTBR5**
600	**NSYSTBR6**

Mounting
Installation accessories

Examples of partial plate installation

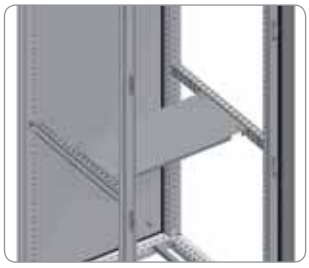
• Spacial SF, SFX:

(1)** Plate mounted on structure.

(2)* Plate mounted on technical vertical uprights.

(3)* Plate mounted on standard vertical uprights.

(4) Plate mounted on cross rails.



(5) Plate mounted on cross rails, horizontal fixing.

*Fixings not supplied.
** Not possible in enclosures Spacial SFX.

• Spacial SM, SMX:

(1)* Plate mounted on technical vertical uprights.

(2)* Plate mounted on standard vertical uprights.

(3)* ** Plate mounted on cross rails.

*Fixings not supplied.
** Not possible in enclosures Spacial SMX.

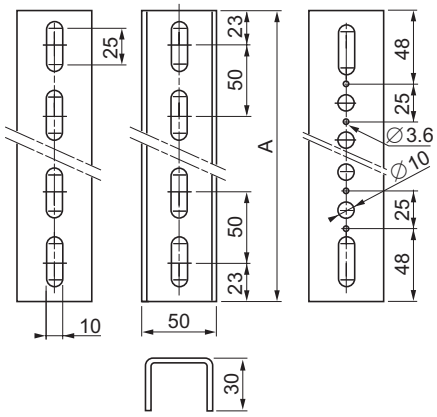
Mounting
Installation accessories

Standard uprights

- Vertical uprights for fixing plates and rails.
- They can be fixed on the mounting plate fixing brackets or on the upright fixing bracket, ref. **NSYMFB**.
- Adjustable height with a pitch of 25 or 50 mm.
- Material: galvanised steel.
- Thickness: 2 mm.

Supply: two standard vertical uprights.

Nominal dimensions (mm)	Reference
Height (A)	Standards
1800	**NSYVR18**
2000	**NSYVR20**
2200	**NSYVR22**



Nuts and screws for standard uprights

- Flat nut for standard uprights.
- Hexagonal screw with washer.

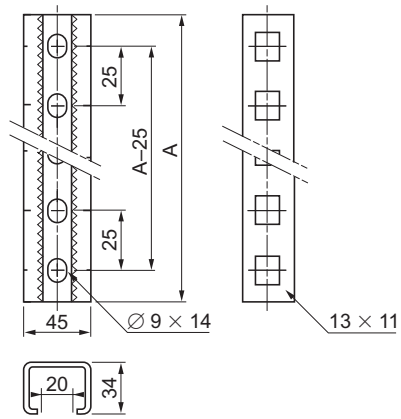
Nuts and screws for standard vertical upright	Supply (units)	Reference
M6 flat nut	50	**NSYFNM6**
M8 flat nut	50	**NSYFNM8**
M6 × 12 screw	100	**NSYS12M6H**
M6 × 16 screw	100	**NSYS16M6H**
M6 × 18 screw	100	**NSYS18M6H**
M8 × 16 screw	100	**NSYS16M8H**
M8 × 20 screw (1)	100	**NSYS20M8H**

(1) Screw without captive washer.

Reference by unit. Order by multiples of 50 (Flat nuts) and 100 (Screws).

Mounting
Installation accessories

For ranges
SF, SM, SFX, SMX,
SD, SDX, PLA



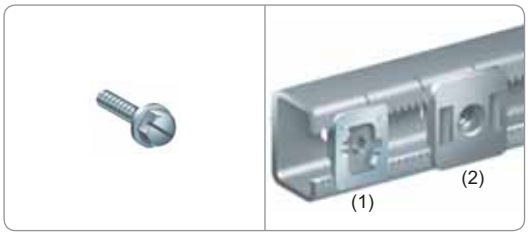
Technical uprights

- Vertical uprights for fixing plates and rails.
- They can be fixed to the fixing brackets of the mounting plate or to the upright-fixing bracket (ref. **NSYMFB**).
- Adjustable height in steps of 2.5 mm (with quarter-turn nuts, ref. **NSYSNM6** or **NSYSNM8**) or 25 mm (with cage nuts, ref. **NSYCNFM6** or **NSYCNFM8**).
- Material: zinc-coated steel.
- Thickness: 2 mm.

Supply: 2 standard uprights.

Enclosure height	A	Reference
750	625	**NSYTVR7**
1000*	675	**NSYTVR8**
1000	875	**NSYTVR10**
1200	1075	**NSYTVR12**
1250	1125	**NSYTVR125**
1400	1275	**NSYTVR14**
1500	1375	**NSYTVR15**
1600	1475	**NSYTVR16**
1800	1675	**NSYTVR18**
2000	1875	**NSYTVR20**
2200	2075	**NSYTVR22**

* Control desk.



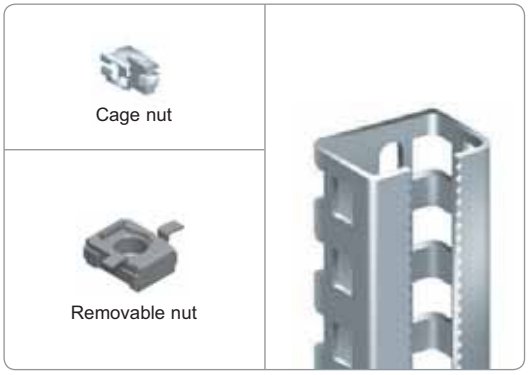
Nuts and screws for technical uprights

- Clip-on quarter-turn sliding nuts.
- Hexagonal screw with washer.

Nuts and screws for technical vertical upright	Supply (units)	Reference
M6 quarter-turn sliding nut (1)	10	**NSYSNM6**
M8 quarter-turn sliding nut (1)	10	**NSYSNM8**
M6 quarter-turn serrated sliding nut (2)	10	**NSYSNSM6**
M8 quarter-turn serrated sliding nut (2)	10	**NSYSNSM8**
M6 × 12 screw	100	**NSYS12M6H**
M6 × 16 screw	100	**NSYS16M6H**
M6 × 18 screw	100	**NSYS18M6H**
M8 × 16 screw	100	**NSYS16M8H**
M8 × 20 screw	100	**NSYS20M8H**

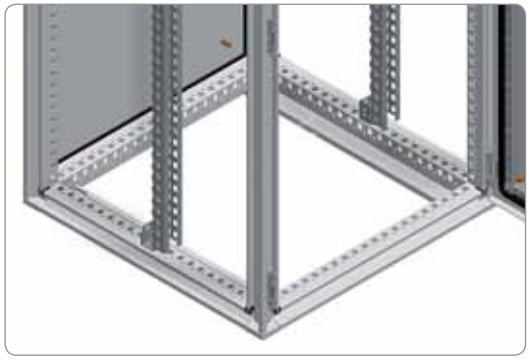
- The nuts are intended for installation in the 13 × 11 mm holes of the structure, the technical uprights and the cross-rails, every 25 mm.

Supply: 50 units.

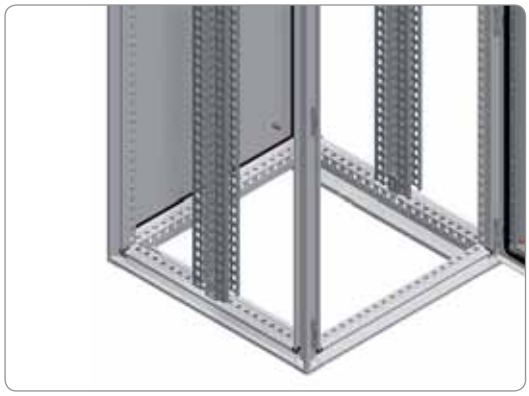


Nuts for technical upright	Reference
M6 cage nut	**NSYCNFM6**
M8 cage nut	**NSYCNFM8**
M6 removable nut	**NSYCNM6**
M8 removable nut	**NSYCNM8**

Mounting
Installation accessories



For ranges
SF, SFX, SMX,
SD, SDX



Bracket for fixing uprights

- Brackets for fixing the uprights, standard or technical, at the same level as the structure, obtaining a greater working surface inside the enclosure.
- They allow two pairs of uprights to be fixed back to back, doubling the working surface.
- The brackets are fixed to the structure by means of M6 self-tapping screws.
- Adjustable depth with a pitch of 25 mm.
- Material: zinc-coated steel.

Supply: four brackets for fixing uprights and fixing elements.

Reference
NSYMFB

Mounting
Installation accessories

Telequick partial mounting plate

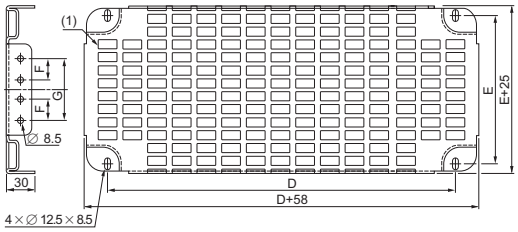
- Allows the installation of switchgear without drilling or screwing.
- Plate designed for quick fixing of switchgear by means of the clip-on nuts, ref. **NSYKNM3** to **NSYKNM6**. See page **7/27**.
- Fixing options:

– Directly to the vertical uprights of the structure, by means of self-tapping screws (only Spacial SF).

– To the vertical equipment uprights, by means of sliding nuts, page **7/24**; to standard uprights by means of flat nuts, page **7/23** or self-tapping screws, and to mounting cross-rails.

- Vertical continuity is guaranteed by vertical mounting of plates.
- The top plate must be fixed in the third hole, 80 mm from the top frame.
- Material: zinc-coated steel.

Supply: 1 telequick partial mounting plate and fixing elements.

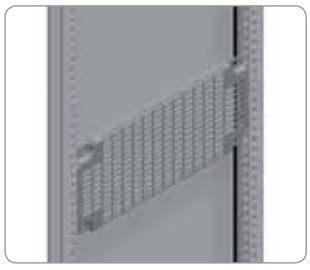


(1) 11 × 26 perforations in steps of 15 × 30.

For ranges SF, SM, SFX, SMX

Nominal dimensions (mm)	Plate height (mm)				Usable surface (dm^2)	Reference
Width (B)	D	E	F	G		
600	450	200	-	100	11.4	**NSYSTMP2260**
	450	425	-	325	22.8	**NSYSTMP4560**
	450	575	125	475	30.4	**NSYSTMP6060**
	450	800	250	700	41.9	**NSYSTMP8260**
800	650	200	-	100	15.9	**NSYSTMP2280**
	650	425	-	325	31.8	**NSYSTMP4580**
	650	575	125	475	42.4	**NSYSTMP6080**
	650	800	250	700	58.4	**NSYSTMP8280**
1000	850	200	-	100	20.4	**NSYSTMP22100**
	850	425	-	325	40.8	**NSYSTMP45100**
	850	575	125	475	54.4	**NSYSTMP60100**
	850	800	250	700	74.9	**NSYSTMP82100**
1200	1050	200	-	100	24.9	**NSYSTMP22120**
	1050	425	-	325	49.9	**NSYSTMP45120**
	1050	575	125	475	66.5	**NSYSTMP60120**
	1050	800	250	700	91.5	**NSYSTMP82120**
1600	Order two 800-mm plates					

Examples of installation on Spacial SF



(1) Perforated mounting plate on structure.

(2) Perforated mounting plate fixed on technical uprights.

(3) Perforated mounting plate on standard uprights.

(4) Perforated mounting plate fixed on cross-rails.

See also the accessories

Fixings and nuts page **7/67**

Mounting
Installation accessories

Clip-on nuts

- Clip-on nuts for Telequick mounting plate.
- Used for fixing switchgear.

Supply: 100 units.

References per unit. To be ordered in multiples of 100 (100, 200, 300, etc.).

Type	Reference
M3	**NSYKNM3**
M4	**NSYKNM4**
M5	**NSYKNM5**
M6	**NSYKNM6**

See also the accessories

Plastic cable support
ref. **NSYSPC**
page **7/122**

Lyre-shaped clamp for plate
ref. **NSYGCR**
page **7/123**

Mounting
Installation accessories

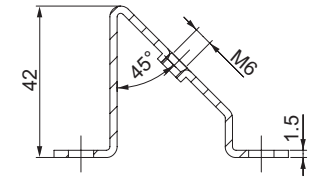
Rail support bracket

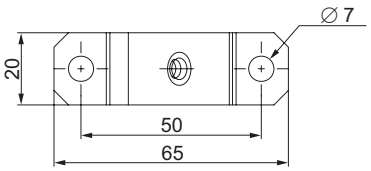
- Bracket for fixing rails at an angle of 45°.
- **Spacial SF:** mounted on the structure and/or mounting plates.
- **Spacial SM:** mounted on the bottom mounting rail and/or mounting plates.
- Material: zinc-coated steel.

Supply: ten units and fixing elements.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYFB45





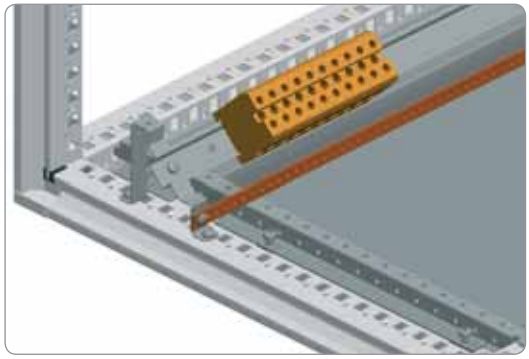
Terminal-block support bracket

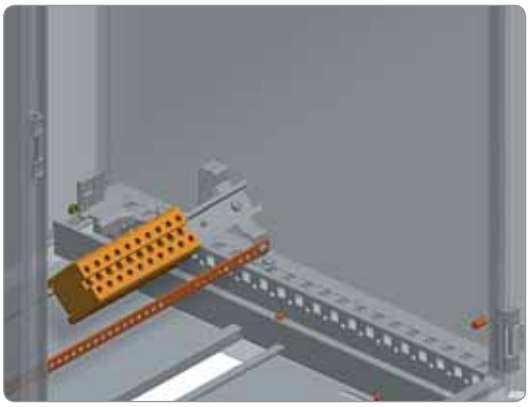
- Tilted to 45°.
- Material: treated steel.

Composition: 2 lugs and fixings

Reference
NSYEDCO

Mounting
Installation accessories





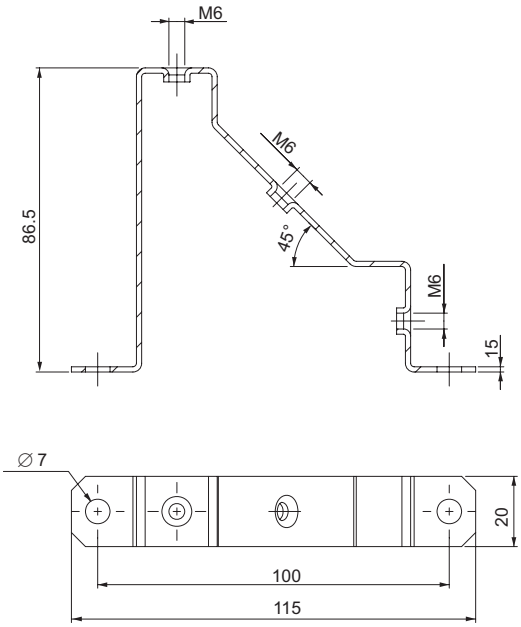
Combined support bracket

- Allow the installation of a DIN rail and an earthing strip on different planes, to minimise the cable radiuses.
- **Spacial SF** installation: directly on the structure and/or using mounting plates.
- **Spacial SM** installation: on the bottom adjustment rails and/or on mounting plates.
- Material: zinc-coated steel.

Supply: ten combined support brackets and fixing elements.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYETF



Combined fixing lugs for the earthing strip

- They allow the mounting of an earth-collector rail at the bottom of the enclosure and a DIN rail.
- Tilted to 30°.
- Earthing strip, ref. **NSYECB1M153**. See page **7/140**.

Composition: 2 fixing lugs and fixing elements.

Reference
NSYEDCOC

Mounting
Installation accessories

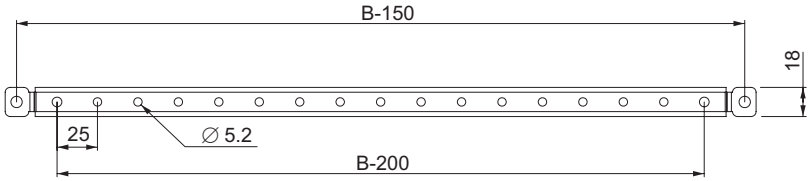
For ranges
SF, SM, SFX, SMX

Door cross rails

- Direct mounting cross rails on the profiles of the reinforcement frame of the door.
- Adjustable height with a pitch of 25 mm.
- Material: galvanised steel.
- Thickness: 2 mm.

Supply: two cross rails and bag of fixings.

Nominal dimensions (mm)	Reference
Width (B)	
400	**NSYSDCR4**
500	**NSYSDCR5**
600	**NSYSDCR6**
800	**NSYSDCR8**
1000	**NSYSDCR10**

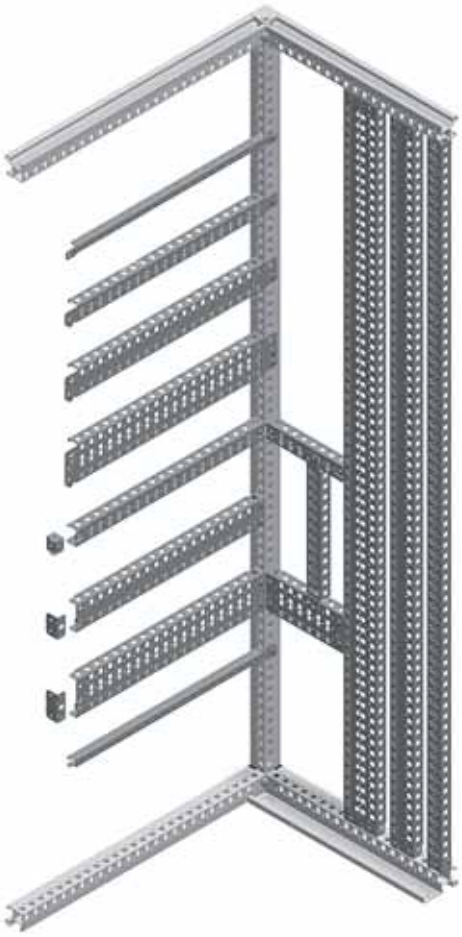


Mounting

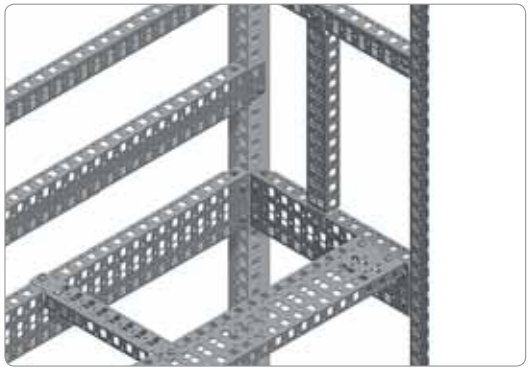
Combination examples

In the **Spacial SF**, **SM**, **SFX** and **SMX** enclosures, it is possible to create a fixing at any point of the inner volume, providing mounting planes with different widths, heights and depths.
In the case of the **Spacial SM**, it may be necessary to install vertical/horizontal adaptation profiles and 40-mm universal cross rails (1 row).

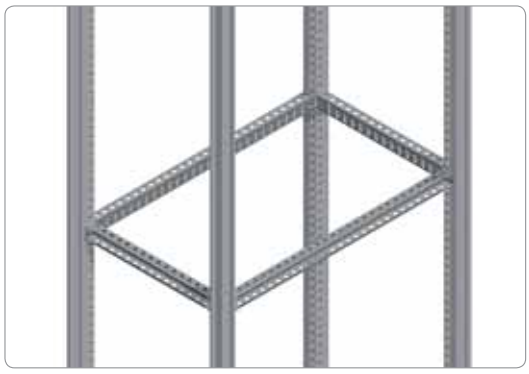
For the formation of structures inside the enclosure, it is possible to combine three types of cross rails:
– Universal cross rails of 40 (1 row), 65 (2 rows) and 90 mm (3 rows).
– Quick-fixing cross rails of 40 (1 row), 65 (2 rows) and 90 mm (3 rows).
– Light cross rails.
– Mounting plate sliding rails, see page **7/14**.



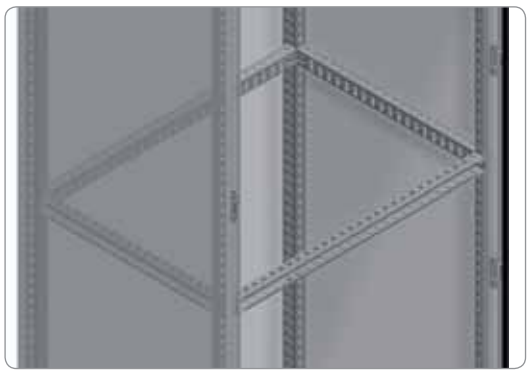
Mounting

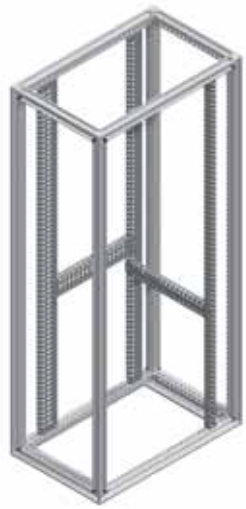


Spacial SF and SFX: the cross rails can be fixed to the structure and among each other, offering multiple possibilities.



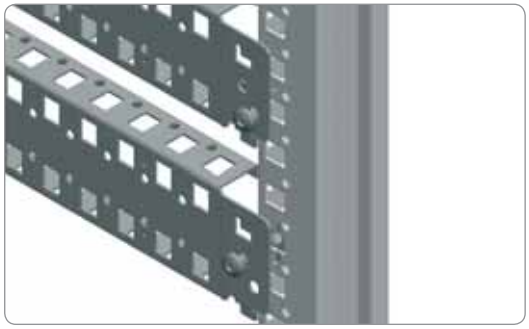
The universal cross rails allow installations at the same level, around the entire perimeter of the enclosure.
To perform this type of installation in a **Spacial SM** enclosure, the vertical adaptation profile and the vertical 40-mm universal cross rail (1 row) are required, mounted in the back of the enclosure.





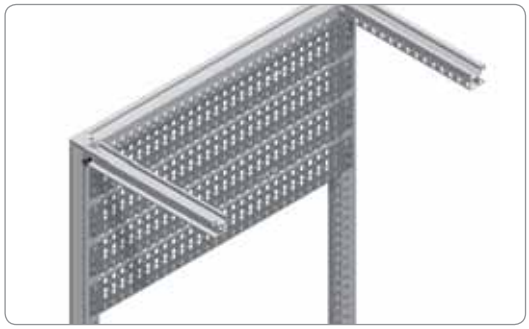
Spacial SF: the universal cross rails can be installed in vertical position.

Mounting

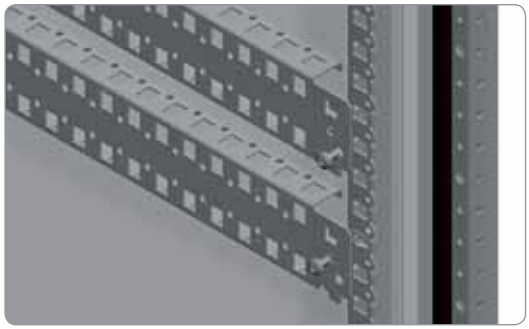


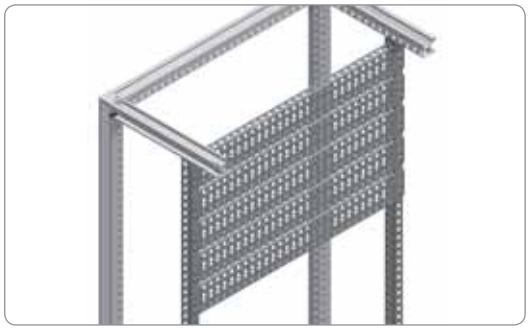
The quick-fixing cross rails can be fixed directly to the structure, quickly and easily.
- **Spacial SF and SFX*:**
– They clip onto the structure and are fixed by M6 self-tapping screws, or optionally with M6 caged nuts.
- **Spacial SM:**
– Possibility of clipping onto the adaptation profile or another cross rail.
– Fixing by means of M6 self-tapping screws.
– Fixing by means of M6 caged nuts.

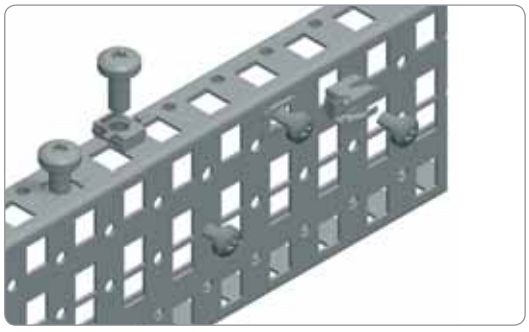
* In enclosures Spacial SFX is not possible to mount it in depth.



The quick-fixing cross rails can be used as a support for equipment in the back of the enclosure or offset with a pitch of 25 mm, using two universal cross rails in vertical position.

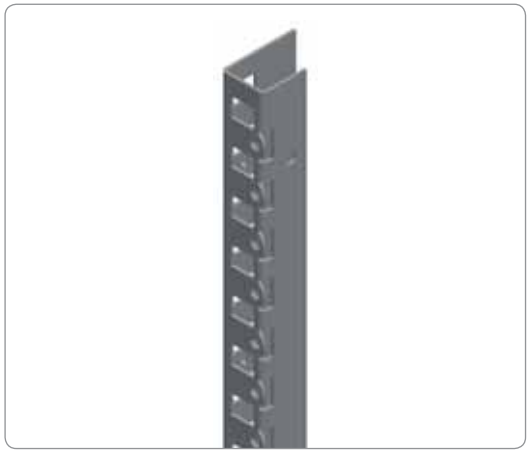






The main fixing point to the quick-fixing cross rails is the 5.2 mm drill hole for M6 self-tapping screw, although they can also receive M6 and M8 caged nuts.

Mounting
Installation accessories



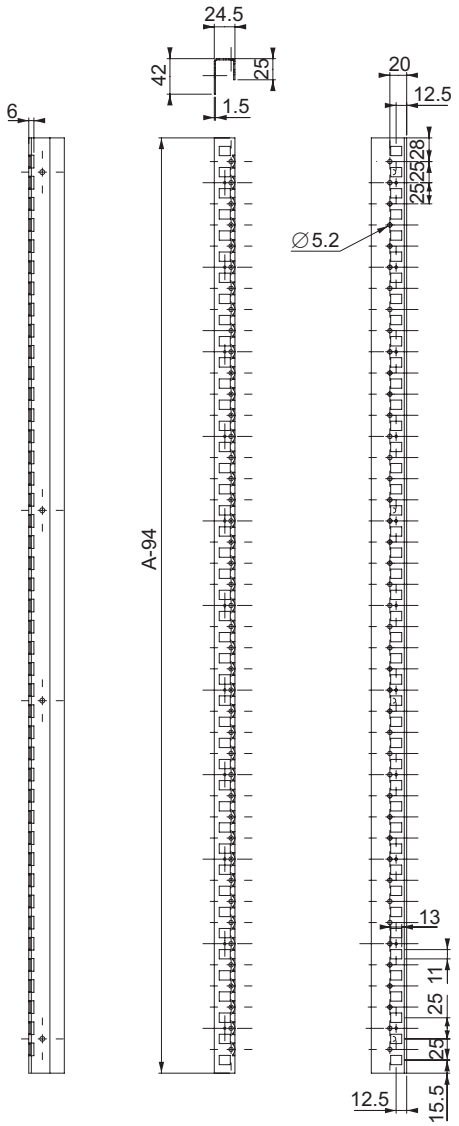
For ranges
SM

Vertical adaptation profiles

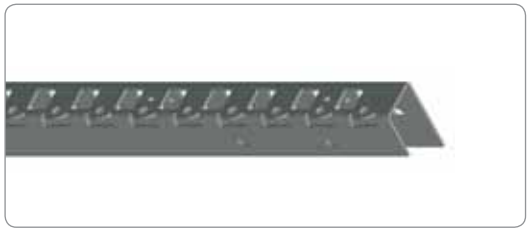
- The vertical adaptation profiles provide fixing points at the entrance to the enclosure.
- Fixing on the screws of the hinge and catches of the lock.
- Allows the depthwise fixing of cross rails, etc.
- Material: steel.
- Thickness: 1.5 mm.
- Finish: zinc-coated.

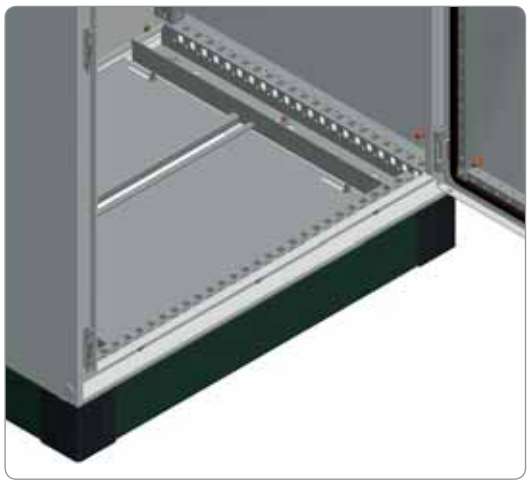
Supply: 2 vertical adaptation profiles and fixing screws.

Nominal height (mm) (A)	Reference
1200	**NSYSMVR12**
1400	**NSYSMVR14**
1600	**NSYSMVR16**
1800	**NSYSMVR18**
2000	**NSYSMVR20**



Mounting
Installation accessories





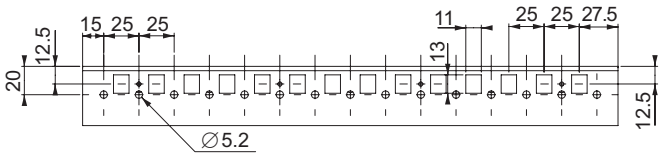
[For ranges SM]

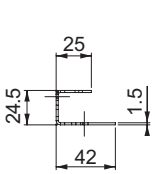
Horizontal adaptation profiles

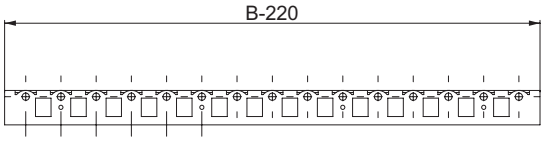
- The horizontal adaptation profiles provide fixing points at the entrance to the enclosure.
- Material: steel.
- Thickness: 1.5 mm.
- Finish: zinc-coated.

Supply: 2 horizontal adaptation profiles and fixing screws.

Nominal width (mm) (B)	Reference
600	**NSYSMHR6**
800	**NSYSMHR8**
1000	**NSYSMHR10**
1200	**NSYSMHR12**
1600	**NSYSMHR16**







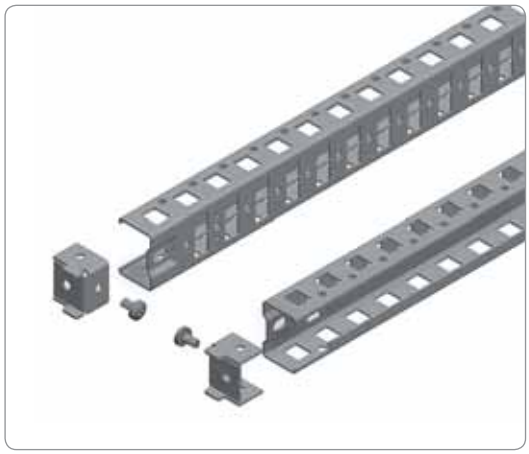
Mounting

For ranges SF, SM, SFX, SMX

Universal cross rails

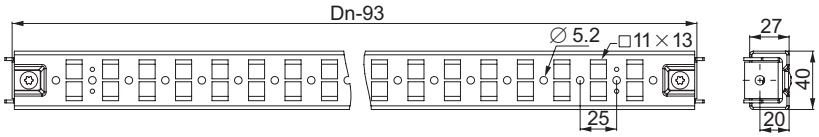
- Various versions available, according to the width: 40 (1 row), 65 (2 rows) and 90 mm (3 rows), perforated with a pitch of 25 mm for the formation of structures inside the enclosure.
- They allow the performance of any type of assembly, as well as the adjustment of the depth of the various types of installation systems (partial plates, 19" racks, etc.).
- Material: zinc-coated steel.
- Thickness: 1.5 mm.

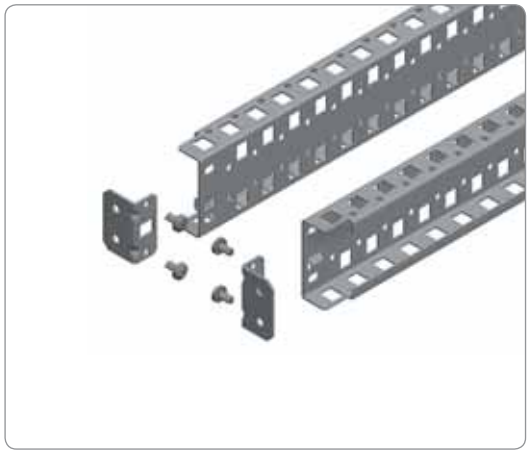
Supply: two universal cross rails, four supports for universal cross rails and fixing elements.



Nominal dimensions Height/Width/Depth (mm)	Maximum load (kg) by rail	Reference 40 mm (1 row)
300	70	**NSYSUCR4030**
400	60	**NSYSUCR4040**
500	60	**NSYSUCR4050**
600	50	**NSYSUCR4060**
800	40	**NSYSUCR4080**
1000	30	**NSYSUCR40100**
1200	20	**NSYSUCR40120**
1400	(1)	**NSYSUCR40140**
1600	(1)	**NSYSUCR40160**
1800	(1)	**NSYSUCR40180**
2000	(1)	**NSYSUCR40200**
2200	(1)	**NSYSUCR40220**

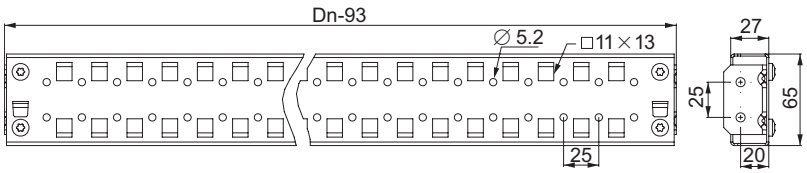
(1) For vertical assembly only.





Nominal dimensions Height/Width/Depth (mm)	Maximum load (kg) by rail	Reference 65 mm (2 rows)
300	110	**NSYSUCR6530**
400	100	**NSYSUCR6540**
500	90	**NSYSUCR6550**
600	80	**NSYSUCR6560**
800	70	**NSYSUCR6580**
1000	50	**NSYSUCR65100**
1200	50	**NSYSUCR65120**
1400	(1)	**NSYSUCR65140**
1600	(1)	**NSYSUCR65160**
1800	(1)	**NSYSUCR65180**
2000	(1)	**NSYSUCR65200**
2200	(1)	**NSYSUCR65220**

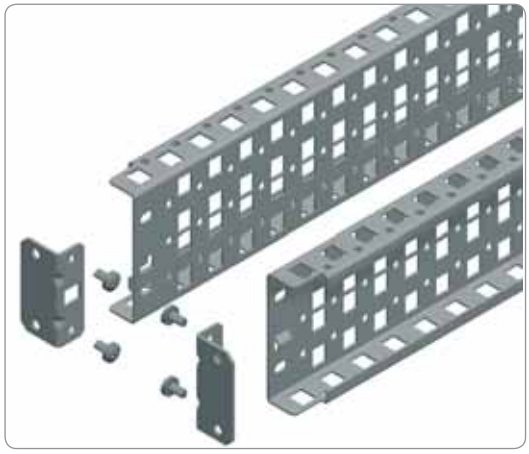
(1) For vertical assembly only.



> Advantage:

The universal cross rails allow any type of installation to be performed.

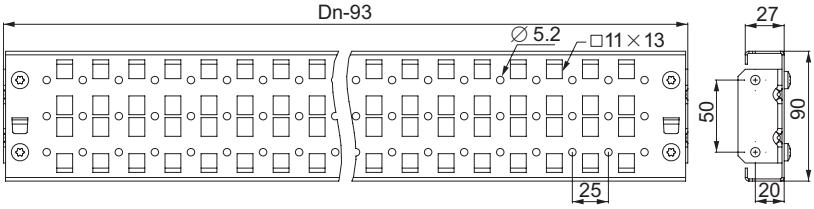
Mounting

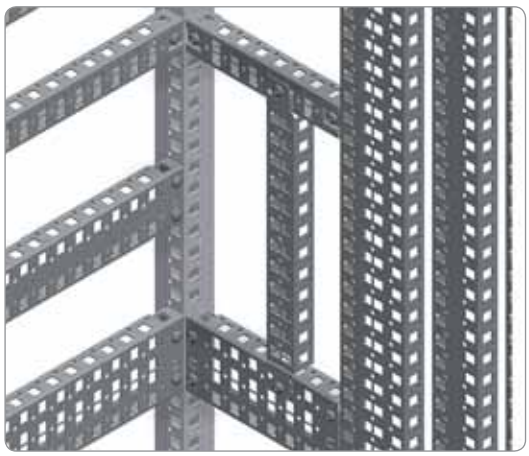


Nominal dimensions Height/Width/Depth (mm)	Maximum load (kg) by rail	Reference 90 mm (3 rows)
300	130	**NSYSUCR9030**
400	120	**NSYSUCR9040**
500	120	**NSYSUCR9050**
600	110	**NSYSUCR9060**
800	100	**NSYSUCR9080**
1000	70	**NSYSUCR90100**
1200	70	**NSYSUCR90120**
1400	(1)	**NSYSUCR90140**
1600	(1)	**NSYSUCR90160**
1800	(1)	**NSYSUCR90180**
2000	(1)	**NSYSUCR90200**
2200	(1)	**NSYSUCR90220**

(1) For vertical assembly only.

For ranges SF, SM, SFX, SMX





Other dimensions

- Other dimensions of universal cross rails of 40 (1 row) and 90 mm (3 rows) for assembly in other positions, and between cross rails.
- Material: zinc-coated steel.
- Thickness: 1.5 mm.

Supply: two universal cross rails, four supports for universal cross rails and fixing elements.

Nominal dimensions Height/Width/Depth (mm)	Maximum load (kg) (1)	Reference 40 mm (1 row)	Maximum load (kg) by rail	Reference 90 mm (3 rows)
700	50	**NSYSUCR4070**	110	**NSYSUCR9070**
900	40	**NSYSUCR4090**	100	**NSYSUCR9090**
1100	30	**NSYSUCR40110**	70	**NSYSUCR90110**
1500	(1)	**NSYSUCR40150**	(1)	**NSYSUCR90150**

(1) Cross rails only for fixing cables.

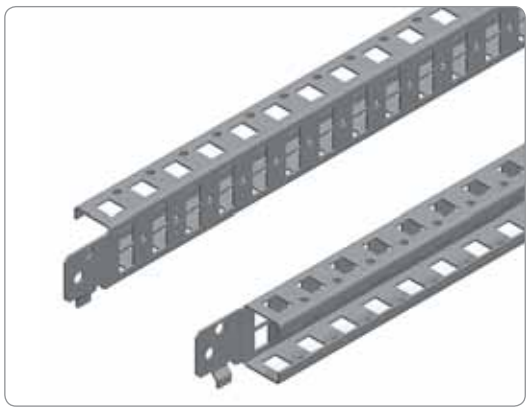
Mounting

For ranges SF, SM, SFX, SMX

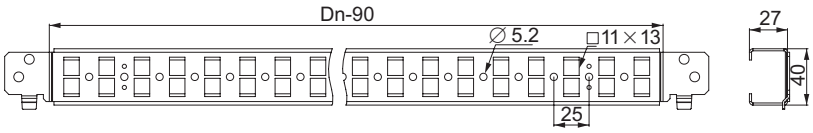
Quick-fixing cross rails

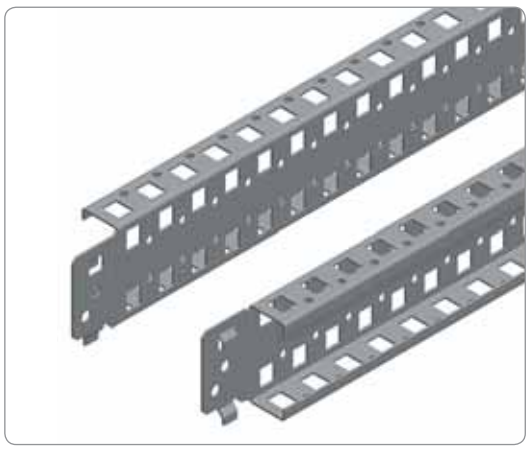
- There are 3 models, according to width: 40 mm (1 row), 65 mm (2 rows) and 90 mm (3 rows), perforated with a pitch of 25 mm (∅ 5.2 mm).
- Adjustable with a pitch of 25 mm.
- **Spacial SF:** they are fixed directly to the structure, quickly and safely. Clip-on plus screwing.
- **Spacial SM:** cross rails for depthwise fixing by means of adaptation profiles and 40 mm universal cross rails (1 row), or between cross rails in any other position.
- Material: zinc-coated steel.

Supply: two quick-fixing cross rails and fixing elements.

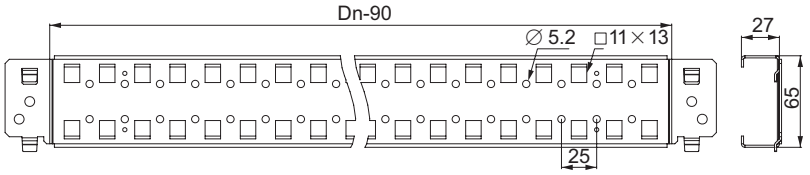


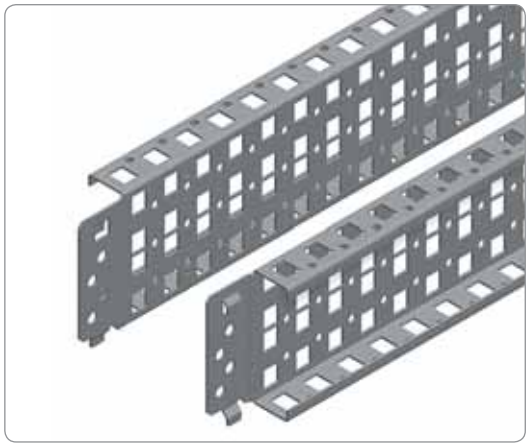
Nominal dimensions Height/Width/Depth	Maximum load (kg) by rail	Reference 40 mm (1 row)
400	60	**NSYSQCR4040**
500	60	**NSYSQCR4050**
600	50	**NSYSQCR4060**
800	40	**NSYSQCR4080**
1000	30	**NSYSQCR40100**
1200	20	**NSYSQCR40120**



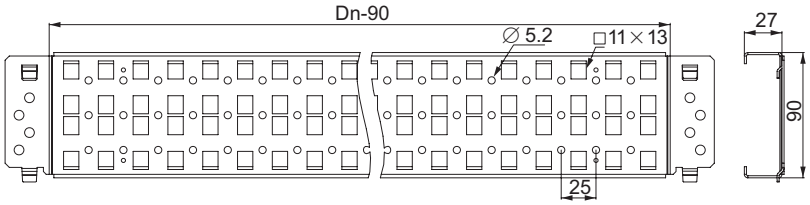


Nominal dimensions Height/Width/Depth	Maximum load (kg) by rail	Reference 65 mm (2 rows)
400	100	**NSYSQCR6540**
500	90	**NSYSQCR6550**
600	80	**NSYSQCR6560**
800	70	**NSYSQCR6580**
1000	50	**NSYSQCR65100**
1200	50	**NSYSQCR65120**

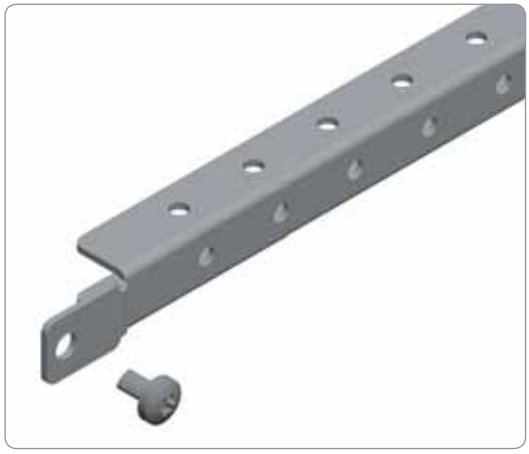


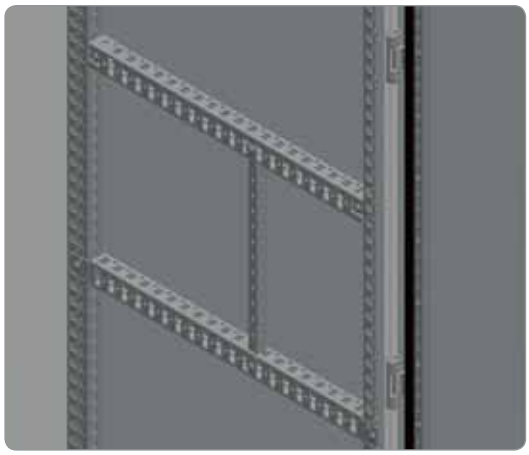


Nominal dimensions Height/Width/Depth	Maximum load (kg) by rail	Reference 90 mm (3 rows)
400	120	**NSYSQCR9040**
500	120	**NSYSQCR9050**
600	110	**NSYSQCR9060**
800	100	**NSYSQCR9080**
1000	70	**NSYSQCR90100**
1200	70	**NSYSQCR90120**



Mounting



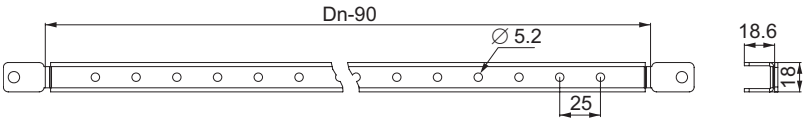


Light cross rails

- **Spacial SF and SFX:** direct fixing to the structure or between cross rails.
- **Spacial SM:** fixing by means of adaptation profiles and 40-mm universal cross rails (1 row), or between cross rails in any other position.
- Adjustable with a pitch of 25 mm.
- The light cross rails are equipped with a row of drill holes with a diameter of 5.2 mm and a pitch of 25 mm, which allows fixing with an M6 self-tapping screw, ref. **NSYST30M6S**.
- Material: zinc-coated steel.

Supply: two light cross rails and fixing elements.

Nominal dimensions Width/Depth	Reference
400	**NSYSLCR40**
500	**NSYSLCR50**
600	**NSYSLCR60**
800	**NSYSLCR80**



For ranges SF, SFX, SM

Rails for heavy loads

- They can be mounted with a cable-gland plate or with a previously mounted mounting plate.
- Laterally adjustable with a pitch of 25 mm.
- Elongated holes, for adjusting the centre-to-centre distance of the switchgear.
- Material: galvanised steel.
- Thickness: 4 mm.

Supply: 2 rails for heavy loads and fixing elements.

Nominal dimensions (mm) Depth	Maximum load (kg)	Reference
400	575	**NSYHLCR40**
500	525	**NSYHLCR50**
600	500	**NSYHLCR60**
800	475	**NSYHLCR80**

For ranges SF

Mounting

Fixing elements

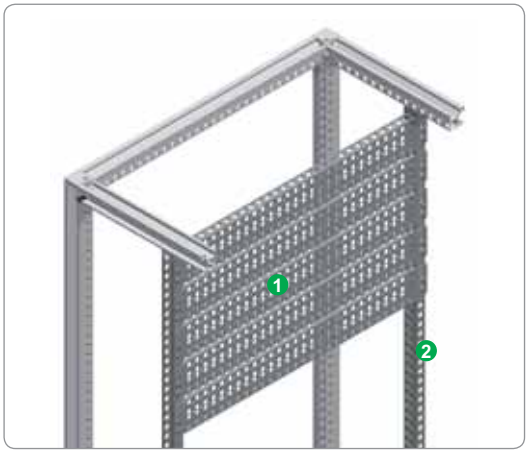
- **Caged nuts:** they are installed in the rectangular cut-outs of the structure and the cross rails.
- **Removable nuts:** they are installed in the rectangular cut-outs of the structure and the cross rails, easy to extract and reuse.
- **Screw with washer:** they make assembly easier in difficult-access locations.
- **Metric Torx screw:** to fix on the caged and/or removable nuts.
- **Torx self-tapping screw:** to fix on the structure or on the cross rails.

	Fixing element	Supply (units)	Reference
	M6 caged nut	50	**NSYCNFM6**
	M8 caged nut	50	**NSYCNFM8**
	M6 removable nut	50	**NSYCNM6**
	M8 removable nut	50	**NSYCNM8**
	M6 × 12 mm	100	**NSYS12M6H**
	M6 × 16 mm	100	**NSYS16M6H**
	M6 × 18 mm	100	**NSYS18M6H**
	M8 × 16 mm	100	**NSYS16M8H**
	M8 × 20 mm	100	**NSYS20M8H**
	Torx T30 M6 × 16 mm screw (1)	100	**NSYST30M6**
	Torx T40 M8 × 16 mm screw (1)	100	**NSYST40M8**
	Torx T30 M6 × 12 mm self-tapping screw (1)	100	**NSYST30M6S**

(1) Screw without washer.

Reference by unit. Order by multiples of 50 (nuts) or 100 (screws).

Mounting
Installation examples

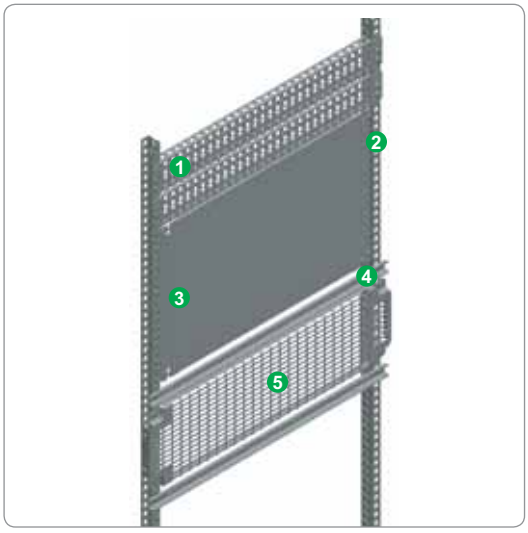


1 90-mm quick cross rails (3 rows), page **7/38**.
2 40-mm universal cross rails (1 row), page **7/36**.

Modular universal chassis

Alternative of assembly with cross rails and accessories (enclosure width 600 mm)

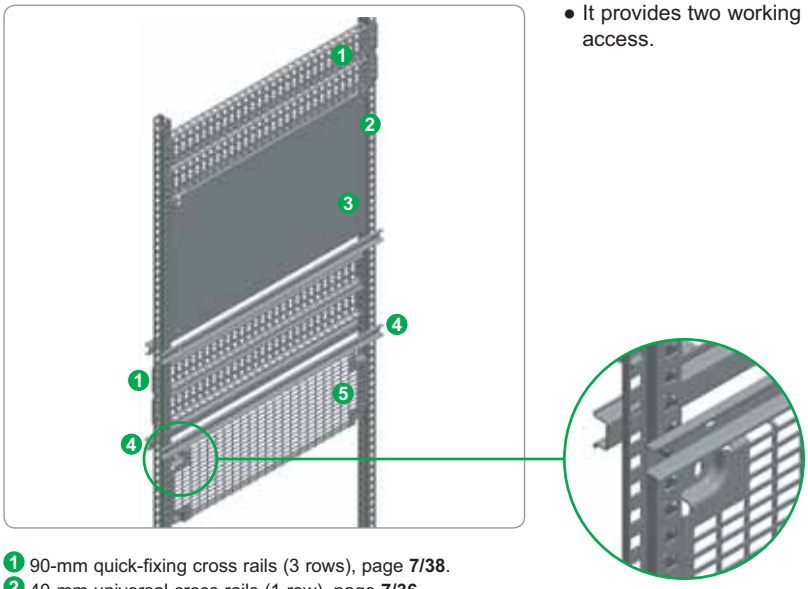
- The 40-mm universal cross rails (1 row) used as depth-adjustable uprights with a pitch of 25 mm allow the installation of a multitude of supports for installing switchgear, allowing their height to be adjusted with a pitch of 25 mm.



1 90-mm quick-fixing cross rails (3 rows), page **7/38**.
2 40-mm universal cross rails (1 row), page **7/36**.
3 Partial mounting plate, page **7/20**.
4 Symmetric DIN rail, page **7/50**.
5 "Telequick" perforated mounting plate, page **7/26**.

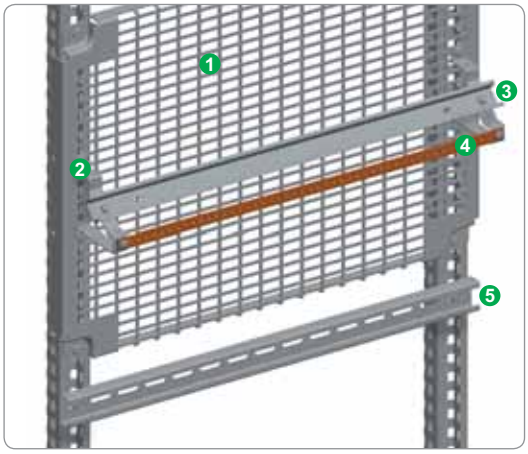
- The modular universal chassis system allows modular and non-modular elements to be installed easily on the same plane, using DIN rails, partial plates and 90-mm cross rails (3 rows) used as pre-perforated plates.

Mounting
Installation examples



- It provides two working surfaces, front and rear, in enclosures with front and rear access.

1. 90-mm quick-fixing cross rails (3 rows), page **7/38**.
2. 40-mm universal cross rails (1 row), page **7/36**.
3. Partial mounting plate, page **7/20**.
4. Symmetric DIN rail, page **7/50**.
5. "Telequick" perforated mounting plate, page **7/26**.



Alternative of assembly with mounting uprights and accessories (enclosure width 600 mm)

- The installation of uprights on the mounting plate brackets allows the creation of chassis with perforated rails and plates, adjustable with a pitch of 2.5 mm, using quarter-turn nuts.

1. Perforated mounting plate "telequick", page **7/26**.
2. Combined support brackets for earthing bar, page **7/29**.
3. Symmetric DIN rail, page **7/50**.
4. Earthing bar, page **7/139**.
5. Symmetric C-shaped rail, page **7/56**.

Mounting
Equipment support accessories

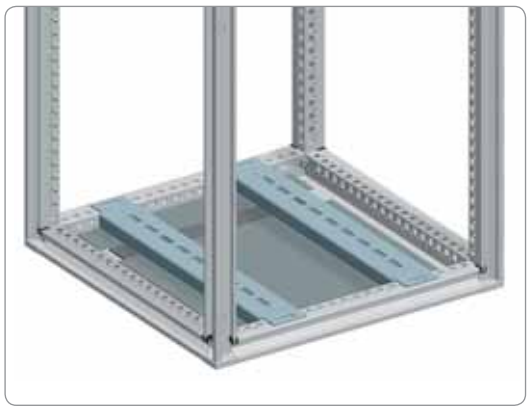
System for supporting heavy loads

- System designed for assembling various devices, especially transformers, at the bottom of the enclosure, allowing the passage of cables.
- They are mounted directly on the bottom frame of the enclosure.
- Material:

– C-shaped rails: zinc-coated steel.
– T-head screws (M12): galvanised steel.

Supply: two C-shaped rails, four T-head screws, four washers, four nuts and elements for fixing to the enclosure.

Nominal dimensions (mm)	Reference
Width	
600	**NSYRSUP6**
800	**NSYRSUP8**
1000	**NSYRSUP10**
1200	**NSYRSUP12**



Rails for heavy loads

- They can be mounted with a cable-gland plate or with a previously mounted mounting plate.
- Laterally adjustable with a pitch of 25 mm.
- Elongated holes, for adjusting the centre-to-centre distance of the switchgear.
- Material: galvanised steel.
- Thickness: 4 mm.

Supply: 2 rails for heavy loads and fixing elements.

Nominal dimensions (mm)	Maximum load (kg)	Reference
Depth		
400	575	**NSYHLCR40**
500	525	**NSYHLCR50**
600	500	**NSYHLCR60**
800	475	**NSYHLCR80**

Mounting
Equipment support accessories

Tray installed on the structure.

Tray installed on cross rails.

> Advantage:
Withstands loads of up to 150 kg.

Fixed tray

- Options for fixing the tray to the enclosure:
– If the tray has the same dimensions as the enclosure:
  - **Spacial SF:** direct fixing to the structure.
  - **Spacial SFX:** instalation possible only with universal cross rails, see on page **7/36**.
  - **Spacial SM:** fixing by means of adaptation profiles and 40-mm universal cross rails (1 row) in vertical position.
– If the tray is smaller than the dimensions of the enclosure: fixing on depth cross rails.
  - Depth-adjustable tray with a pitch of 25 mm.
- Provided with cut-outs for improving air circulation inside.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL-7035 grey.
- Acceptable load: 150 kg, evenly distributed.
- Tray height: 30 mm.

Supply: one fixed tray and fixing elements.

Nominal dimensions (mm)		Tray Dimensions (mm)	Reference
Width	Depth		
600	400	482 × 290 × 30	**NSYFXT6040**
	500	482 × 390 × 30	**NSYFXT6050**
	600	482 × 490 × 30	**NSYFXT6060**
800	400	682 × 290 × 30	**NSYFXT8040**
	500	682 × 390 × 30	**NSYFXT8050**
	600	682 × 490 × 30	**NSYFXT8060**

Mounting
Equipment support accessories

Telescopic rails fixed to the structure.

Telescopic rails fixed to cross rails.

Telescopic rails

- **Spacial SF:** installation directly on the structure of the enclosure or on universal cross rails.
- **Spacial SFX:** Instalation possible only with universal cross rails, see on page **7/36**.
- **Spacial SM:** installation by means of adaptation profiles and 40-mm universal cross rails (1 row) in vertical position, or on horizontal universal cross rails.
- The installation of a telescopic tray consists of the following:

– 1 fixed tray.
– 2 telescopic rails.

- End-of-travel stop of the rails in open and closed position.
- Material: zinc-coated steel.
- Acceptable load: 50 kg evenly distributed.

Supply: two telescopic rails and fixing elements.

Nominal dimensions (mm)	Reference
Depth	
400	**NSYTTG40**
500	**NSYTTG50**
600	**NSYTTG60**

Mounting
Equipment support accessories

Tray cross rails

- The cross rails allow the installation of fixed trays and telescopic rails. Quick and universal cross rails, see page **7/36**.

Nominal dimensions (mm)	Universal cross rail reference	Quick-fixing cross rail reference
Depth	40 mm (1 row)	40 mm (1 row)
400	**NSYSUCR4040**	**NSYSQCR4040**
500	**NSYSUCR4050**	**NSYSQCR4050**
600	**NSYSUCR4060**	**NSYSQCR4060**
800	**NSYSUCR4080**	**NSYSQCR4080**

Handle for telescopic trays

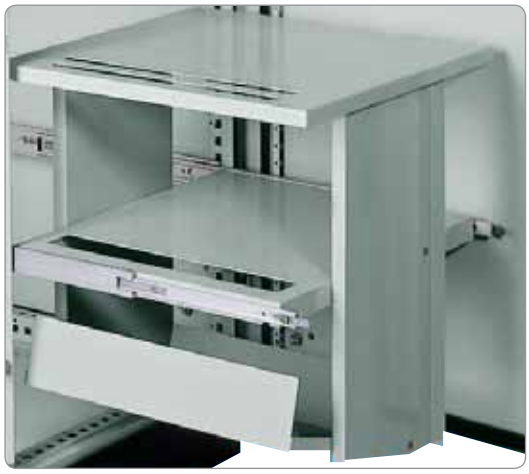
- Handle designed for easy extraction of the sliding trays.
- Material: polyamide 6 (black).

Supply: two units and fixing elements.

Reference
NSY1TH

Mounting
Equipment support accessories

For ranges
SFX, SMX



Printer support

- Support for placing an A4 printer, with area reserved for paper.
- It is fixed directly to the structure of the enclosure, with a depth of 600 mm. For a depth of 800 mm, it can be installed with universal or quick 40-mm (1 row) cross rails (ref. **NSYSUCR4080** or **NSYSQCR4080**).
- Material: steel.
- Finish: painted RAL-7035 grey.

Supply: printer support and fixing elements.

Reference
NSYPSA4

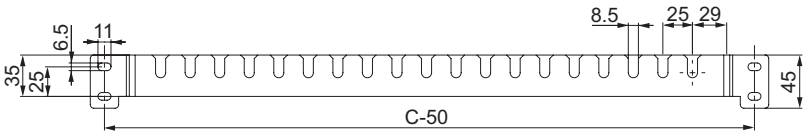
For ranges
SF

Cross rail for Lütze chassis

- Cross rail for fixing and adjusting the depth of the Lütze chassis.
- Material: galvanised steel.
- Thickness: 2.5 mm.

Supply: 6 cross rails for Lütze chassis and fixing elements.

Nominal dimensions (mm)	Reference
Depth (C)	
400	**NSYLCR40**
500	**NSYLCR50**
600	**NSYLCR60**



Mounting
Equipment support accessories

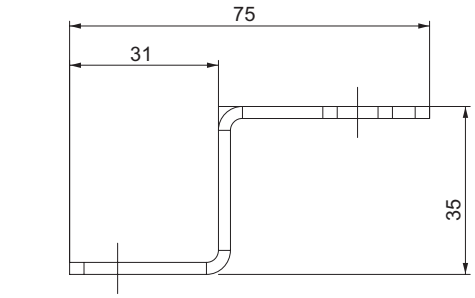
For ranges SF

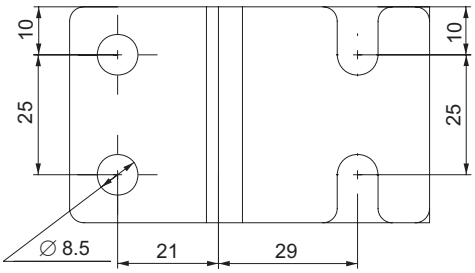
Support for Lütze chassis

- Support for installing Lütze chassis in the back of the enclosure.
- Material: galvanised steel.
- Thickness: 2.5 mm.

Supply: 6 supports and fixing elements.

Reference
NSYLSUP





Accessories

Mounting rails 7/50

Symmetric DIN rails 7/50

Asymmetric DIN rails 7/53

Double profile DIN rails 7/55

Symmetric C-shaped rails 7/56

Serrated C-shaped rails 7/57

U/L shaped rails 7/58

Connectors 7/59

Spacers 7/64

Nuts and screws 7/67

Mounting
Rails

For ranges SF, SM, SFX, SMX, SD

Symmetric DIN rails

Symmetric DIN rails for the metal enclosure range

- Fixed to the standard or technical uprights, not included in the supply, or directly to the structure.
- Ensure horizontal continuity in case of enclosure assembly.
- Rail type:

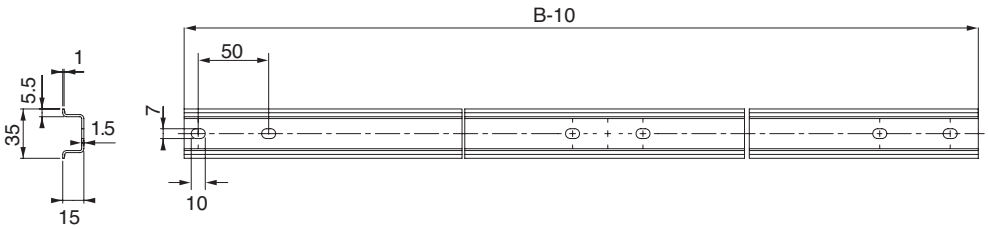
– Type A: 35 × 15 mm, thickness 1.5 mm.

- Material: zinc-coated steel.

Supply: 20 rails and fixings for direct assembling to the structure.

References per unit. Please place orders in multiples of 20 units (20, 40, etc.).

Dimensions (mm) (B)	Rail length (mm) (B-10)	Reference
600	590	**NSYSDR60**
800	790	**NSYSDR80**
1000	990	**NSYSDR100**
1200	1190	**NSYSDR120**



7

See also the accessories

Nuts and fixings page **7/67**

Uprights page **7/23**

Mounting
Rails

For ranges
S3D, S3X, PLM

Symmetric DIN rail for the Wall-Mounting range

- Fixing to mounting plates or another fixing elements, uprights not included in the supply.
- 2 types:

– Type A: 35 × 15 mm, thickness 1.5 mm.
– Type B: 35 × 7,5 mm, thickness 1 mm.

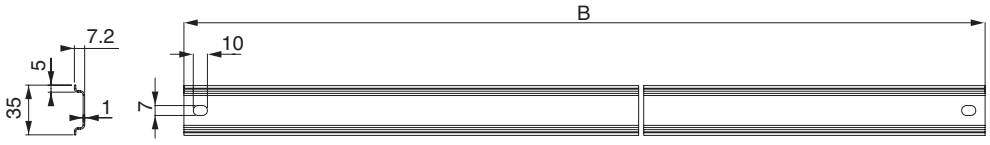
- Material: zinc-coated steel.

Supply: 20 rails and fixings for direct assembling to the structure.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Dimensions (mm)	Rail type	Rail length (B) (mm)	Reference
300	B	250	**NSYSDR30B**
400	B	350	**NSYSDR40B**
500	A	450	**NSYSDR50A**
600	A	550	**NSYSDR60A**
800	A	750	**NSYSDR80A**
1000	A	950	**NSYSDR100A**

Type A



Type B

7

See also the accessories

Nuts and fixings
page **7/67**

Uprights
page **7/23**

Mounting
Rails

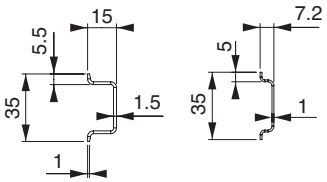
Symmetric DIN rails, 2000-mm version

- Material: galvanised steel.

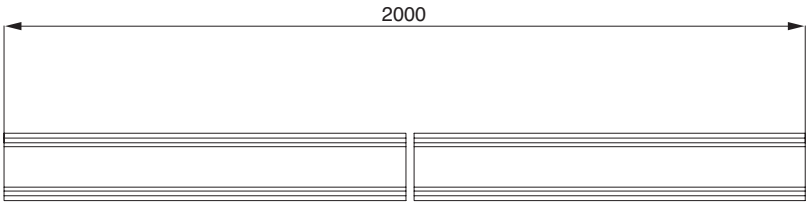
Supply: 20 rails with a length of 2 m.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Length of the rail (mm)	Perforations	Rail type	Reference
2000	Perforated	A	**NSYSDR200**
2000	Perforated	B	**NSYSDR200B**
2000	Not perforated	A	**NSYSDR200D**
2000	Not perforated	B	**NSYSDR200BD**

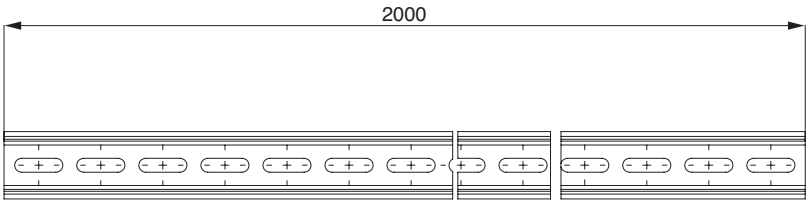


Type A Type B



Type A

Type B



7

See also the accessories

Nuts and fixings page **7/67**

Uprights page **7/23**

Mounting
Rails

For ranges
SF, SM, SFX, SMX, SD

Asymmetric DIN rails

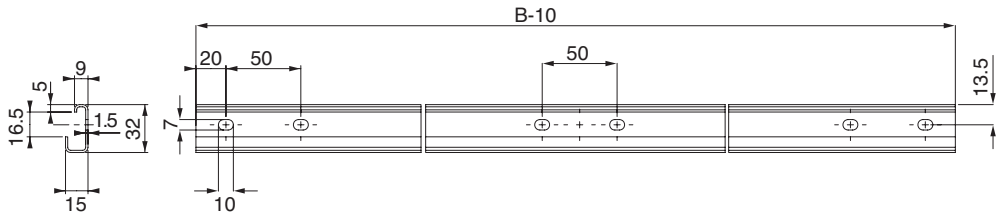
Asymmetric DIN rails for the Floor-Standing range

- Fixed to the standard or technical uprights, not included in the supply, or directly to the structure.
- Ensure horizontal continuity in the case of enclosure assembly.
- Thickness: 1.5 mm.
- Material: zinc-coated steel.

Supply: 20 rails and fixings for direct fixing to the structure.

References by unit. Order by multiples 20 units (20, 40, etc.).

Dimensions (mm) (B)	Rail length (mm) (B-10)	Reference
600	590	**NSYADR60**
800	790	**NSYADR80**
1000	990	**NSYADR100**
1200	1190	**NSYADR120**



NSYADR60

7

See also the accessories

Nuts and fixings
page **7/67**

Uprights
page **7/23**

Mounting
Rails

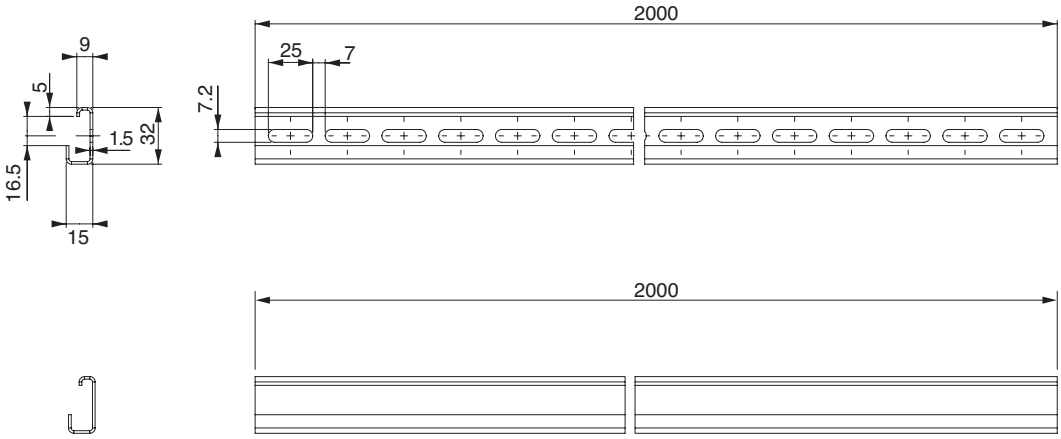
Asymmetric DIN rails, 2000-mm version

- Material: galvanised steel.

Supply: 20 rails with a length of 2 m.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Length (mm)	Perforations	Reference
2000	Not perforated	**NSYADR200**
2000	Perforated	**NSYADR200D**



7

See also the accessories

Nuts and fixings page **7/67**

Uprights page **7/23**

Mounting
Rails

For ranges
SF, SM, SFX, SMX, SD

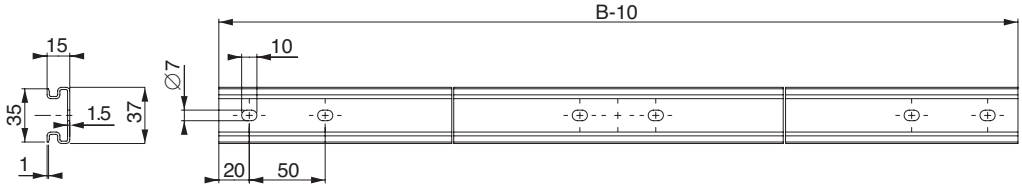
Double-profile DIN rails

- They combine the advantages of symmetric and asymmetric rails.
- They are fixed to the standard or technical uprights (see page **7/23**) or directly to the structure.
- Quick installation of terminals according to standard DIN46277/1.
- Thickness: 1.5 mm.
- Material: zinc-coated steel.

Supply: 20 rails and fixings for direct assembling to the structure.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Dimensions (mm) (B)	Rail length (mm) (B-10)	Reference
600	590	**NSYDPR60**
800	790	**NSYDPR80**
1000	990	**NSYDPR100**
1200	1190	**NSYDPR120**



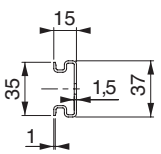
Double-profile DIN rails, 2000-mm version

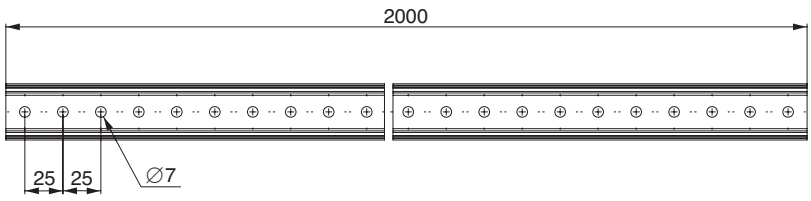
- Thickness: 1.5 mm.
- Material: galvanised steel.

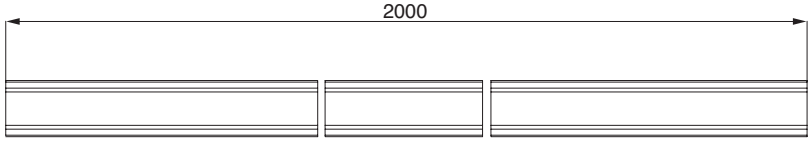
Supply: 20 rails with a length of 2 m.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Length (mm)	Perforations	Reference
2000	Not perforated	**NSYDPR200**
2000	Perforated	**NSYDPR200D**







7

Mounting
Rails

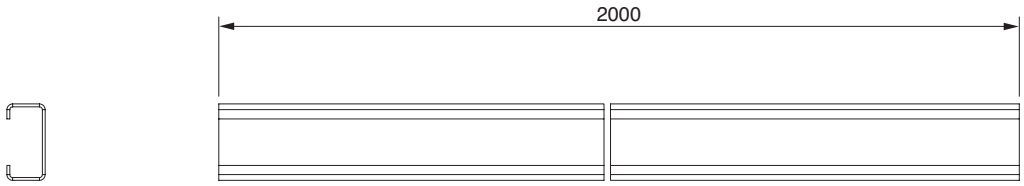
Symmetric C-shaped rails

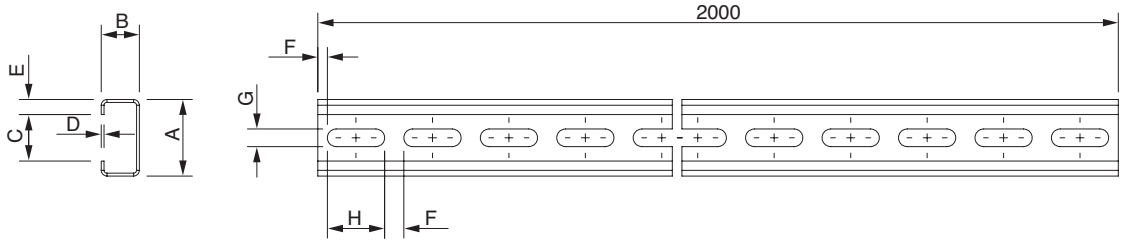
- Rails for supporting and fixing switchgear on panels and enclosures, formation of chassis, racks and panel reinforcements.
- They are fixed to the structure and to one another by means of fixing elements.
- Material: galvanised steel.

References by unit. Order by multiples of the units specified in the supply.

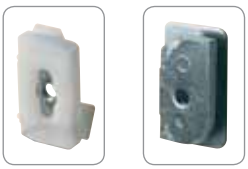
Rail type	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Supply	Reference
C20 (1)	21	11	10	1.5	5.5	-	-	-	20	**NSYCN20**
C40 (1)	40	20	24	1.5	8	-	-	-	20	**NSYCN40**
C60	60	30	36	2	12	-	-	-	10	**NSYCN60**
C20	21	11	10	1.5	5.5	5	6.2	15	20	**NSYCNT20**
C40	40	20	24	1.5	8	10	8.5	30	20	**NSYCNT40**
C60	60	30	36	2	12	10	10.5	30	10	**NSYCNT60**

(1) Not perforated.





See also the accessories



Fixing nuts page **7/68**

Connectors for symmetric C shapped rails page **7/59**

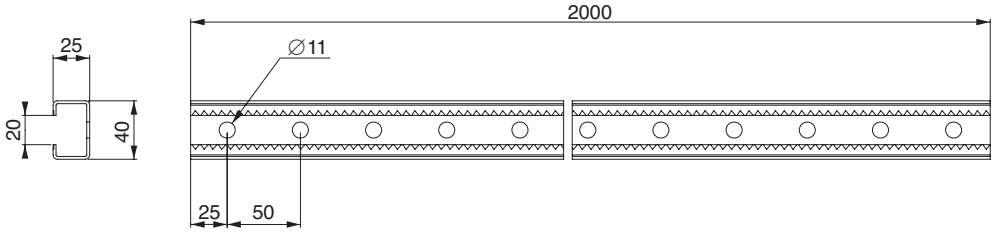
Mounting
Rails

Serrated C-shaped rail for heavy loads

- Marked in steps of 25 mm to facilitate switchgear positioning.
- Thickness: 2 mm.
- Material: zinc-coated steel.

Supply: 2 rails with a length of 2 m.

Dimensions (mm)	Reference
2000	**NSYSCR200**



See also the accessories

Fixing nuts page **7/68**

Mounting
Rails

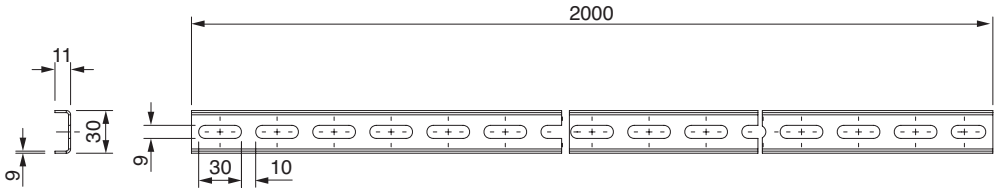
U-shaped rail

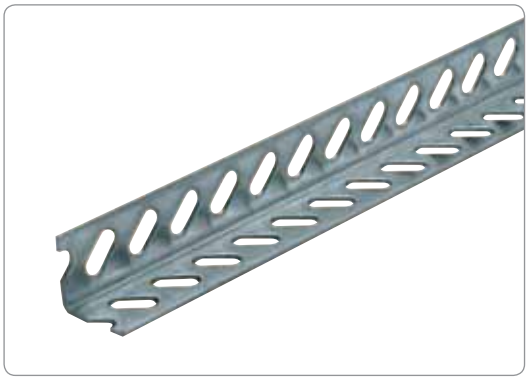
- Universal rails with elongated drill holes with a width of 8.5 mm which can house M4, M5 and M6 caged nuts.
- Material: galvanised steel.
- Thickness: 2 mm.

Supply: 20 rails with a length of 2 m.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Dimensions (mm)	Reference
2000	**NSYCUT30**





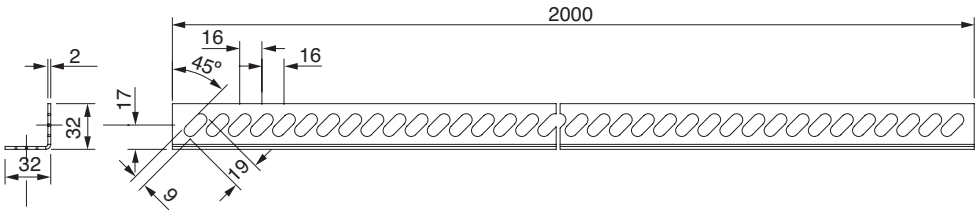
L-shaped rail

- Universal rails with elongated drill holes with a width of 8.5 mm which allow housing of M4, M5 and M6 caged nuts.
- Material: galvanised steel.
- Thickness: 2 mm.

Supply: 20 rails with a length of 2 m.

References by unit. Order by multiples of 20 units (20, 40, etc.).

Dimensions (mm)	Reference
2000	**NSYAT32**

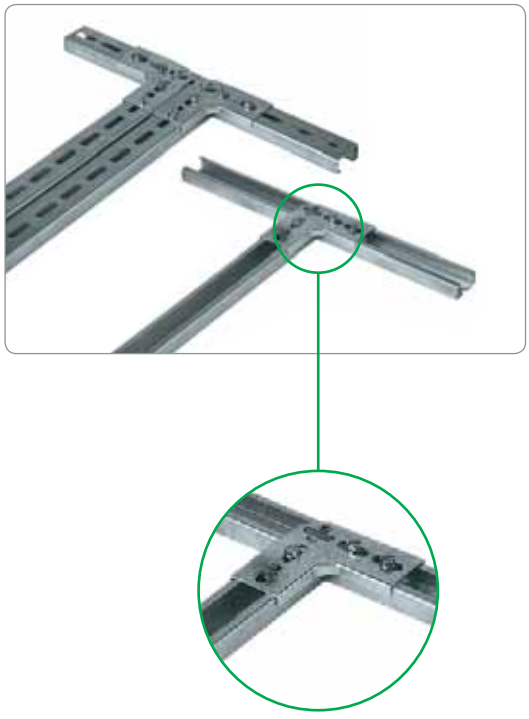


Mounting
Rails

Connectors for symmetric C-shaped rails

- The connectors enable the formation of chassis or frames and structures for fixing switchgear, in any position inside the enclosures, allowing the fixing of DIN rails or other elements.
- See symmetric C-shaped rails, page **7/56**.
- The fixing between connectors and rails is performed using combiplas nuts.

Examples of combinations with connectors for symmetric C-shaped rails



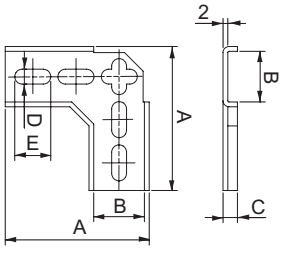
EMA connectors

- The EMA connectors are used to joint two symmetric C-shaped rails, C20 and C40 types, at right angles; they can also be used to obtain a T-shaped assembly.
- Material: zinc-coated steel.
- Thickness: 2 mm.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Reference
60	21.3	6	6.2	15	**NSYEMA20**
100	40.3	10	8.5	25	**NSYEMA40**



Mounting
Rails

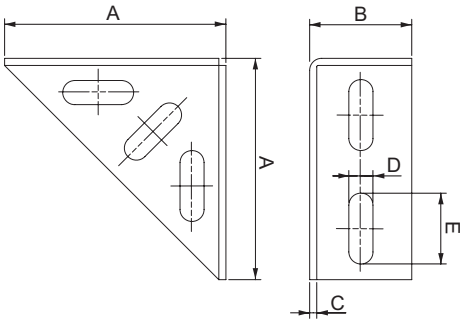
EVA connectors

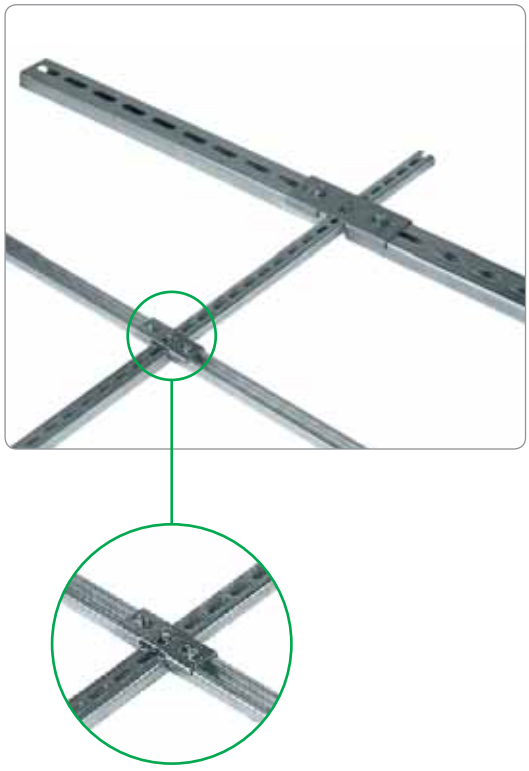
- The EVA connectors are used to join two symmetric C-shaped rails, C20 and C40 types, forming an overlapping assembly with plane change, or also at right angles for the formation of spacers or supports at a different level.
- Material: zinc-coated steel.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	Reference
43	19	2	6.2	15	**NSYEVA20**
78	36	2.5	8.5	25	**NSYEVA40**





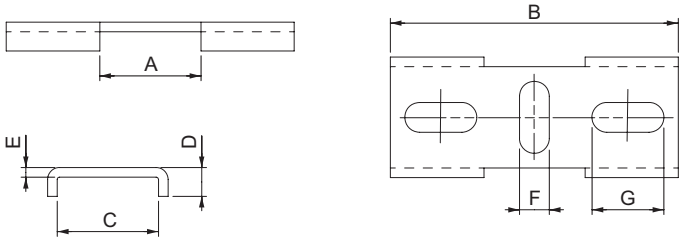
UCA connectors

- The UCA connectors are used to join symmetric C-shaped rails, types C20 and C40, forming a cross-shaped assembly of three rails located on the same plane, for example inside a frame.
- Material: zinc-coated steel.

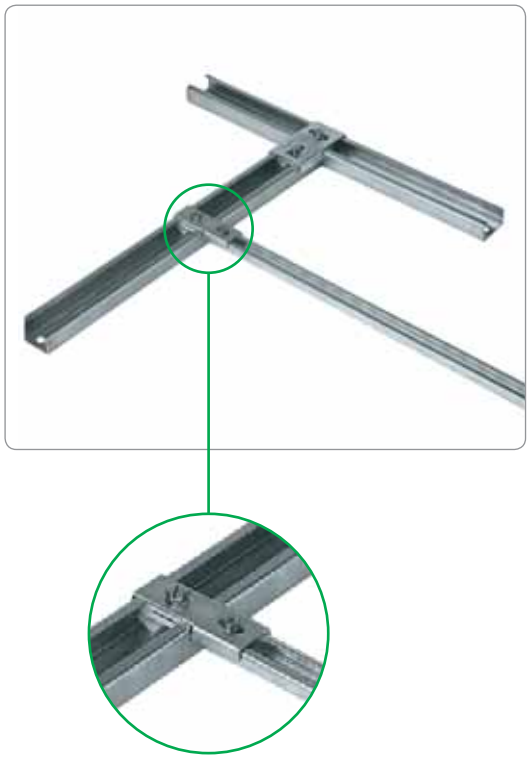
Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Reference
21.3	60	21.3	6	2	6.2	15	**NSYUCA22**
40.3	116	40.3	10	2.5	8.5	25	**NSYUCA44**



Mounting
Rails



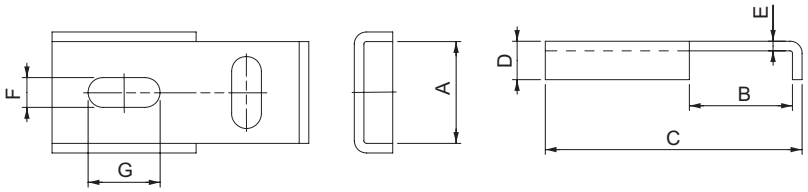
UTA connectors

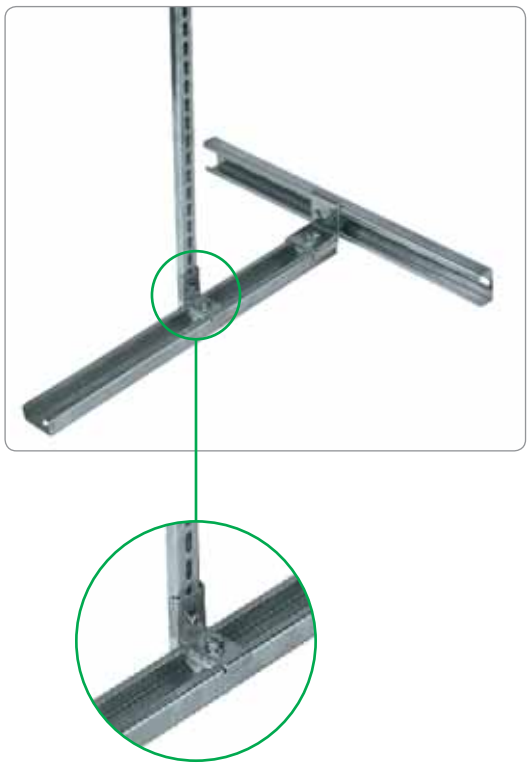
- The UTA connectors are used to create a T-shaped assembly between two symmetric C-shaped rails, C20 and C40 types, especially recommended for forming crossbars on chassis and frames.
- The UTA42 connectors type allows C20 rails to be joined with C40 rails.
- Material: zinc-coated steel.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	Reference
21.3	21.5	53.5	8	2	6.2	15	**NSYUTA22**
21.3	40.5	72.5	8	2	6.2	15	**NSYUTA42**
40.3	40.5	81	10	2.5	8.5	25	**NSYUTA44**





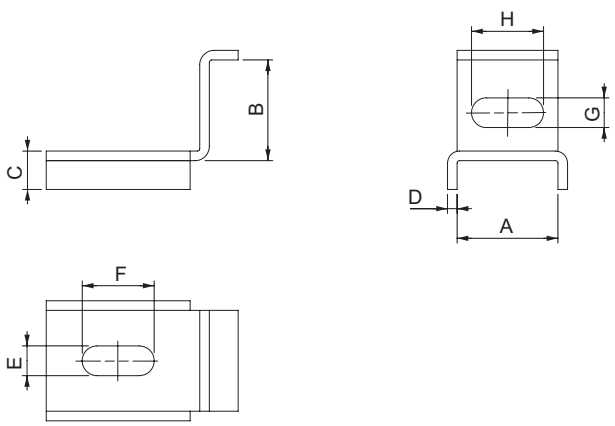
ECA connectors

- The ECA connectors are used to form a cross-shaped assembly with two symmetric C-shaped rails, C20 and C40 types, located perpendicularly on different planes.
- The ECA42 connector type makes it possible to join C20 rails with C40 rails.
- Material: zinc-coated steel.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)	H (mm)	Reference
21.3	21.5	8	2	6.2	15	6.2	15	**NSYECA22**
21.3	40.5	8	2	6.2	15	6.2	13	**NSYECA42**
40.3	40.5	10	2.5	8.5	25	8.5	25	**NSYECA44**



Mounting
Rails

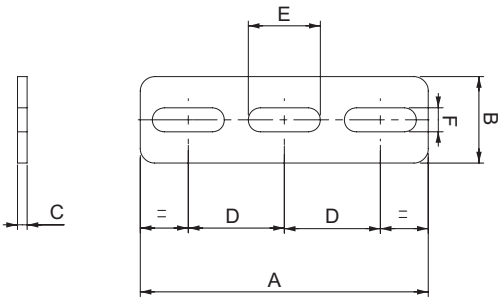
UR connectors

- The UR connectors are used for rectilinear joining of symmetric C-shaped rails.
- Recommended when the standard length is not sufficient or for maximising fractions.
- Material: zinc-coated steel.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Reference
60	18	2	20	15	5	**NSYUR20**
130	36	3	40	30	10	**NSYUR40**
130	55	3	40	30	10	**NSYUR60**



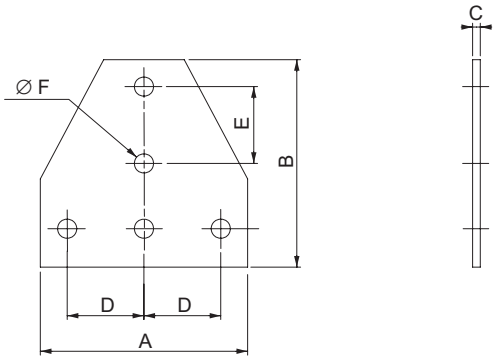
UT connectors

- The UT connectors are used to form T-shaped assemblies between symmetric C-shaped rails. They are used to form crossbars on frames and structures.
- Material: zinc-coated steel.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Reference
54	54	2	20	20	5	**NSYUT20**
60	80	2	20	25	8	**NSYUT40**



Mounting
Rails

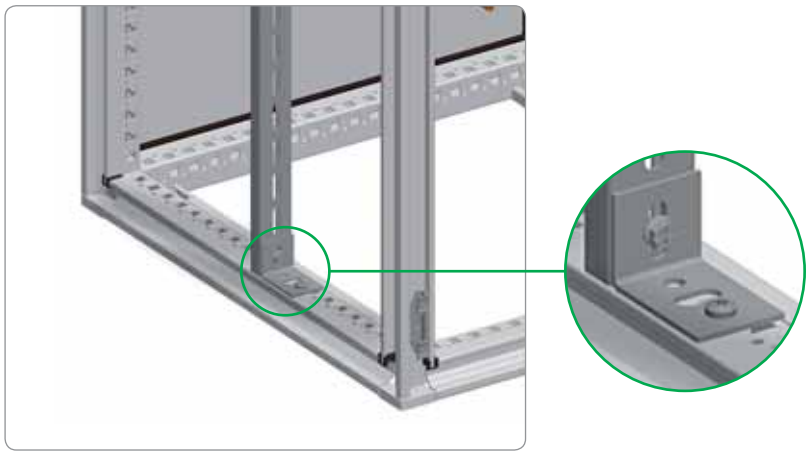
EN connectors

- The EN connectors are used to create L-shaped assemblies with plane change in the symmetric C-shaped rails, between them or with any other section.
- Material: zinc-coated steel.

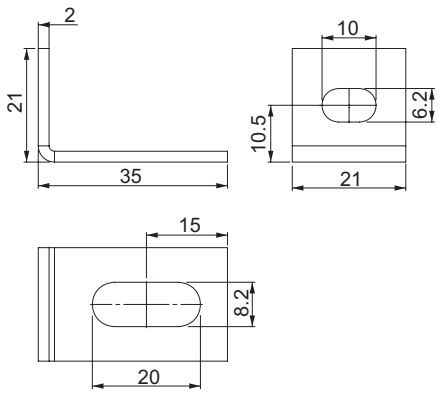
Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

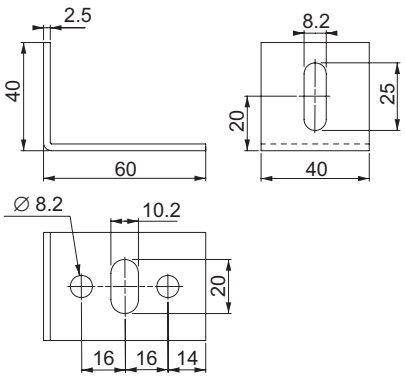
Reference
NSYEN20
NSYEN40
NSYEN60



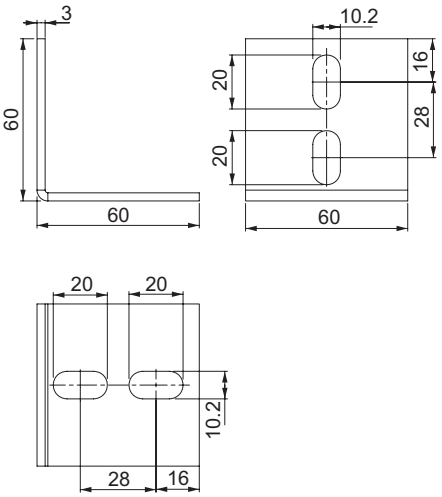
NSYEN20



NSYEN40



NSYEN60



7

Mounting
Rails

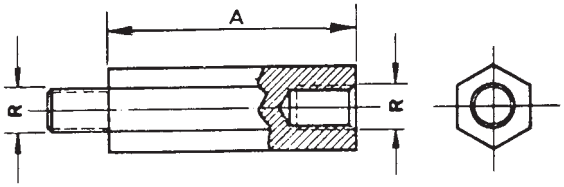
Hexagonal spacers

- Hexagonal spacers for raising switchgear, mounting plates, etc. They can be linked together to achieve variable heights with gradual elevation.
- Their assembly requires M6 or M8 caged nuts.

Supply: 100 hexagonal connectors.

References by unit. Order by multiples of 100 units (100, 200, 300, etc.).

Spacer height (mm) (A)	Thread type (R)	Reference
10	M5	**NSYE1025**
15	M5	**NSYE1525**
20	M5	**NSYE2025**
10	M6	**NSYEX106**
12	M6	**NSYEX126**
14	M6	**NSYEX146**
16	M6	**NSYEX166**
18	M6	**NSYEX186**
20	M6	**NSYEX206**
30	M6	**NSYEX306**
40	M6	**NSYEX406**
50	M6	**NSYEX506**
100	M6	**NSYEX1006**
15	M8	**NSYEX158**
20	M8	**NSYEX208**
30	M8	**NSYEX308**
40	M8	**NSYEX408**
50	M8	**NSYEX508**
60	M8	**NSYEX608**
100	M8	**NSYEX1008**



Mounting
Rails

ETU modular spacers

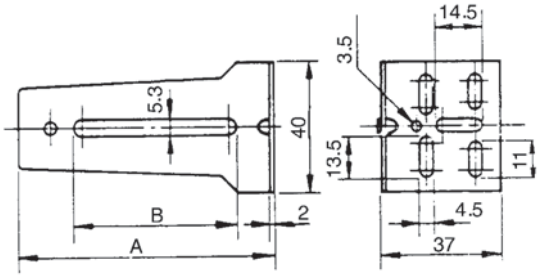
- Modular spacers for installing devices or rails at a different level from that achieved with the basic chassis or mounting plate.
- Material: zinc-coated steel.

Supply: 20 units.

References by unit. Order by multiples of 20 units (20, 40, 60, etc.).

A (mm)	B (mm)	Reference
48	25	**NSYETU48**
58	25	**NSYETU58**
79	55	**NSYETU79**
118	55	**NSYETU118**

Combination of spacers	Minimum height (mm)	Maximum height (mm)
NSYETU48 + NSYETU48	53	64
NSYETU48 + NSYETU58	63	74
NSYETU48 + NSYETU79	85	95
NSYETU48 + NSYETU118	124	134
NSYETU58 + NSYETU58	73	84
NSYETU58 + NSYETU79	94	104
NSYETU58 + NSYETU118	134	144
NSYETU79 + NSYETU79	84	125
NSYETU79 + NSYETU118	124	164
NSYETU118 + NSYETU118	164	204



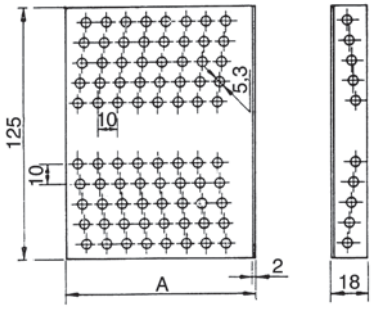
Mounting
Rails

EMM modular spacers

- Progressive modular spacers. Every 2 mm combining two spacers, ref. **NSYEMM95**, a raised height of between 108 and 178 mm is obtained.
- Material: zinc-coated steel.

Supply: 10 units.

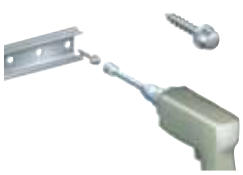
A (mm)	Reference
95	**NSYEMM95**



Mounting
Nuts and screws for rails

Rail type	Nuts			
Symmetric DIN rails page **7/50**	Clip-on nut	M4	**NSYTDE4**	100
		M5	**NSYTDE5**	100
		M6	**NSYTDE6**	100
Asymmetric DIN rails page **7/53**	Quarter-turn sliding nut	M4	**NSYSNM4A**	100
		M5	**NSYSNM5A**	100
		M6	**NSYSNM6A**	100
Double-profile DIN rails page **7/55**	Quarter-turn sliding nut	M3	**NSYTDC34**	100
		M4		
		M5	**NSYTDC56**	100
		M6		

Fixings		
Screw with captive washer		
M4 × 10	**NSYS10M4H**	100
M4 × 16	**NSYS16M4H**	100
M5 × 12	**NSYS12M5H**	100
M5 × 18	**NSYS18M5H**	100
M6 × 12	**NSYS12M6H**	100
M6 × 16	**NSYS16M6H**	100
M6 × 18	**NSYS18M6H**	100

	Self-tapping screw		
	M6 × 16	**NSYS16M6HS**	100
	M5 × 13	**NSYS13M5HS**	100
	Self-tapping screw		
	M5 × 16	**NSYS16M5HS**	100

References by unit. Order by multiples of 100 units (100, 200, 300, etc.).

Mounting
Nuts and screws for rails

Rail type	Nuts				Fixings		
Symmetric C-shaped rails page **7/56**	Combiplas nut	M3		-	100	M4 × 10	**NSYS10M4H**	100
		M4	**C20**	**NSYBN204**	100	M4 × 16	**NSYS16M4H**	100
		M6		**NSYBN206**	100	M5 × 12	**NSYS12M5H**	100
						M5 × 18	**NSYS18M5H**	100
						M6 × 12	**NSYS12M6H**	100
		M4		**NSYBN404**	50	M6 × 16	**NSYS16M6H**	100
		M6	**C40**	**NSYBN406**	50	M6 × 18	**NSYS18M6H**	100
		M8		**NSYBN408**	50	M8 × 16	**NSYS16M8H**	100
						M8 × 20	**NSYS20M8H**	100
		M4		**NSYBN606**	20			
		M8	**C60**	**NSYBN608**	20			
		M10		**NSYBN610**	20			
	Metal sliding nut	M4	**C20**	**NSYB204**	100			
		M4	**C40**	**NSYB404**	100			
		M6		**NSYB406**	100			
Serrated C-shaped rail for heavy loads page **7/57**	(1) (2) Quarter-turn sliding nuts	M6 (1)		**NSYSNM6**	10			
		M8 (1)		**NSYSNM8**	10			
		M6 (2)		**NSYSNSM6**	10			
		M8 (2)		**NSYSNSM8**	10			

References by unit. Order by multiples of the units specified in the supply.

Accessories

Power distribution 7/70

DLM modular chassis 7/70

DL modular chassis 7/72

Single-chassis coupling set 7/75

Double-chassis coupling set 7/76

Chassis-coupling set with zone for busbars 7/77

Cover plates 7/78

Set of fixed rail 7/81

Reinforced plate supports 7/83

Cable duct fixing supports 7/84

Busbars and blocks 7/85

Busbars support accessories 7/91

Sigma safety terminals 7/96

Terminals 7/97

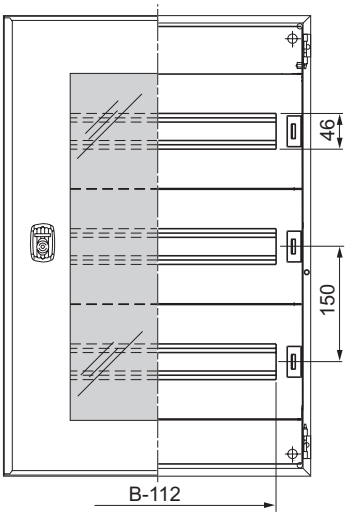
Earthing strips 7/98

Power distribution
Modular distribution

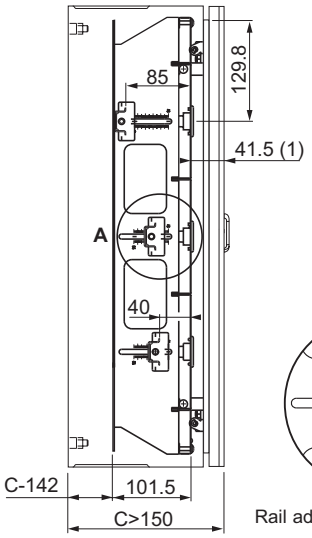
For ranges
CRN, S3X, S3D

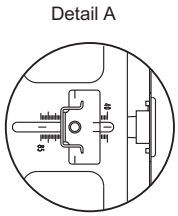
DLM modular chassis

- The chassis consists of metal cut-out front panels, which can be clipped on without screws, structured finish, epoxy-polyester powder, RAL-7035 grey, on a rigid galvanised-steel structure.
- The depth of the chassis can be adjusted from 40 to 85 mm, between the rail and the front panel, allowing the installation of all types of devices.



Front-panel cut-out
(see page **7/71**)





Rail adjustment: 45 mm

Dimensions (mm)		Number of modules*	Modular chassis reference	Plain front plate reference	Plain chassis reference
Height	Width				
400	300	24	**NSYDLM24**	**NSYCTL300DLM**	**NSYPMP300DLM**
500	400	48	**NSYDLM48**	**NSYCTL400DLM**	**NSYPMP400DLM**
600	400	48	**NSYDLM48P**	**NSYCTL400DLM**	**NSYPMP400DLM**
600	600	84	**NSYDLM66**	**NSYCTL500DLM**	**NSYPMP600DLM**
700	500	66	**NSYDLM84**	**NSYCTL500DLM**	**NSYPMP500DLM**
700	500	88	**NSYDLM88**	**NSYCTL500DLM**	**NSYPMP500DLM**
800	600	84	**NSYDLM84P**	**NSYCTL600DLM**	**NSYPMP600DLM**
800	600	112	**NSYDLM112**	**NSYCTL600DLM**	**NSYPMP600DLM**
1000	600	168	**NSYDLM168**	**NSYCTL600DLM**	**NSYPMP600DLM**
1000	800	234	**NSYDLM240**	**NSYCTL800DLM**	**NSYPMP800DLM**

* 1 module = 2 steps = 18 mm.

Power distribution
Modular distribution

Number of modules per chassis in steps of 18 mm

Chassis reference	NSYDLM24	NSYDLM48	NSYDLM48P	NSYDLM84	NSYDLM66	NSYDLM88	NSYDLM84P	NSYDLM112	NSYDLM168	NSYDLM240
Enclosure height (mm)	400	500	600	600	700	700	800	800	1000	1000
Enclosure width (mm)	300	400	400	600	500	500	600	600	600	800
Number of rows	2	3	3	3	3	4	3	4	6	6
Modules per row	12	16	16	28	22	22	28	28	28	39
Total n. of modules	24	48	48	84	66	88	84	112	168	234

*For references **NSYDLM48**, **NSYDLM48P** and **NSYDLM84** on Spacial wall-mounting enclosures the central row can only receive modules at the height of the lock when installed at the front of the enclosure. In this case, 1 module is sealed up (check our technical instructions).

Plain front panel

- Metal front panels to be clipped on without screws, structured finish, 100% polyester powder, RAL-7035 grey colour.
- Nominal height: 150 mm.

Composition: 2 plain front panel and fixings.

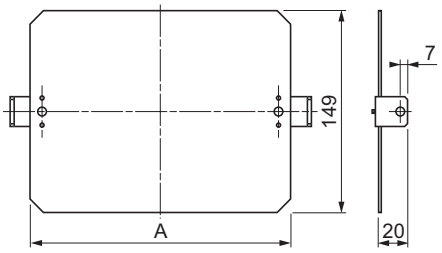
Enclosure width (mm)	No. of modules	Reference
300	12	**NSYCTL300DLM**
400	16	**NSYCTL400DLM**
500	22	**NSYCTL500DLM**
600	28	**NSYCTL600DLM**
800	40	**NSYATP6DTM**

Plain mounting plate

- Mounting plate for fixing non-modular devices.
- Material: galvanised steel, 2 mm thick.
- Nominal height: 150 mm.
- To be ordered in multiples of 2 parts.

Composition: 2 plain chassis and fixings.

Enclosure width (mm)	A (mm)	Reference
300	208	**NSYPMP300DLM**
400	308	**NSYPMP400DLM**
500	408	**NSYPMP500DLM**
600	508	**NSYPMP600DLM**
800	708	**NSYPMP800DLM**



Sheet, 2 mm thick

Power distribution
Modular distribution

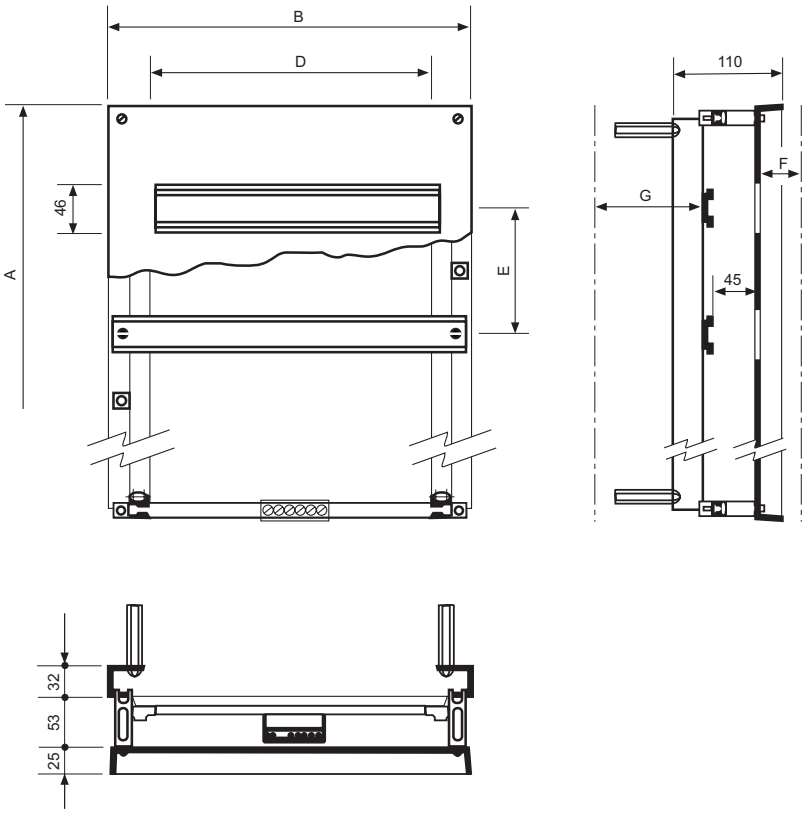
NSYCRN64150P + NSYDLCR64

For ranges
CRN, S3X, S3D*

DL modular chassis

Dinimel chassis designed for devices with heights of 53 and 68 mm, which can be coupled directly to the enclosure plate-support bolts. Manufactured from sheet steel. Metal protective cover plate, RAL-7035 colour.

- Distance between device rail and protective cover plate: 45 mm.



*For Spacial S3D please consult us.

Dimension F: Distance from the protective cover plate to the inside of the door.
Dimension G: Distance from the device-support rail to the rear of the enclosure.

Reference	No. of 18-mm modules	No. of rows	Approx. weight (kg)	For coupling to the enclosures with normal or transparent door			Dimensions (mm)					
				Height	Width	Depth	A	B	D	E	F**	G
NSYDLCR18	18	2	1.2	300	250	150*	255	205	162	120	41	51
NSYDLCR24	24	2	1.7	400	300	150*	355	255	216	160	41	51
NSYDLCR36	36	3	1.7	400	300	150*	355	255	216	110	41	51
NSYDLCR48	48	3	2.4	500	400	150*	455	355	288	130	41	51
NSYDLCR64	64	4	3.3	600	400	150/200	555	355	288	130	41	51/101
NSYDLCR88	88	4	4.5	600	500	150/200	555	455	396	130	41	51/101
NSYDLCR110	110	5	5.1	700	500	200	655	455	396	125	41	101
NSYDLCR135	135	5	7.5	800	600	200	755	555	486	140	41	101

* For coupling to enclosures with a depth of 200 mm, the stand-offs (ref. **NSYEX608**) are to be ordered separately (4 per chassis).
** For enclosures with transparent door, the F dimension is reduced by 4 mm.

See also the accessories

Plain front plates
page **7/71**

Blanking plate
page **7/73**

Power distribution
Modular distribution

Blanking plate

Blanking plate made from fire-proof insulating material, for full or partial covering of the circuit-breaker windows; it can easily be cut to the required size.

Length (mm)	N°. of modules	RAL	Reference
72	4	7032	**NSYATP72G**
72	4	7035	**NSYATP72MS**
108	6	-	**NSYATP6DTM**
432	24	-	**NSYATP24DTM**
1100	-	7032	**NSYATPUND**

See also the accessories

Connecting strips page **7/98**

Power distribution
Modular distribution

Modular distribution system

- The modular distribution system is made up of a range of accessories prepared for forming electric panels with high distribution capacity.
- The accessories are installed on a chassis mounted at the front of the enclosure, such as for example:

– Cover plates for enclosures with widths of 600 and 800, solid or cut-out in screwed-on or hinged versions. They cover 24 or 36 modules per row, depending on the width of the enclosure.
– Material support rails, fixed or with adjustable depth.
– Chassis supports for coupling non-modular equipment.
– Supports for fixing cable-distribution cable ducts.

- Sets of accessories made up of material-supporting frames with chassis and cover plates are offered for the construction of double or busbar modular chassis. All the accessories of the individual chassis system can also be combined in the same way with the double chassis or with the chassis with busbar area.

Modular distribution accessories

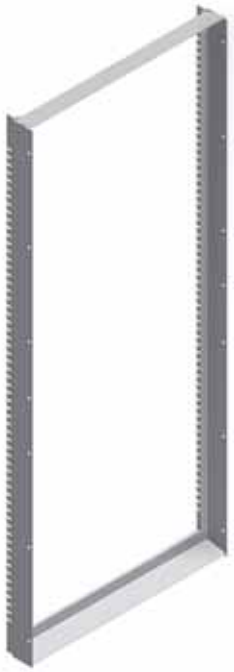
For ranges
SF, SM

- Schneider Electric has developed a broad range of accessories for the construction of modular distribution frames, meeting the needs of the market.
- The new range has a coupling chassis, installed at the front of the enclosure, allowing the installation of:

– Cover plates with lengths of 600 and 800 mm, plain and cut-out, screwed on and hinged, with heights of 150, 200, 300, 400, 450 and 600 mm.
– Material support rails, fixed or with adjustable depth.
– Mounting plate supports, plain or perforated, for installation of non-modular devices.

- For the construction of double modular distribution frames or with busbar chamber, specific coupling chassis have been created for these applications.

Power distribution
Modular distribution



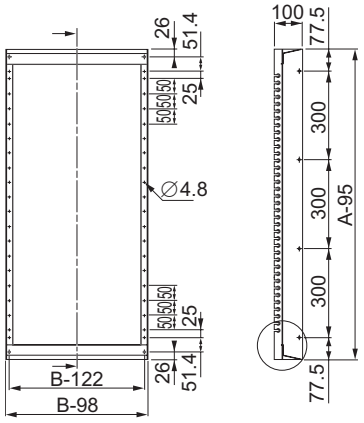
Single-chassis coupling set

- Chassis made up of vertical uprights and horizontal crossbars:
  – **Spacial SF:** they are screwed to the front frame of the enclosure.
  – **Spacial SM:** they are screwed to the front frame of the enclosure by means of the vertical adaptation profiles, see page **7/34**.
- Easy access to the inside for component installation.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

Supply: two vertical uprights, two horizontal crossbars and fixing elements.

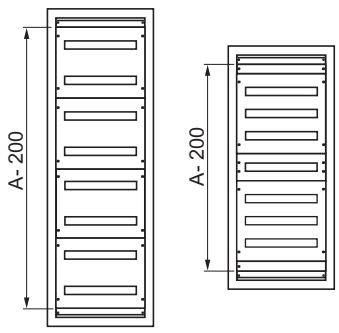
Nominal dimensions (mm)		Maximum no.of 18-mm modules	Reference
Height (A)	Width (B)		
1200	600	144	**NSYCSH126**
	800	216	**NSYCSH128**
1400	600	192	**NSYCSH146**
	800	288	**NSYCSH148**
1600	600	216	**NSYCSH166**
	800	324	**NSYCSH168**
1800	600	240	**NSYCSH186**
	800	360	**NSYCSH188**
2000	600	288	**NSYCSH206**
	800	432	**NSYCSH208**

For ranges SF, SM

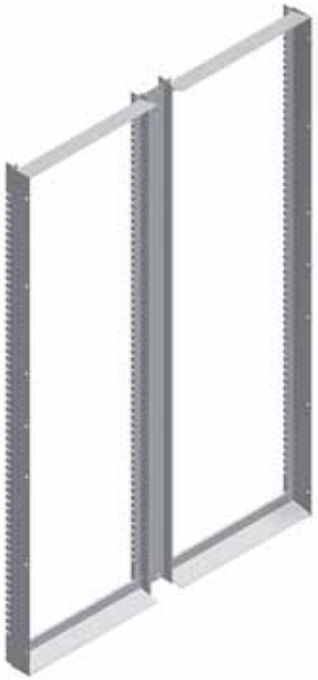


Example of the combination of cut-out, screwed-on cover plates and single-chassis coupling set

Nominal dimensions (mm)		No. of 18-mm modules	Reference		
Height (A)	Width (B)		1 single-chassis coupling set	5 screwed-on cut-out cover plates	2 adjustment cover plates
1800	600	240	1 × **NSYCSH186**	5 × **NSYMUC306**	1 × **NSYADC16**



Power distribution
Modular distribution



For ranges SF, SM

Double-chassis coupling set

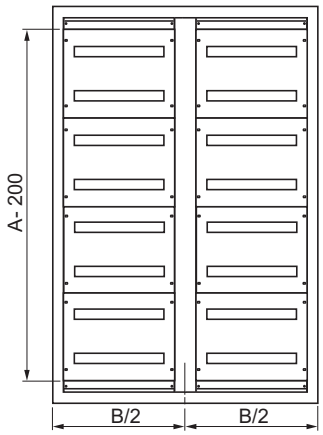
- Mounting on enclosures with widths of 1200 and 1600 mm.
- Installation on **Spacial SM**: they are screwed to the front frame of the enclosure by means of the vertical adaptation profiles, see page **7/34**.
- Set made up of two modular chassis with an intermediate central upright.
- **Spacial SM:** for enclosures with a width of 1200 mm the top/bottom adjustment rails are necessary, see page **7/21**.
- **Spacial SF:** the double-door enclosure adaptation kit is required for enclosure widths of 1200 and 1600 mm, see page **7/19**.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

Supply: two single-chassis coupling sets, one intermediate central upright and fixing elements.

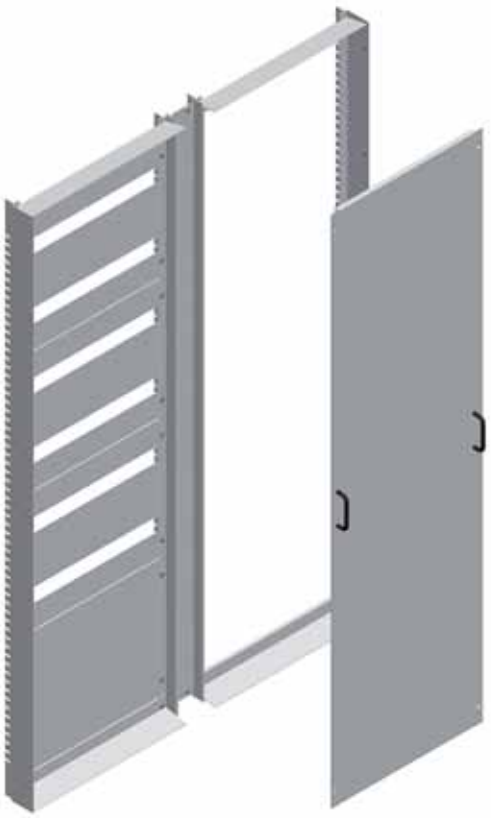
Spacial dimensions (mm)		Set made up of columns with a width (mm)	Maximum no. of 18-mm modules	Reference
Height	Width			
1400	1200	600 + 600	384	**NSYDCSH1412**
1600	1200	600 + 600	432	**NSYDCSH1612**
1800	1200	600 + 600	480	**NSYDCSH1812**
	1600	800 + 800	720	**NSYDCSH1816**
2000	1200	600 + 600	576	**NSYDCSH2012**
	1600	800 + 800	864	**NSYDCSH2016**

Example of the combination of cut-out, screwed-on cover plates and double-chassis coupling set

Spacial dimensions (mm)			No. of 18-mm modules	Reference		
Height (A)	Width (B)	Depth (C)		1 double-chassis coupling set	12 screwed-on cut-out 300-mm cover plates	Double-door enclosure adaptation kit
2000	1200	500	576	1 × **NSYDCSH2012**	12 × **NSYMUC306**	**NSYSMP2D5**
	1600	500	864	1 × **NSYDCSH2016**	12 × **NSYMUC308**	**-**



Power distribution
Modular distribution



For ranges SF, SM

Chassis-coupling set with zone for busbars

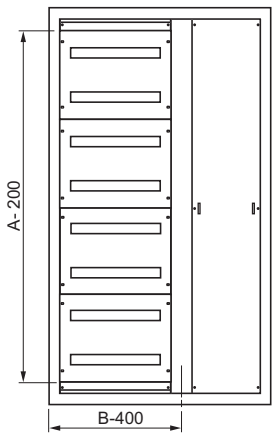
- Set for mounting on enclosures with widths of 1000 and 1200 mm.
- **Spacial SF:** They are screwed to the front frame enclosure.
- **Spacial SM:** They are screwed to the front frame of the enclosure by means of the vertical and horizontal adaptation profiles, see page **7/34**.
- Assembly made up of a modular chassis with an intermediate central upright and a blanking cover plate for busbars (width 300 mm).
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

Supply:
– One single-chassis coupling set.
– One intermediate central upright.
– One busbar blanking cover plate.
– Fixing elements.

Nominal dimensions (mm)		Set made up of columns with a width (mm)	Maximum no. of 18-mm modules	Reference
Height	Width			
1400	1000	600 + 400	192	**NSYCSHB1410**
	1200	800 + 400	288	**NSYCSHB1412**
1600	1000	600 + 400	216	**NSYCSHB1610**
	1200	800 + 400	324	**NSYCSHB1612**
1800	1000	600 + 400	240	**NSYCSHB1810**
	1200	800 + 400	360	**NSYCSHB1812**
2000	1000	600 + 400	288	**NSYCSHB2010**
	1200	800 + 400	432	**NSYCSHB2012**

Example of the combination of cut-out, screwed-on cover plates and chassis-coupling set with busbar zone

Nominal dimensions (mm)		No. of 18-mm modules	Reference		
Height (A)	Width (B)		1 chassis-coupling set with zone for busbars	5 screwed-on cut-out 300-mm cover plates	2 adjustment cover plates
1800	1000	240	1 × **NSYCSHB1810**	5 × **NSYMUC306**	1 × **NSYADC16**
1800	1200	360	1 × **NSYCSHB1812**	5 × **NSYMUC308**	1 × **NSYADC18**



Power distribution
Modular distribution

For ranges SF, SM

Plain cover plates

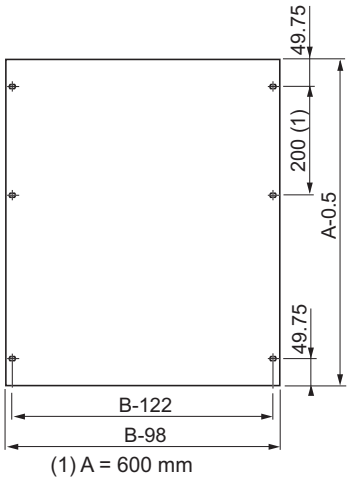
- Metal cover plates for protecting control devices.
- The cut-outs in non-modular control devices is at user's request
- Suitable by modules of 150 or 200 mm.
- Versions:

– Screwed-on plain cover plate.
– Hinged plain cover plate. 120° opening with flat hinge.

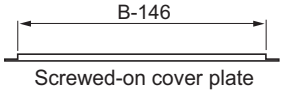
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

Supply: one plain cover plate and fixing elements.

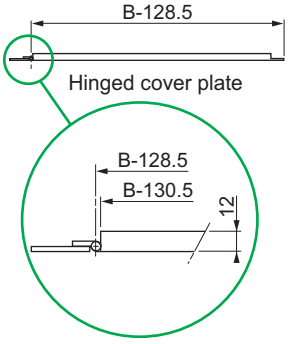
Nominal dimensions (mm)		Screwed-on plain cover plate reference	Hinged plain cover plate reference
Height (A)	Width (B)		
150	600	NSYMPC156	NSYMPCH156
	800	NSYMPC158	NSYMPCH158
200	600	NSYMPC206	NSYMPCH206
	800	NSYMPC208	NSYMPCH208
300	600	NSYMPC306	NSYMPCH306
	800	NSYMPC308	NSYMPCH308
400	600	NSYMPC406	NSYMPCH406
	800	NSYMPC408	NSYMPCH408
450	600	NSYMPC456	NSYMPCH456
	800	NSYMPC458	NSYMPCH458
600	600	NSYMPC606	NSYMPCH606
	800	NSYMPC608	NSYMPCH608



(1) A = 600 mm



Screwed-on cover plate



Hinged cover plate

Power distribution
Modular distribution

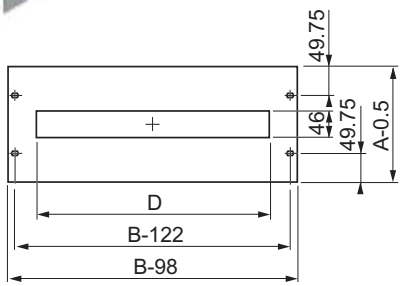
Cut-out cover plates

- Cut-out metal cover plates for modular switchgear (1 module = 18 mm).
- Suitable by modules of 150 or 200 mm.
  – Cover plates for 600-mm enclosures: 24 modules per row.
  – Cover plates for 800-mm enclosures: 36 modules per row.
- Versions:
  – Screwed-on cut-out cover plate.
  – Hinged cut-out cover plate. 120° opening with flat hinge.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

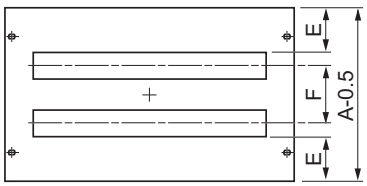
Supply: one cut-out cover plate and fixing elements.

Nominal dimensions (mm)		Dimensions			No. of cut-outs	Maximum no. of 18-mm modules	Screwed-on cut-out cover plate reference	Hinged cut-out cover plate reference
Height (A)	Width (B)	D	E	F				
150	600	432	-	-	1	24	**NSYMUC156**	**NSYMUCH156**
	800	642			1	36	**NSYMUC158**	**NSYMUCH158**
200	600	432	-	-	1	24	**NSYMUC206**	**NSYMUCH206**
	800	642			1	36	**NSYMUC208**	**NSYMUCH208**
300	600	432	51.75	150	2	48	**NSYMUC306**	**NSYMUCH306**
	800	642			2	72	**NSYMUC308**	**NSYMUCH308**
400	600	432	76.75	200	2	48	**NSYMUC406**	**NSYMUCH406**
	800	642			2	72	**NSYMUC408**	**NSYMUCH408**
450	600	432	51.75	150	3	72	**NSYMUC456**	**NSYMUCH456**
	800	642			3	108	**NSYMUC458**	**NSYMUCH458**
600	600	432	76.75	200	3	72	**NSYMUC606**	**NSYMUCH606**
	800	642			3	108	**NSYMUC608**	**NSYMUCH608**

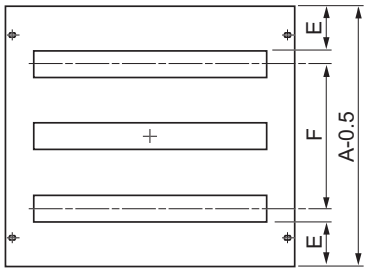
For ranges SF, SM



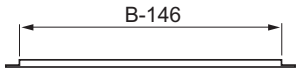
A = 150 and 200 mm



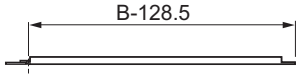
A = 300 and 400 mm



A = 450 and 600 mm



Screwed-on cover plate



Hinged cover plate

Power distribution
Modular distribution

For ranges SF, SM

Adjustment cover plates

- Metal adjustment cover plates designed to complete the front of the modular chassis according to the combinations made by modules of 150 or 200 mm.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

Supply: two adjustment cover plates and fixing elements.

Cover plate dimensions (mm)	Nominal dimensions (mm)	Reference
Height	Width	
50	600	**NSYADC16**
	800	**NSYADC18**

Blanking covers

- Blanking covers for cut-out cover plates.
- Each cover is made up of four strips of four modules each (1 module = 18 mm).
- Material: plastic.
- Finish: RAL-7035 grey.

Supply: 25 strips of 4 modules.

Reference
NSYATP72M

Power distribution
Modular distribution

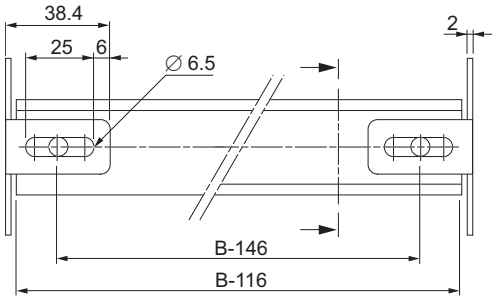
For ranges SF, SM

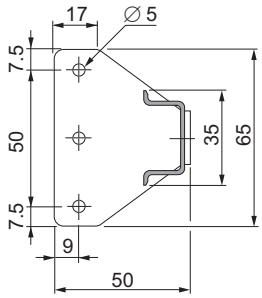
Set of fixed rail with supports

- Set made up of a galvanised symmetric DIN rail, 35 × 15 mm, and fixed mounting supports, for the installation of modular devices or not.
- Maximum number of 18-mm modules:
– Enclosure width 600 mm: 24 modules.
– Enclosure width 800 mm: 36 modules.
- Mounting by screws directly on the uprights of the chassis-coupling set.
- Material: zinc-coated steel.

Supply: one DIN rail, two fixed supports and fixing elements.

Nominal dimensions (mm) Width (B)	Reference
600	**NSYMFSC60**
800	**NSYMFSC80**





Fixed supports with no rail

Supply: two fixed supports and fixing elements.

Reference
NSYMFS1

7

Power distribution
Modular distribution

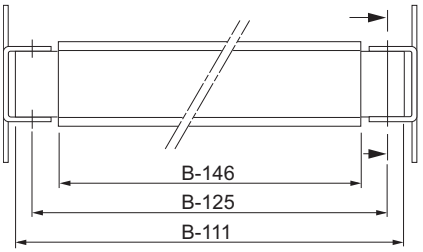
For ranges SF, SM

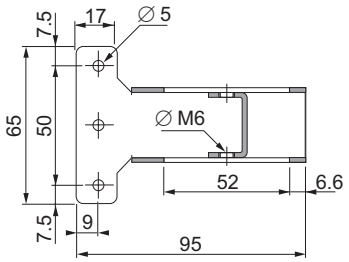
Set of depth-adjustable rail with supports

- Set made up of a galvanised symmetric DIN rail, 35 × 15 mm, and depth-adjustable mounting supports, for the installation of modular devices or not.
- Maximum number of 18-mm modules:
– Enclosure width 600 mm: 24 modules.
– Enclosure width 800 mm: 36 modules.
- Mounting by screws directly on the uprights of the modular chassis-coupling set.
- Material: zinc-coated steel.

Supply: one DIN rail, two adjustable supports and fixing elements.

Nominal dimensions (mm) Width (B)	Reference
600	**NSYMFSC60D**
800	**NSYMFSC80D**



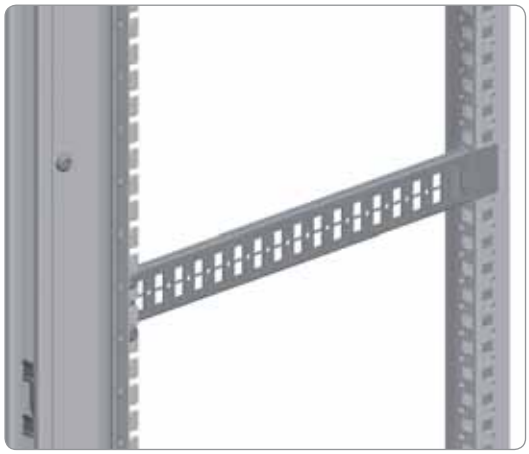


Adjustable supports with no rail

Supply: two adjustable supports and fixing elements.

Reference
NSYMFS1D

Power distribution
Modular distribution



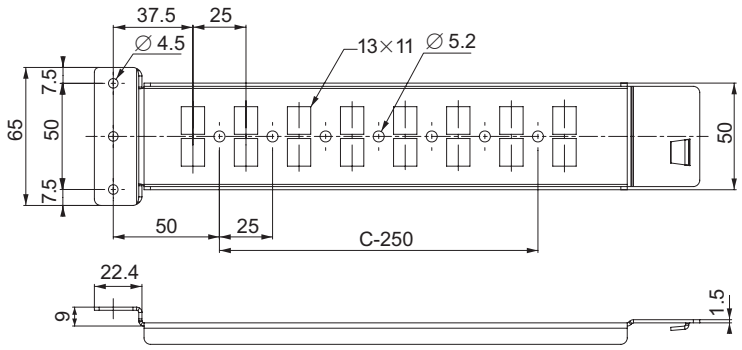
For ranges SF, SM

Reinforced plate supports

- Supports for fixing the partial mounting plate for small non-modular equipment or material-supporting cross rails for heavy equipment. See partial mounting plate, page **7/20**.
- Direct fixing by screws to the vertical uprights of the modular chassis-coupling set, and at the rear directly to the structure **(Spacial SF)** and on universal or quick-fixing cross rails (see page **7/36**) installed vertically in the back of the enclosure **(Spacial SM)**.
- Material: zinc-coated steel.

Supply: two supports and fixing elements.

Nominal dimensions (mm) Depth (C)	No. of cut-outs (∅ 5.2 mm)	Reference
300	3	**NSYMPS30**
400	7	**NSYMPS40**
500	11	**NSYMPS50**
600	15	**NSYMPS60**
800	23	**NSYMPS80**



7

Power distribution
Modular distribution

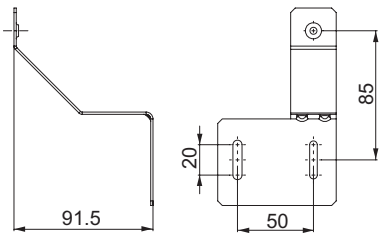
For ranges SF, SM

Cable duct fixing supports

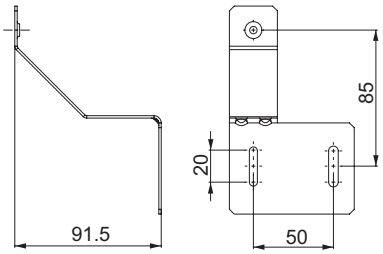
- Supports for fixing cable-distribution gutters in the modular distribution chassis.
- Allows the fixing of gutters in horizontal and vertical position on the same plane to facilitate cable distribution.
- Installation by screws directly on the rail supplied with the fixed or adjustable rail, page **7/81**.
- Material: zinc-coated steel.

Supply: six supports (three on the right and three on the left) and fixing elements.

Reference
NSYMCDFIX



Left support



Right support

Power distribution
Busbars and blocks

Side panels for the side busbar chamber

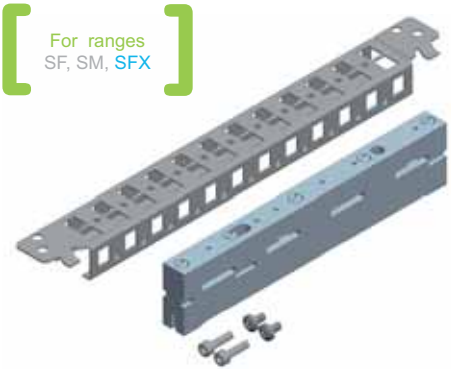
- Set of 2 side panels fixed to the outside.
- Captive screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL-7035 grey.

Supply: two side panels with external fixing and fixing elements.

Nominal dimensions (mm)		Reference
Height	Depth	
1800	400	**NSY2SP184**
	500	**NSY2SP185**
	600	**NSY2SP186**
2000	400	**NSY2SP204**
	500	**NSY2SP205**
	600	**NSY2SP206**
	800	**NSY2SP208**
2200	600	**NSY2SP226**

Power distribution
Busbars and blocks

For ranges SF, SM, SFX

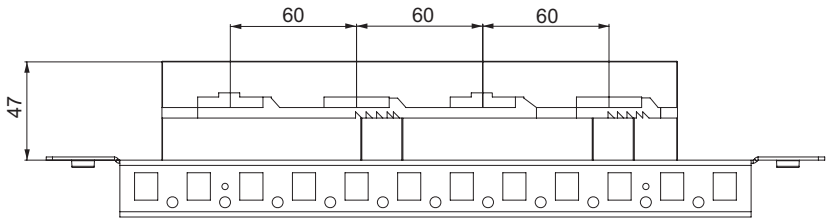


630 A bar support

- **Spacial SF:** support prepared for coupling directly to the structure of the enclosure.
- A universal cross rail needed to replace the 400 mm quick-fixing cross rail.
- **Spacial SM:** installation by means of a vertical adaptation profile and 40-mm universal cross rails (1 row).
- Maximum nominal rating 630 A.
- Determine according to the enclosed table the cross-section of the bars and the distance between supports, according to the nominal and short-circuit current respectively.

Supply: one 630 A bar support, one 40-mm quick-fixing cross rail and fixing elements.

Nominal dimensions (mm)	Reference
Width/Depth	
400	**NSYBS400**
500	**NSYBS500**
600	**NSYBS600**
800	**NSYBS800**



Nominal rating IP55 NR (A)	No. of bars per phase	Bar cross-section (mm)	Bar cross-section (mm^2)	Maximum distance between bar supports according to the short-circuit current (mm)							Neutral (mm)	Earth (mm)
				Icc kA								
				12	23	30	39	52	66	69		
200	1	12 × 5	60	525	525	525	400	250	-	-	-	-
250	1	12 × 5	75	575	575	575	450	325	-	-	-	-
320	1	20 × 5	100	600	600	600	475	350	150	-	12 × 5-10	-
390	1	25 × 5	125	600	600	600	475	350	150	-	12 × 5-10	6 × 3
440	1	30 × 5	150	650	650	650	650	525	400	350	20 × 5-10	10 × 3
500	1	20 × 10	200	675	675	675	525	350	150	-	25 × 5-10	10 × 6
600	1	30 × 10	300	675	675	675	600	475	325	275	30 × 5-10	10 × 6

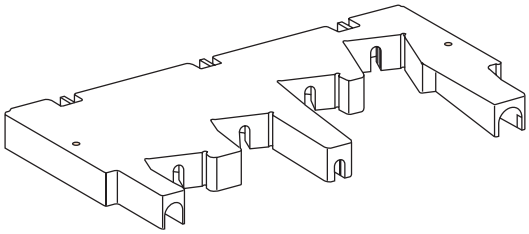
630 A busbar end cover

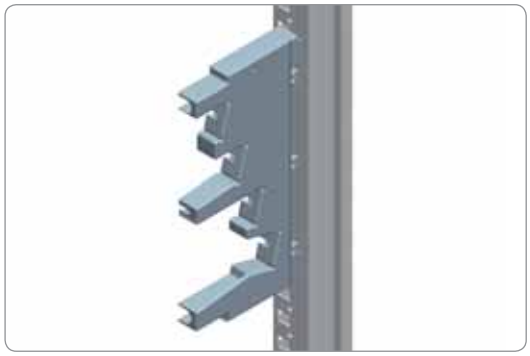
- Busbar end protection.
- Direct installation on the actual bar support (insulator).

Supply: two 630 A bar support plates and fixing elements.

Reference
NSYBSC630

Power distribution
Busbars and blocks





630 A multi-stage bar support

- Support for fixing bars with cross-sections:
  – 15 × 5.
  – 20 × 5.
  – 32 × 5.
  – 32 × 8.
- The orientation of the copper bars makes tightening easier and allows better circulation of the cables.
- It can be 3-pole or 4-pole, with gauges from 160 to 630 A.
- Mounting on mounting plates (see page **7/10**) or cross-rails (see page **7/36**).
- Electrical characteristics:
  – Rated peak withstand current Ipk (kÂ):
    • 30 kÂ for 160 A busbar.
    • 40 kÂ for 250 A busbar.
    • 55 kÂ for 400 A and 630 A busbar.
  – Rated insulation voltage Ui = 750 V.
- Material: insulating plastic.

Supply: 1 multi-stage bar support and fixing elements.

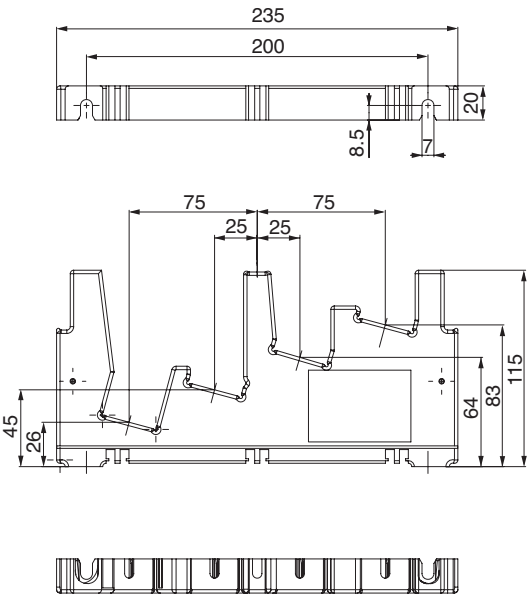
- M6 × 25 self-tapping screws are required for fixing on the cross-rails, not included.

Reference
04192

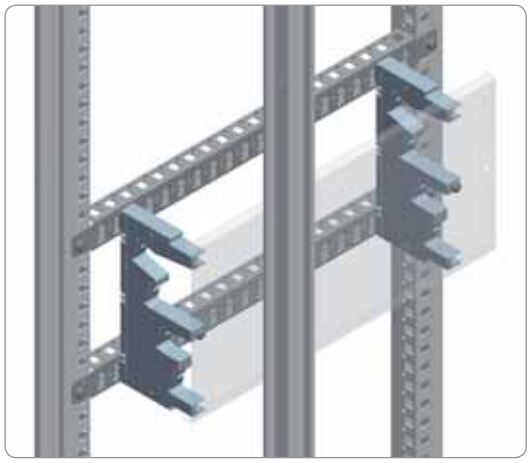
- The following table shows:
  – The cross-section of the bars that will be used according to the current-carrying capacity in the busbar.
  – The distance between the bar supports that will be installed according to the rated short-time withstand current: Icw.

Amperage (A)	Bar cross-section (mm)	Centre-to-centre distance of the supports (mm)				
		Icw (kA eff/1 s)				
		10	13	15	20	25
160	15 × 5	450			300	300 (1)
250	20 × 5					
400	32 × 5					
630	32 × 8					

(1) Icw (kA eff/0.6 s).



Power distribution
Busbars and blocks



Screen for 630 A multi-stage busbar

- Protects against direct contact from the front in the connections of the busbar.
- Direct mounting on the actual support.
- Length: 1500 mm.

Supply: 1 screen for multi-stage busbar and fixing elements.

Reference
04197

160 A / 630 A four-pole multi-stage distribution block

- The orientation of the copper bars makes tightening easier and allows better circulation of the cables.
- The copper bars are supplied with:

– 13 holes for M6, for the outlets.
– 4 holes with ∅ 12.2 for supplying the distribution block.

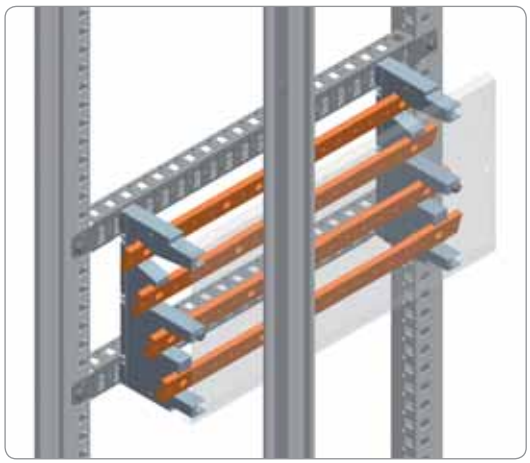
- It can be 3-pole or 4-pole, with gauges from 160 to 630 A.
- Installation:

– Mounting plates (see page **7/10**) or cross-rails (see page **7/37**).

- Electrical characteristics:

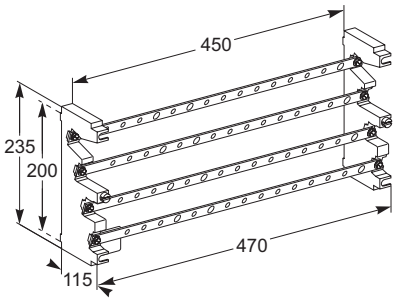
– Rated operating current (40 °C):
  • 160 A.
  • 250 A.
  • 400 A.
  • 630 A.
– Rated insulation voltage Ui = 750 V.
– Rated short-time withstand current = Icw:
  • 10 kA eff/1 s for 160 A distribution block.
  • 13 kA eff/1 s for 250 A distribution block.
  • 20 kA eff/1 s for 400 A distribution block.
  • 25 kA eff/1 s for 630 A distribution block.
– Rated peak withstand current = Ipk:
  • 30 kÂ for 160 A distribution block.
  • 30 kÂ for 250 A distribution block.
  • 40 kÂ for 400 A distribution block.
  • 40 kÂ for 630 A distribution block.
– Rated impulse withstand voltage: Uimp = 8 kV.

- Distribution: 13 outlets for phase with max. 50 mm².



Supply: 2 multi-stage bar supports, 4 cut-out copper bars with a pitch of 25 mm and 1 IPxxB insulating front cover.

- M6 × 25 self-tapping screws are required for fixing on the cross-rails, not included.



Model	Bar cross-section (mm)	Reference
160 A (40 °C)	15 × 5	**04052**
250 A (40 °C)	20 × 5	**04053**
400 A (40 °C)	32 × 5	**04054**
630 A (40 °C)	32 × 8	**04055**

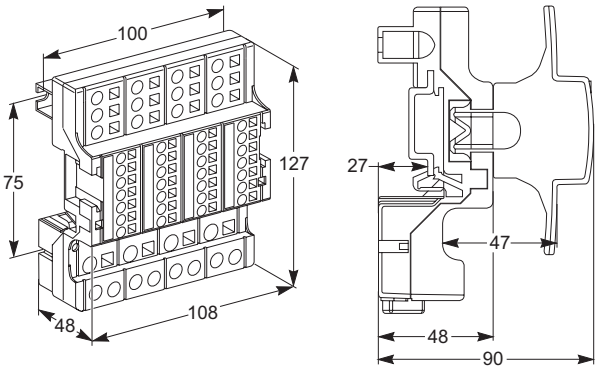
Power distribution
Busbars and blocks

Distribloc distribution block

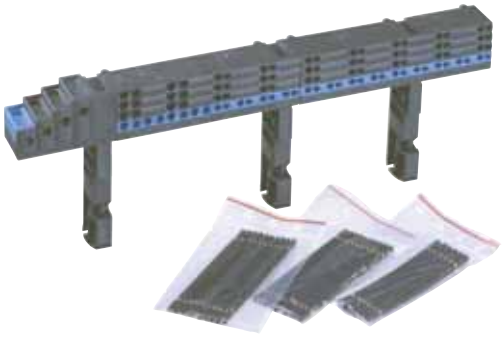
- 4-pole distribution block.
- The outlets are connected by the front, on spring terminals. The pressure of this spring is adapted automatically to the cross-section of the conductor. It is independent from the operator.
- Degree of protection: IPxxB (protection against direct contacts).
- Installation:
  – Clips onto DIN rails (see page **7/50**) and/or mounting plates (see page **7/10**).
- Electrical characteristics:
  – Rated operating current (40 °C):
    • 125 A for Distribloc 125.
    • 160 A for Distribloc 160.
  – Resistance to short-circuit currents: the interrupting capacity reinforced by filiation is conserved in the case of automatic switch associations.
  – According to low-voltage switchgear standards UNE-EN 60947-7-1 and/or UNE-EN 60439-1.
  – Rated impulse withstand voltage: Uimp = 8 kV.
- Power supply:
  – 125 A Distribloc: screw terminal for flexible cables from 6 to 35 mm^2 (rigid from 10 to 35 mm^2).
  – 160 A Distribloc: by prefabricated flexible connection, supplied.
- Distribution (for 125 A and 160 A Distribloc):
  – On spring terminals:
    • 2 outlets connected by flexible cables from 1 to 10 mm^2.
    • 3 outlets connected by flexible cables from 1 to 6 mm^2.
    • 7 outlets connected by flexible cables from 1 to 4 mm^2.
  – On screw terminals:
    • 1 outlet connected by flexible cables from 4 to 16 mm^2 (rigid from 4 to 25 mm^2).

Supply: single-piece distribution block, 1 IPxxB modular insulating screen and self-adhesive labels for identifying the phases. Prefabricated flexible connection in Distribloc 160.

Model	Reference
125 A distribution block	**04045**
160 A distribution block (with 4 flexible connectors)	**04046**



Power distribution
Busbars and blocks



Multiclip distribution block

- Distribution in a full row (48 steps) of modular switchgear. Generally supplied on a busbar.
- The outlets are connected by the front, without screws on the spring terminals. The contact pressure of the cable is independent from the operator.
- It adapts automatically to the cross-section of the conductor (min. cross-section 1 mm^2).
- Each spring only accepts one flexible cable at a time.
- Degree of protection: IPxxB (protection against direct contacts).
- Installation: clipped onto the rear of a modular rail, for example Ref. 03004, or screwed on mounting plates (see page **7/10**).
- Electrical characteristics:

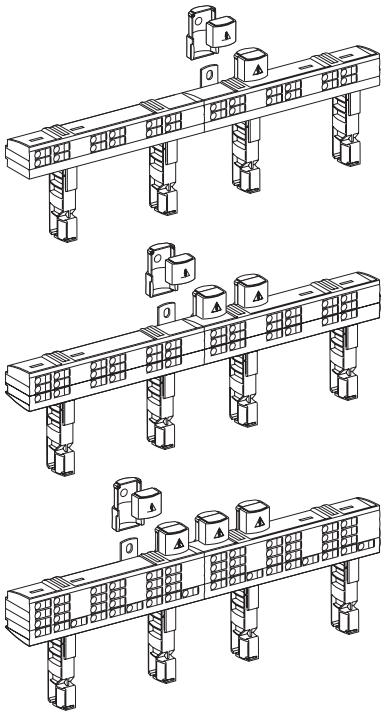
– Rated insulation voltage: Ui = 750 V.
– Rated impulse withstand voltage: Uimp = 8 kV.
– Resistance to short-circuit currents: the interrupting capacity reinforced by filiation is conserved in the case of automatic switch associations.
– 200 A Multiclip:
  • 10 mm^2 cable outlet: Imax = 50 A.
  • 2 different outlets with cables of 10 mm^2: Imax = 63 A.

- Distribution:

– For 2-pole 200 A Multiclip (04012):
  • 12 phase and neutral connection points.
– For 3-pole and 4-pole 200 A Multiclip (04013 and 04014):
  • 12 connection points for each phase.
  • 18 connection points for the neutral.

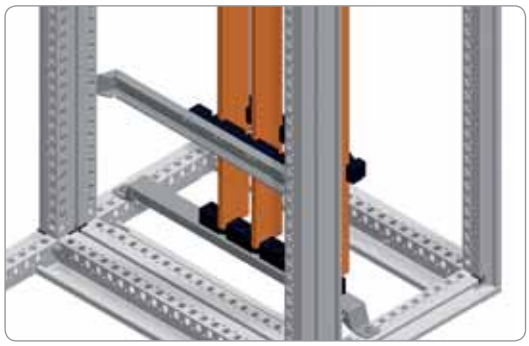
Supply: Multiclip distribution block, 10 mm^2 bared copper connections with a length of 100 mm, 2 bags of 12 connections, terminal covers for the supply poles (IPxxB), screws for the supply poles and fixing elements.

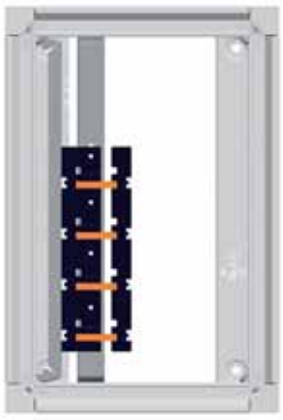
Model	Reference
200 A 2-pole	**04012**
200 A 3-pole	**04013**
200 A 4-pole	**04014**



Power distribution
Busbar support accessories

For ranges SF





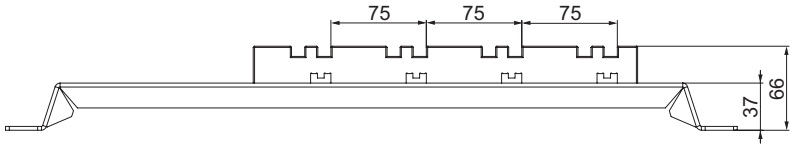
Vertical bar support up to 3200 A

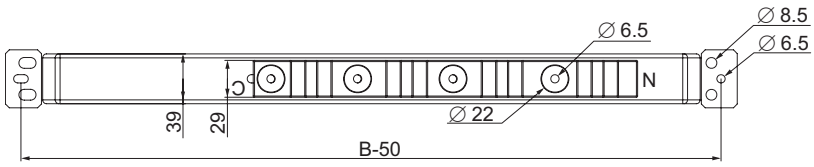
- Support prepared for fixing bars in vertical position, mounted directly on the structure of the enclosure. Adjustable height with a pitch of 25 mm.
- Maximum nominal rating:
  – 1600 A for 5-mm bars.
  – 3200 A for 10-mm bars.
- The number and the distance between supports, according to the nominal current and the short-circuit current, are stated in the enclosed table.

Supply: two insulating bar supports, one metal vertical support and fixing elements.

Nominal dimensions (mm) Width/Depth (B)	Reference
400	**NSYBVS400**
500	**NSYBVS500**
600	**NSYBVS600**
800	**NSYBVS800**

- The number and the distance between supports, according to the nominal current and the short-circuit current, are stated in the enclosed table.





Sets of vertical bars			Maximum distance between bar supports (mm) according to the short-circuit current, Icc (kA)								
Nominal rating In (A)	Cross-section (mm)	No. of bars per phase	Icc (kA)								
			15	25	30	40	50	60	65	75	85
750	60 × 5	1	650	325	325	217	-	-	-	-	-
900	80 × 5	1	650	325	325	217	-	-	-	-	-
1250	60 × 5	2	650	325	325	217	163	-	-	-	-
1600	80 × 5	2	650	325	325	217	217	-	-	-	-
1080	50 × 10	1	650	650	650	325	217	217	-	-	-
1250	60 × 10	1	650	650	650	325	325	217	-	-	-
1600	80 × 10	1	650	650	650	325	325	217	-	-	-
1850	50 × 10	2	650	650	325	325	325	217	217	217	-
2000	60 × 10	2	650	650	650	325	325	325	217	217	-
2500	80 × 10	2	650	650	650	325	325	325	325	217	-
2800	100 × 10	2	650	650	650	650	325	325	325	217	163

Note: The current-carrying capacity values in the set of bars are given for an ambient temperature of 35 °C around the busbar.
The nominal rating values are indicated for IP55. The maximum values (3200 A) are achieved with ambient temperatures of less than 35 °C, varying according to the configuration and position of the busbar.
See enclosed table of current-carrying capacities according to temperature, page **7/95**.

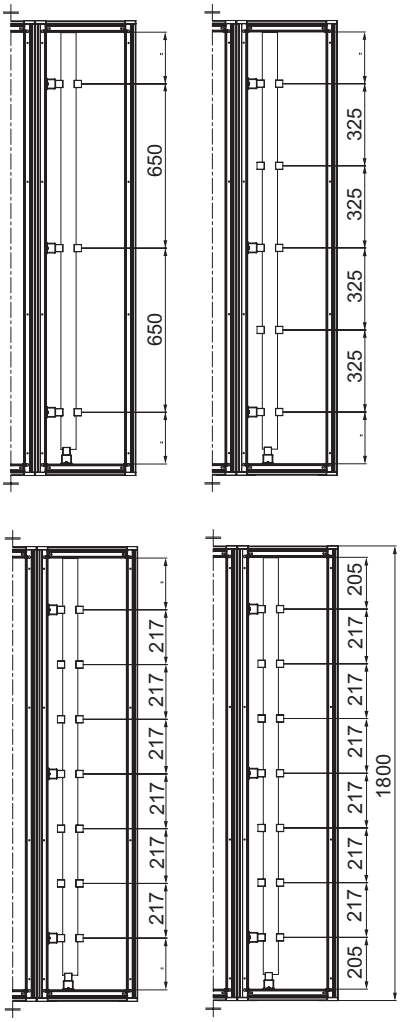
Power distribution
Busbar support accessories

Selection of the number of supports

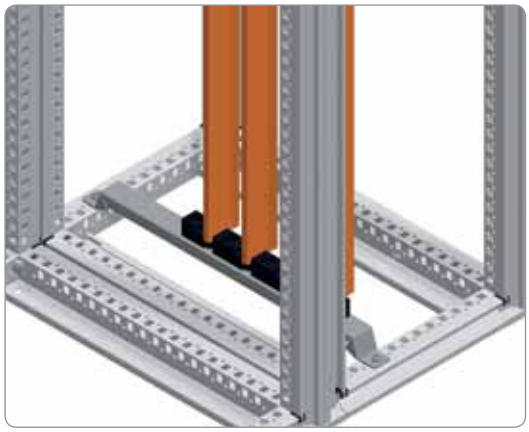
- The number and cross-section of the bars are chosen for each phase, according to the nominal rating.
- Determine the short-circuit current Icc (kA) and use the table to obtain the maximum distance between supports.
- Based on the maximum distance between supports, obtain the number of supports to be installed according to the following criterion:

– Three vertical supports must necessarily be fixed to the structure (ref. **NSYBVS**...).
– If more than three supports are required, the support arms must be used (ref. **NSYBSA**), in even numbers (2, 4, etc.).

- Example:
  In: 2000 A, two 60 × 10 bars are required per phase.
  Icc: 50 kA.
  According to the table of maximum distance between supports they must be 325 mm.
  Length of the copper bars: 1800 mm.
  1700/325 = 5.23, which means 6 supports, 3 fixed vertical supports and 3 support arms + 1 extra support for the number to be even.



Power distribution
Busbar support accessories



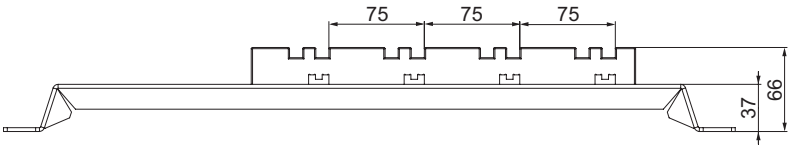
For ranges SF

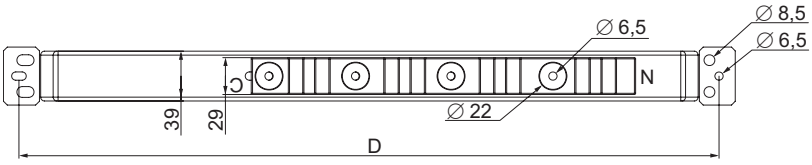
Setting support

- Bottom support for bars in vertical position.
- It is fixed to the bottom frame of the enclosure.
- It is required for supporting the bars.
- It is not considered a bar support when calculating the number of supports.

Supply: one insulating bar support, one metal vertical support and fixing elements.

Nominal dimensions (mm) Width/Depth	Reference
400	**NSYAS400**
500	**NSYAS500**
600	**NSYAS600**
800	**NSYAS800**

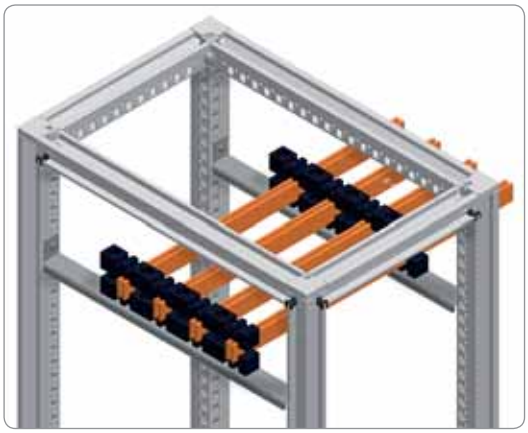




7

Power distribution
Busbar support accessories

For ranges SF, SFX

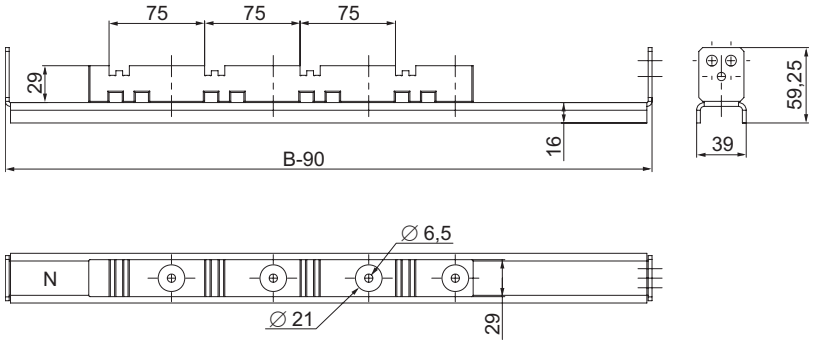


Horizontal bar support up to 3200 A

- Support prepared for fixing bars in horizontal position.
- Direct mounting to the structure of the enclosure, on the vertical uprights, at any height, adjustable with a pitch of 25 mm.
- Maximum nominal rating:
  – 1600 A for 5-mm bars.
  – 3200 A for 10-mm bars.
- The number and the distance between supports, according to the nominal and short-circuit current, are stated in the enclosed table.

Supply: two insulating bar supports, one metal horizontal support and fixing elements.

Nominal dimensions (mm) Width/Depth (B)	Reference
500	**NSYBHS500**
600	**NSYBHS600**
800	**NSYBHS800**



Sets of vertical bars			Maximum distance between bar supports (mm) according to the short-circuit current Icc (kA)								
Nominal rating In (A)	Cross-section (mm)	No. of bars per phase	15	25	30	40	50	60	65	75	85
750	60 × 5	1	650	325	325	217	-	-	-	-	-
900	80 × 5	1	650	325	325	217	-	-	-	-	-
1250	60 × 5	2	650	325	325	217	163	163	130	108	81
1600	80 × 5	2	650	325	325	217	217	163	130	108	81
1080	50 × 10	1	650	650	650	325	217	217	163	-	-
1250	60 × 10	1	650	650	650	325	325	217	163	130	108
1600	80 × 10	1	650	650	650	325	325	217	163	130	108
1850	50 × 10	2	650	650	325	325	325	217	217	217	163
2000	60 × 10	2	650	650	650	325	325	325	217	217	163
2500	80 × 10	2	650	650	650	325	325	325	325	217	163
2800	100 × 10	2	650	650	650	650	325	325	325	217	163

Note: The current-carrying capacity values in the set of bars are given for an ambient temperature of 35 °C around the busbar.
The nominal rating values are indicated for IP55. The maximum values (3200 A) are achieved with ambient temperatures of less than 35 °C, varying according to the configuration and position of the busbar.
See enclosed table of current-carrying capacities according to temperature, page **7/95**.

Power distribution
Busbar support accessories

For ranges SF, SFX

Selection of the number of supports

- The number and cross-section of the bars are chosen for each phase, according to the nominal rating.
- Determine the short-circuit current Icc (kA) and use the table to obtain the maximum distance between supports.
- Based on the maximum distance between supports, obtain the number of supports to be installed according to the following criterion:

– Two supports must necessarily be fixed to the structure per enclosure. In the event of enclosure suites, only one support is required, fixed to one of the uprights of the coupling.

– If more than two supports are required per enclosure, the support arms must be used (ref. **NSYBSA**).

Table of current-carrying capacities according to temperature

Type of bars		Current-carrying capacity (A) according to the ambient temperature around the frame				
Cross-section (mm)	No. of bars per phase	25 °C	30 °C	35 °C	40 °C	45 °C
60 × 5	1	840	790	750	700	650
80 × 5	1	1050	990	900	870	810
60 × 5	2	1420	1350	1250	1180	1090
80 × 5	2	1820	1720	1600	1510	1390
50 × 10	1	1220	1160	1080	1010	940
60 × 10	1	1400	1320	1250	1160	1070
80 × 10	1	1800	1700	1600	1500	1390
50 × 10	2	2090	1980	1850	1740	1610
60 × 10	2	2270	2140	2000	1870	1720
80 × 10	2	2820	2660	2500	2330	2160
100 × 10	2	3200	3100	2800	2720	2510

Note: The rating values according to temperature are not exhaustive, since they depend on the configuration and position of the bars inside the enclosure.

Bar support arm

- Support without fixing to the enclosure, required to guarantee the distance between the bars.
- It is used on bars in both vertical and horizontal position.
- To choose the number of supports, see the tables of maximum distances between supports, pages **7/86**, **7/91** and **7/94**.

Supply: two insulating bar supports and fixing elements.

Reference
NSYBSA

Power distribution
Distribution blocks

Sigma safety terminals

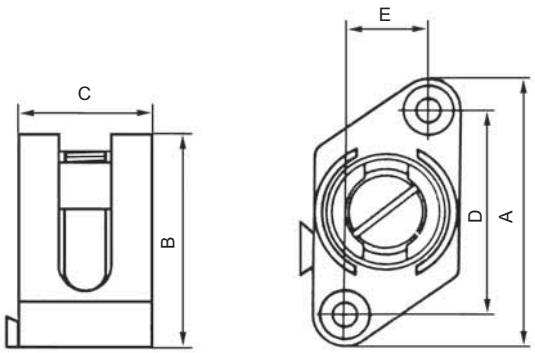
Safety terminals made from self-extinguishing Polyamide-6, with matt black base, **MS-58** brass terminal (DIN 17660), tempered, zinc-plated and dichromated steel ring, and cover made from orange-coloured self-extinguishing polypropylene.

- Anti-shearing: the connection is made by means of a tightening mechanism, which distributes the pressure across the entire contact surface, avoiding friction and occasional stress that can damage the conductors.
- Unloosenable: the ring that surrounds the brass body guarantees that the pressure exerted by the actual conductors cannot open the terminal and loosen the connection.
- Full insulation: all the SIGMA "S" terminals are supplied with a terminal-covering cap, avoiding any accidental contact with live parts.

All the gauges can be coupled together, forming strips of any length. Operating voltage: 500 V.

Section (mm^2)	A	B	C	D	E	Supply	Reference
1 × 4	30	20	13	21	4	20	**NSYS04**
1 × 6	33	25	16	24	7	20	**NSYS06**
1 × 10	38	28	16	28	6	20	**NSYS10**
1 × 16	42	32	19	32	9	20	**NSYS16**
1 × 35	46	38	23	34	11	20	**NSYS2535**
1 × 50	52	45	27	40	15	20	**NSYSDT5**
1 × 70	55	50	30	40	15	20	**NSYS70**
1 × 100	58	54	33	40	20	10	**NSYS95100**

Note: Each terminal accepts up to 2 conductors with the specified section.



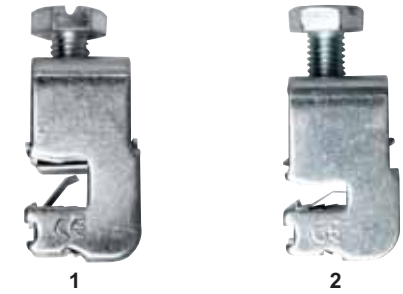
Power distribution
Distribution blocks

Bimetal terminals

Terminals specially designed for the junction of cables on plates, their main application is in busbar connections.
The bimetal terminals are made from a copper alloy, hot-stamped and tin plated, suitable for connecting a copper or aluminium conductor indistinctly (bimetal).

Supply: 4 bimetal terminals.

Main section (mm^2)	Junction section (mm^2)	Reference
6-50	-	**NSYBBH29**
6-50	-	**NSYBBH29C**
10-95	-	**NSYBBH30**
16-150	-	**NSYBBH31**
50-240	-	**NSYBBH32**
6-50	6-50	**NSYBBH29D**
6-50	6-50	**NSYBBH29DC**
10-95	10-95	**NSYBBH30D**
25-150	16-150	**NSYBBH31D**
95-240	5-240	**NSYBBH32D**
6-50	-	**NSYBBH29P**
6-50	-	**NSYBBH29PC**
6-50	6-50	**NSYBBH29DP**
6-50	6-50	**NSYBBH29DPC**

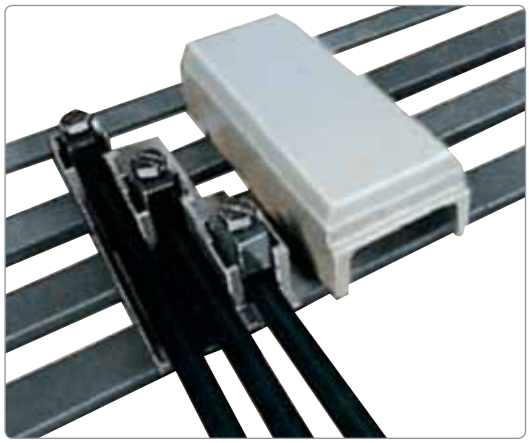


Plate/cable terminals

Entry by plate and junction by cable, plate or terminal.

Supply: 1 junction terminal.

Junction cable-section (mm^2)	Plate thick-ness (mm)	Fig.	Reference
1.5 to 16	5	2	**NSYBPCH516**
1.5 to 50	5	2	**NSYBPCH550**
16 to 120	5	2	**NSYBPCH5120**
1.5 to 16	10	1	**NSYBPCH1016**
1.5 to 50	10	1	**NSYBPCH1050**
16 to 120	10	1	**NSYBPCH10120**



Three-pole junction terminals

Entry by plate and junction by cable (for busbars).

Supply: 1 junction terminal.

Entry plate width (mm)	Entry plate thickness (mm)	Junction cable section (mm^2)	Reference
12/15/20/25/30	5 to 10	35 to 120	**NSYBTE630TBT**

Power distribution
Distribution blocks

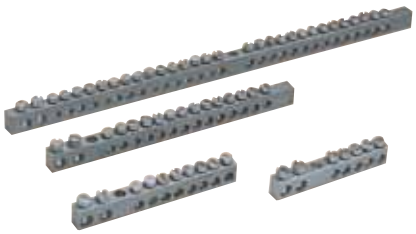


Fig. 1

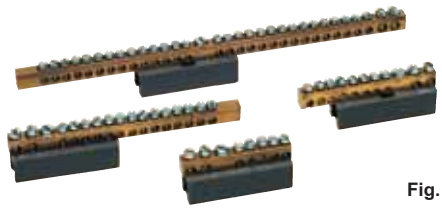


Fig. 2

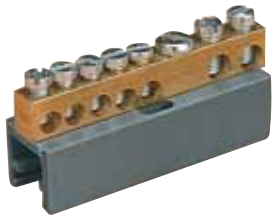


Fig. 2

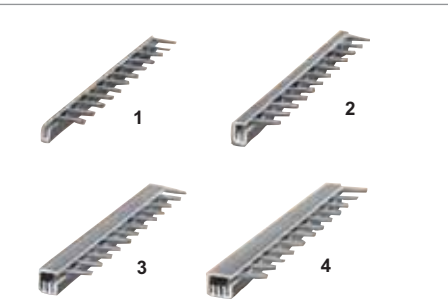
Earthing strips

For the junction of neutral and earth cables.

- Models **NSYRBL** (Fig. 1) for installation in boxes with insulating rear or by means of insulators, not supplied.
- Models **NSYRBLZ** (Fig. 2) with insulating plinth for fitting under pressure on 12 × 2-mm rail.

Supply: 10 earthing strips

Number of terminals × section mm²	Fig.	Reference
2 × 16 mm² + 5 × 6 mm²	2	**NSYRBL21656M**
2 × 16 mm² + 8 × 6 mm²	2	**NSYRBL21686M**
2 × 16 mm² + 14 × 6 mm²	2	**NSYRBL216146M**
2 × 16 mm² + 29 × 6 mm²	2	**NSYRBL216296M**
2 × 16 mm² + 5 × 6 mm²	1	**NSYRBLZ21656**
2 × 16 mm² + 8 × 6 mm²	1	**NSYRBLZ21686**
2 × 16 mm² + 14 × 6 mm²	1	**NSYRBLZ216146**
2 × 16 mm² + 29 × 6 mm²	1	**NSYRBLZ216296**



Distribution boards

For distribution in a single row of circuit breakers with a total of 12 modules.

Supply: 10 distribution boards.

N.° of bars	N.° of poles per bar	Fig. n.°	Reference
1	12	1	**NSYBDS112**
2	6	2	**NSYBDS26**
3	4	3	**NSYBDS34**
4	3	4	**NSYBDS43**

Accessories

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FL21-type membranes 7/105

IP 65 connector free cable entries system 7/106

Cable entries system with connectors 7/109

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Plastic cable support 7/115

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Corrugated cable-gland tube and fixing support 7/118

Cable-gland for body/door 7/119

Cable-duct and cover 7/120

Cable-duct support 7/121

Plastic foot for cable-duct support 7/122

Label frame 7/122

Insulated-head screw 7/122

Lyre-shaped clamps 7/123

Steel wired cable tray 7/123

Cable management

Minimum size and a high assembly:

Choice

Multiple solutions that can be combined on a single cable-entry plate (machining possible at the plant) or directly on the enclosure. See our customised offer.

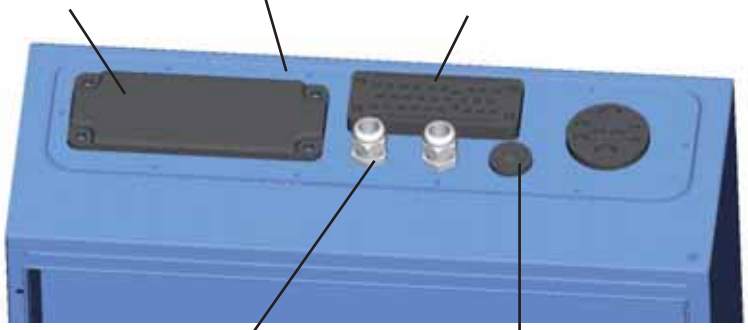
- IP 67 ISO cable-glands: for quick installation without tools.
- IP 67 cable-glands.
- IP 65 membranes for quick cable entries with FL21-type cut-out.
- IP 65 plate for quick cable entries with the following types of cut-outs: Harting or circular M50 and M63.
- IP 65 plate for cable entries equipped with Harting-type cut-outs and connectors.

Saves time:
IP 65 membranes for quick cable entries with FL21-type cut-out.

Service:
Direct machining of the cut-out on the body of the enclosure.

Development of the installation:
IP 65 plate for quick cable entries with the following types of cut-outs: Harting or circular M50 and M63.

Smart:
IP 54 plate for cable entries equipped with Harting-type cut-out connectors.



Practical:
IP 67 cable-glands.

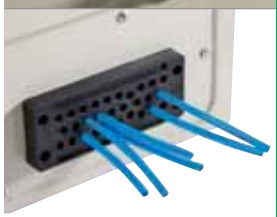
Simple:
IP 67 ISO cable-glands: for quick installation without tools.

Example of installation on cable-entry plate.

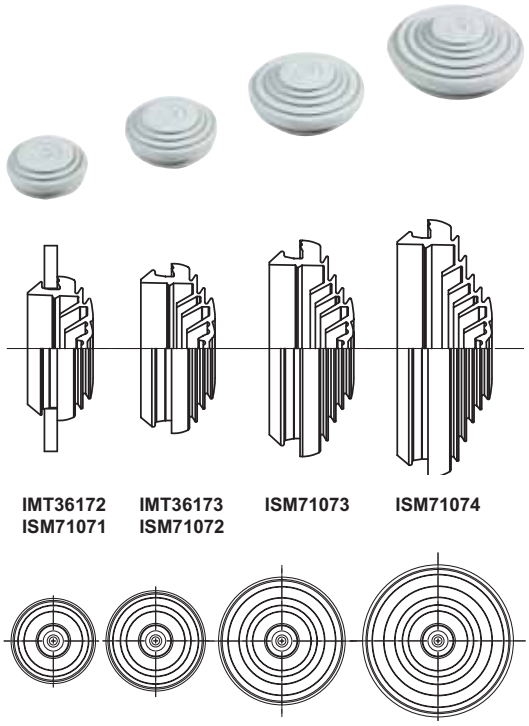
Specific

Machining of your plate before painting, with our specific service.

Cable management
Cable entries

	Description	Diameter	Details	See also the accessories
	Stepped mixed end pieces for IP 55 direct cable entries.	For cables Diameter 23 Diameter 29 Diameter 36 Diameter 44	Page **7/103**	Door cable-guide cross-rail Page **7/115**
	IP 67 quick cable entries	M12 M16 M20 M25 M32 M40 M50	Page **7/103**	Adjustable cable tie Page **7/116**
	ISO cable-gland	M12 M16 M20 M25 M32 M40	Page **7/104**	Self-adhesive support bases Page **7/117**
	IP 65 membranes	For cables with diameters from 8 to 60 mm	Page **7/105**	Fixing lugs for the earthing strip Page **7/29**
	IP 65 circular cable entries Entries from 3 mm to 14 mm	2 sizes: M50 and M63	Page **7/106**	Plastic cable tie fixing support Page **7/116**
	IP 65 cable entries without connectors. Entries from 3 mm to 6.5 mm	Dimensions 112× 36	Page **7/106**	Covered cable ducts Page **7/120**
	Plates for cable entries with IP 54 connectors	91 × 36 112 × 36	Page **7/109**	Duct support Page **7/121**

Cable management
Cable entries



Mixed membrane entries for IP 55 direct cable entries

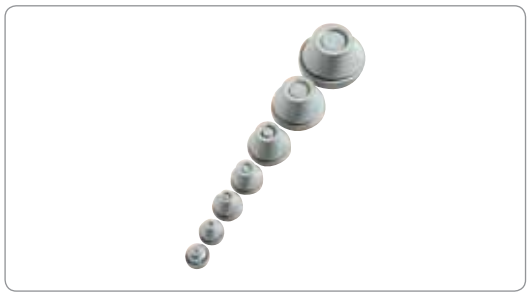
Common accessories for the Thalassa and Spacial offers

- Membrane entries with multiple membranes.
- IP 55.
- RAL 7035.
- Patented concentric cutting. A simple screwdriver is enough. Enables ultra-quick connection with the choice of several cable diameters for the same membrane entry.
- Material: SBS.
- Minor packaging of 10 pieces.
- Warning: The IP becomes 55.
- Suitable for walls from 2 to 3.2 mm.

Ø (mm)		Minor pack.	References and colours	
Drill hole	Cable / conduit		RAL 9010 white	RAL 7035 light grey
23	4 - 20	10	**IMT36172**	**ISM71071**
29	4 - 25	10	**IMT36173**	**ISM71072**
36	4 - 32	10	-	**ISM71073**
44	4 - 40	10	-	**ISM71074**

Installation of IP 55 entries

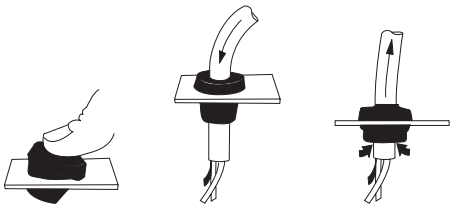
- Insertion of rigid cables:
– Strip at least 100 mm.
– Push the wires through the membrane.
- Insertion of flexible cables:
- Pierce partially and soften the membrane with a 4 to 5.5-mm screwdriver.
– Pass the cable through the membrane.
- Insertion of conduits:
– Peel the necessary step: 16, 20, 25, 32 or 40 mm.
– Push the conduit.



IP 67 quick cable entries

- IP 67.
- Material: EPDM plastic.
- Suitable for walls from 1 to 4 mm (0.5 to 2 mm for ref. **IMT36179**).
- Quick installation with no tools.
- Installation direction: the conical part is inside the box.

ISO	Ø of drill hole	Cable Ø (mm)	Minor pack.	Reference
M12	12.5	3 - 5	50	**IMT36179**
M16	16	5 - 7	50	**IMT36180**
M20	20.3	7 - 10	50	**IMT36181**
M25	25.3	10 - 14	50	**IMT36182**
M32	32.4	14 - 20	50	**IMT36183**
M40	40.7	20 - 26	25	**IMT36184**
M50	50.7	26 - 35	25	**IMT36185**



Application

- Push the cable entry into the hole. The conical part must be inserted into the box.
- Prepare and loosen the cable entry with a screwdriver. Pass the cable through the cable entry.
- Pull the cable back slightly to fix it in place. The installation is complete.

Cable management
Cable entries

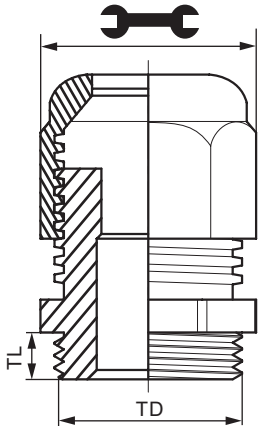
Cable-gland, disc and plug selection table

Ø	1-cable cable gland			Multi-cable disc		Gasket	Blanking plug	Transport plug
	Ref.	Ø min / max (mm)	drill \ (2)	Ref.	Number / Ø (mm)			
M12	**ISM71501**	3 / 6.5	12.2 (0 + 0.2)	-	-	**IMT36151**	**IMT36161**	-
M16	**ISM71502**	4 / 8	16.2 (0 + 0.2)	**IMT36157**	2 × Ø 4	**IMT36152**	**IMT36162**	**IMT36167**
M20	**ISM71503**	6 / 12	20.2 (0 + 0.2)	**IMT36158**	3 × Ø 4	**IMT36153**	**IMT36163**	**IMT36168**
M20 (1)	**IMT36150**	6 / 12	20.2 (0 + 0.2)	**IMT36158**	3 × Ø 4	**IMT36153**	**IMT36163**	**IMT36168**
M25	**ISM71504**	11 / 17	25.2 (0 + 0.2)	**IMT36159**	4 × Ø 5	**IMT36154**	**IMT36164**	**IMT36169**
M32	**ISM71505**	15 / 21	32.2 (0 + 0.3)	**IMT36160**	6 × Ø 5	**IMT36155**	**IMT36165**	**IMT36170**
M40	**ISM71506**	19 / 28	40.5 (0 + 0.3)	-	-	**IMT36156**	**IMT36166**	**IMT36171**

(1) Cable-gland with high resistance to fire.
(2) In brackets: tolerance.

ISO cable-gland

Ø	Reference	TD	TL		Thread
M12	**ISM71501**	12	6	15	1.5
M16	**ISM71502**	16	8	19	1.5
M20	**ISM71503 - IMT36150**	20	10	24	1.5
M25	**ISM71504**	25	8	29	1.5
M32	**ISM71505**	32	10	36	1.5
M40	**ISM71506**	40	10	46	1.5



- IP 68, 5 bars.
- According to standard IEC 62208.
- RAL 7035 grey.
- Material: PA6, neoprene gasket.
- Usage temperature: – 30 ... + 80 °C up to + 150 °C intermittently.
- The cable-glands are supplied with nuts.
- The IP is guaranteed with no gasket between the cable-gland and the thermoplastic box. A gasket available as an accessory guarantees the seal in the event of installation on a steel enclosure.
- The cable-gland (ref. **IMT36150**) is especially recommended for security circuits (glow wire resistance: 960 °C).
- Pack of 20 (M12 to M20), 10 (M25 and M32), 5 (M40).

Multi-cable disc

Cable-gland gasket

- Batch of 100 (M12 to M25), 50 (M32), 25 (M40).

Multi-cable disc

- It is possible to pass several cables through a single cable-gland using the multi-cable bushing.

Blanking plug

Blanking plug

- It is screwed into the cable-gland's place.
- Pack of 20 plugs (M12 to M15), 10 plugs (M32), 5 plugs (M40).

Transport plug

Transport plug

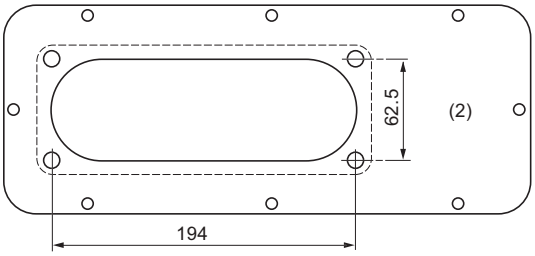
- It is installed to block the cable-gland during transport or during maintenance operations.
- Pack of 20 plugs (M16 to M25), pack of 10 (M32), pack of 5 (M40).

Cable management
Cable entries

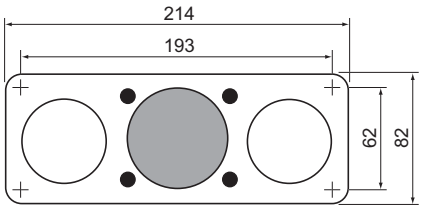
FL21-type membranes for IP 65 cable-entry plate

Number of cable entries	Diameter of the cable entry (∅ mm)										Reference
	5-7	6-10	8-12	8-16	10-14	12-18	14-20	17-32	20-26	24-54	30-60	
0												**NSYAECPFLBP**
7				4						2	1	**NSYAECPFLT7**
25	4		4		12		4		1			**NSYAECPFLT25**
35		2	14		16	2		1				**NSYAECPFLT35**

Sealed cable entries made from insulating material (fire resistance: V0 according to UL 94).
- Guarantees a degree of protection of IP 65.
- Dark grey colour.
- Installation on pre-cut plates or direct installation on the enclosures with our specific offer. Please consult us.
- 3 models: 7 to 35 cable entries.
- Cover for cut-out ref. **NSYAECPFLBP**.

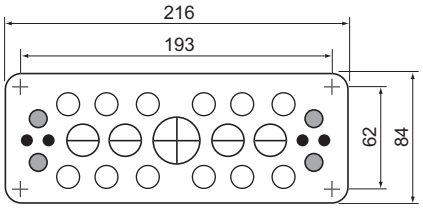


Features of the membranes



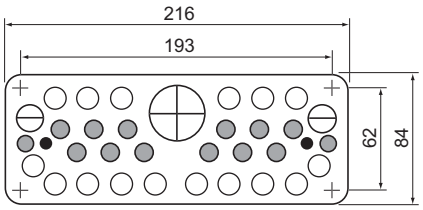
NSYAECPFLT7

Symbol	For cable ∅	No. of entries
●	8-16	4
○	24-54	2
◉	30-60	1



NSYAECPFLT25

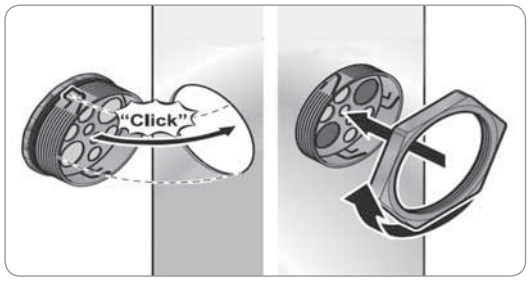
Symbol	For cable ∅	No. of entries
●	5-7	4
◉	8-12	4
○	10-14	12
⊖	14-20	4
⊕	20-26	1



NSYAECPFLT35

Symbol	For cable ∅	No. of entries
●	6-10	2
◉	8-12	14
○	10-14	16
⊖	12-18	2
⊕	17-32	1

Cable management
Cable entries



IP 65 connector-free cable entries: Two solutions to suit your application

Circular

Compact, flexible system for inserting cables in electrical enclosures or connection boxes, for example:

Specifications
- IP 65 tightness.
- Fire resistance: V0.
- Cut-outs ∅ 50 and 63 mm.
- Installation by nut, up to Spacial wall-mounting steel enclosure size 700 × 500 × 250 mm.
- 2 installation methods are possible for sizes larger than 700 × 500 × 250 mm: clipping or screwing (installation by screwing recommended).

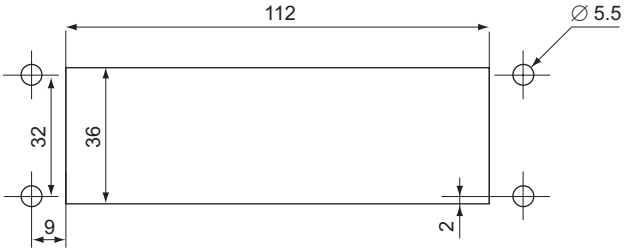
Composition: 10 units.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Rectangular

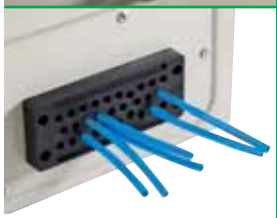
Compact, flexible system for inserting cables in electrical enclosures or connection boxes, for example:
- External dimensions: 146 × 14 × 58 mm.
- Drill-hole diameter: 112 × 36 mm.

Specifications
- IP 65 tightness.
- Fire resistance: V0.
- Identical cut-outs to the 24-point connectors.
- Installation by screwing, up to Spacial wall-mounting steel enclosure size 700 × 500 × 250 mm.
- 2 installation methods are possible for sizes larger than 700 × 500 × 250 mm: clipping or screwing (installation by screwing recommended).

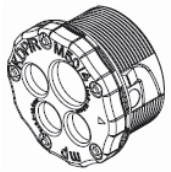
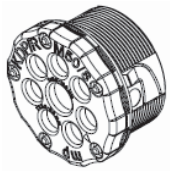
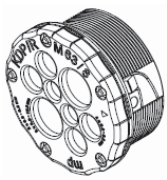
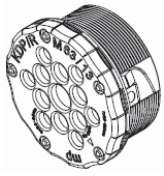


Cable management
Cable entries

Selection guide

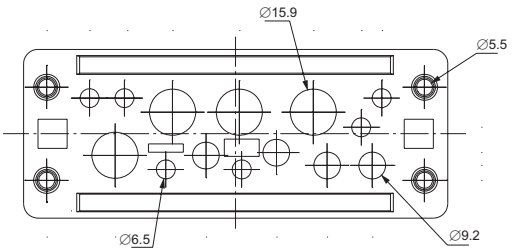
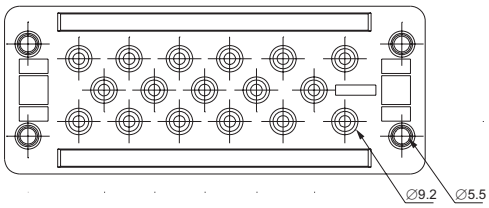
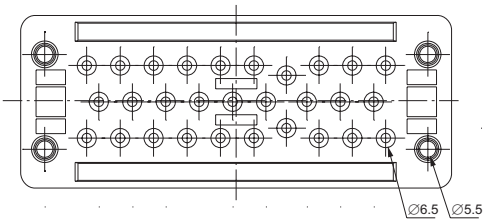
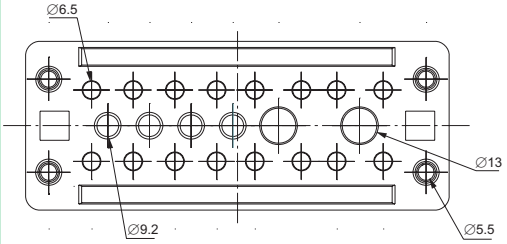
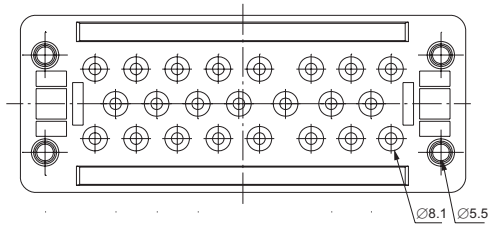
Type	No. of openings	Dimensions/ cut-out Ø	Diameter of the cable entry (∅ mm)								Reference
			3-5.5	4.3-8.1	3-6.5	3.6-6.5	5-9.2	6-10	8-12.5	9.6-15.9	
	4	50.5						3		1	**NSYTSAM504SE**
	8	50.5				7		1			**NSYTSAM508SE**
	8	63.5			2		4			2	**NSYTSAM638SE**
	13	63.5	6			6		1			**NSYTSAM6313SE**
	14	112 × 36			6		4				**NSYTSA2414SE**
	17	112 × 36					17			4	**NSYTSA2417SE**
	22	112 × 36			16		4		2		**NSYTSA2422SE**
	23	112 × 36		23							**NSYTSA2423SE**
	29	112 × 36			29						**NSYTSA2429SE**

Position of the holes on the circular cable entries with diameters 50 and 63 mm

Type	Hole diameter	Reference
	1 × ∅ 9.6 to 15.9 mm 3 × ∅ 6 to 10 mm	**NSYTSAM504SE**
	7 × ∅ 6 to 10 mm 1 × ∅ 6 to 10 mm	**NSYTSAM508SE**
	2 × ∅ 3 to 6.5 mm 4 × ∅ 5 to 9.2 mm 2 × ∅ 9.6 to 15.9 mm	**NSYTSAM638SE**
	6 × ∅ 3 to 5.5 mm 6 × ∅ 3.6 to 6.5 mm 1 × ∅ 6.0 to 10.0 mm	**NSYTSAM6313SE**

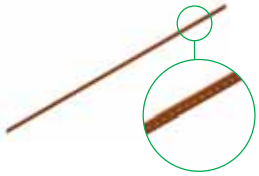
Cable management
Cable entries

Diagrams of dimensions and positions of the holes on a rectangular cable entry

Cable entries (mm)	Type	Reference
6 × 3 to 6.5 4 × 5 to 9.2 4 × 9.6 to 15.9		**NSYTSA2414SE**
17 × 9,2		**NSYTSA2417SE**
29 × 3 to 6.5		**NSYTSA2429SE**
16 × 3 to 6.5 4 × 5 to 9.2 2 × 8 to 12.5		**NSYTSA2422SE**
23 × 4.3 to 8.1		**NSYTSA2423SE**

See also the accessories

Adjustable cable tie page **7/110**



Cable management page **7/140**

Cable management
Cable entries

Cable entries system with connectors

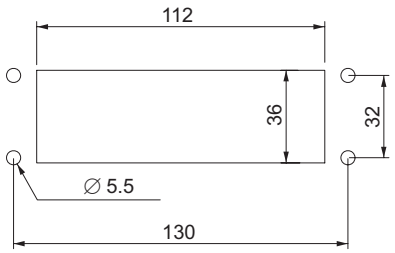
- System in two parts for inserting cables and hoses in the enclosures.
- Several ribbed gaskets adapted to the diameter of the cable.
- Models:

– 24/0: plain.
– 24/4: for two small gaskets with cable diameters between 3 and 14 mm, and two large gaskets with cable diameters between 16 and 31 mm.
– 24/10: for 10 small gaskets with cable diameters between 3 and 14 mm.

- Water/dustproof: IP54 for plate with entries, IP65 for plain plate.
- Identical recessing as for 24-point connectors.
- Material: PA.

Supply: 1 plate and fixing elements.

Cable-gland plates for connectors		
Types	**No. of entries**	**Reference**
Plate 24/0	0	**NSYDCE240**
Plate 24/4	4	**NSYDCE244**
Plate 24/10	10	**NSYDCE2410**



Gaskets for cable entries system

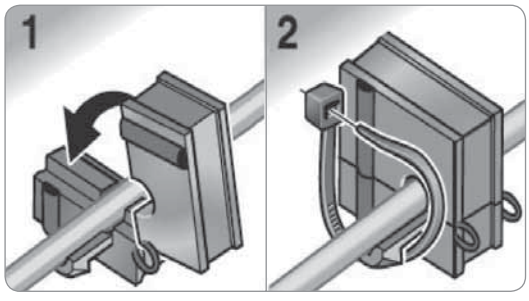
- Ribbed gaskets adapted to the diameter of the cable.
- They are installed on the cable-gland plates for connectors.
- Models:

– Small gaskets with diameters between 3 and 14 mm.
– Large gaskets with diameters between 16 and 31 mm.

- Material: thermoplastic rubber.

Supply: 10 units.

Reference by unit. Order by multiples of 10 (10, 20, 30...).



	∅ cable (mm)	Reference
Small gasket	Plain	**NSYCEJD**
	3-4	**NSYCEJD3**
	5-6	**NSYCEJD5**
	7-8	**NSYCEJD7**
	9-10	**NSYCEJD9**
	11-12	**NSYCEJD11**
	13-14	**NSYCEJD13**
Large gasket	16-17	**NSYCEJD16**
	18-19	**NSYCEJD18**
	20-21	**NSYCEJD20**
	22-23	**NSYCEJD22**
	24-25	**NSYCEJD24**
	26-27	**NSYCEJD26**
	28-29	**NSYCEJD28**
	30-31	**NSYCEJD30**

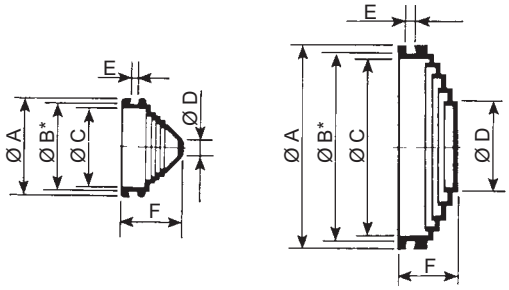
Cable management
Cable entries

PVC adjustable cone-shaped entries

PVC insulating cone-shaped entries which can be cut according to the volume of cables. Installation on insulating distribution boxes and protection boxes; generally suitable for thicknesses matching the dimension E.

Fig.	Ø A	Ø B*	Ø C	Ø D	E	F	Capacity		Composition	Reference
							Cable Ø	Tube		
1	25	21.5	18	5	3.2	13	5 to 18	Pg. 9 to 11	50	**NSYECPC3**
1	33	29.5	26	5	3.2	20	5 to 26	Pg. 9 to 16	25	**NSYECPC5**
1	43	38.5	36	5	3.2	22	5 to 36	Pg. 9 to 21	25	**NSYECPC6**
2	70	63	60	28	3	20	28 to 60	Pg. 21 to 48	10	**NSYECPC9**
2	98	90	87	28	3	23	28 to 87	Pg. 21 to 48	10	**NSYECPC15**

*Drill-hole for mounting.

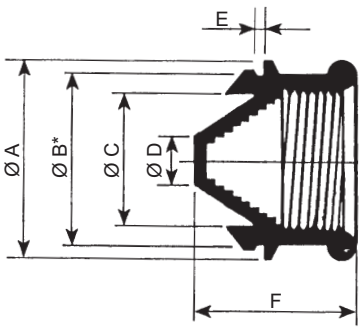


PVC adjustable cone-shaped entries

PVC insulating cone-shaped entries, threaded for the entry of Pg tubes and detachable rear for cable entry. They allow the entry of all types of normal and flexible cables and tubes, with diameters comprised between the dimension B and the thread root (maximum ∅).

Ø A	Ø B*	Ø C	Ø D	E	F	Capacity		Composition	Reference
						Cable Ø	Tube		
25	19.5	16	3	1.2	21	3 to 16	Pg. 9	50	**NSYEC1**
25	19.5	16	6	1.2	21	6 to 16	Pg. 11	50	**NSYEC2**
27	21.5	18	7	1.2	23	7 to 18	Pg. 13.5	50	**NSYEC3**
29.5	23.5	20	8	1.2	26	8 to 20	Pg. 16	25	**NSYEC4**
35	29.5	26	10	1.2	27	10 to 26	Pg. 21	25	**NSYEC5**
42	38.5	35	12	1.5	30	12 to 35	Pg. 29	25	**NSYEC6**
52	48.5	44	13	1.5	30	13 to 44	Pg. 36	25	**NSYEC7**

*Drill-hole for mounting.



Cable management
Cable entries

Neoprene adjustable cone-shaped entries

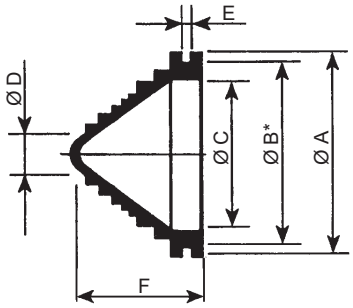
Neoprene adjustable cone-shaped entries. This material has excellent mechanical, dielectric and thermal properties and can resist corrosive environments.

Composition: 25 units.

Reference by unit. Order by multiples of 25 (25, 50, 75...).

Ø A	Ø B*	Ø C	Ø D	E	F	Capacity		Composition	Reference
						Cable Ø	Tube		
24	19.5	14	8.6	1.75	20	8.6 to 14	-	50	**NSYECN1**
34	29.5	26	9	1.75	22	9 to 26	Pg. 9 to 16	25	**NSYECN5**
43	38.5	32	9	1.75	28	9 to 32	Pg. 9 to 21	25	**NSYECN6**
53	48.5	36	9	1.75	32	9 to 36	Pg. 9 to 29	25	**NSYECN7**
71	65	60	9.2	1.75	40	9.2 to 60	Pg. 9 to 48	10	**NSYECN10**

*Drill-hole for mounting.

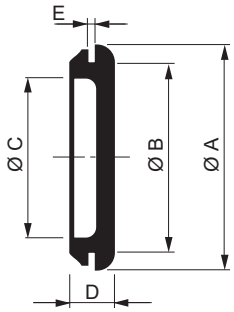


Cable management
Cable entries

Plugs

Made from black PVC, they are suitable for all diameters of knock-out holes on the boxes.

Ø A	Ø B	Ø C	D	E	Composition	Reference
25.5	20	16.5	7	1.2	50	**NSYTC1**
27.5	22	19	7	1.2	50	**NSYTC2**
29.5	24	21	7	1.2	50	**NSYTC3**
36.5	29.5	27	7	1.5	25	**NSYTC4**
46.5	39	35	7.5	1.5	25	**NSYTC5**
56.5	49	45	7.5	1.5	25	**NSYTC6**



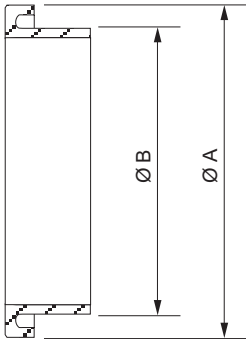
Protection rings

Protection rings for cables at the exit of the tubes. They are made from flexible, strong, light-grey PVC.

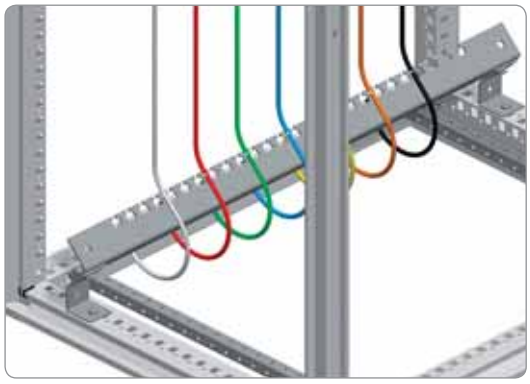
Composition: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

A	Ø B	Tube	Reference
15.2	12.7	Pg. 9	**NSYPC1**
18.6	16	Pg. 11	**NSYPC2**
20.4	17.8	Pg. 13.5	**NSYPC3**
22.5	19.8	Pg. 16	**NSYPC4**
28.3	25.3	Pg. 21	**NSYPC5**
37	33.6	Pg. 29	**NSYPC6**
47	43	Pg. 36	**NSYPC7**



Cable management
Cable holding



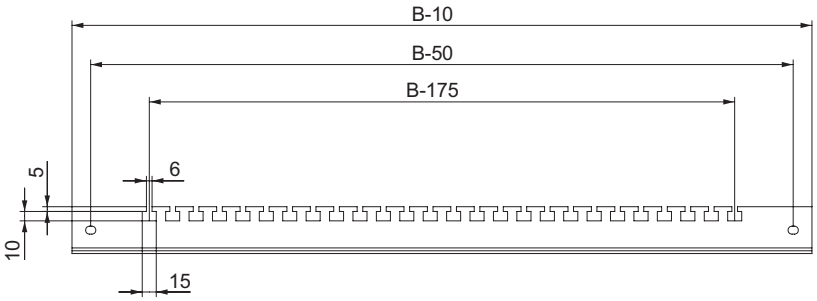
For ranges
SF, SM, SFX, SMX

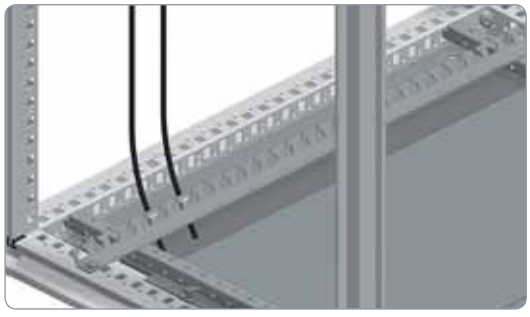
Lower cable-guide cross-rail

- It allows quick fixing of cables entering and exiting the enclosure.
- Depth adjustable every 25 mm.
- Spacial SF: for suitable enclosures with widths of 1200 and 1600 mm, use the adaptation kit for 2-door suitable enclosures, see page **7/19**.
- Spacial SM: for floor-standing enclosures with a width of 1200 mm, a top/bottom mounting rail installed in central position is required. See page **7/21**.
- Spacial SFX: no adaptation piece is required for the 1200-mm suitable enclosures.
- Spacial SMX: no adaptation piece is required for the 1600-mm floor-standing enclosures.
- Material: galvanised steel.

Composition: 1 cable-guide cross-rail and fixing elements.

Spacial dimensions (mm) Width (B)	Reference
600	**NSYCFP60**
800	**NSYCFP80**
1000	**NSYCFP100**
1200	2 × **NSYCFP60**
1600	2 × **NSYCFP80**





For ranges
SF, SM, SFX, SMX

Cable-guide cross-rails for framework

- Spacial SF and SFX: support for direct mounting on the framework, cross-rails or rails.
- Spacial SM: fixing on the bottom mounting rail, or on the floor-standing enclosure by means of adaptation rails and 40-mm universal cross-rails (1 row) in vertical position.
- Spacial SMX: fixing on the bottom mounting rail and 40-mm universal cross-rails (1 row) in vertical position.
- Support types:

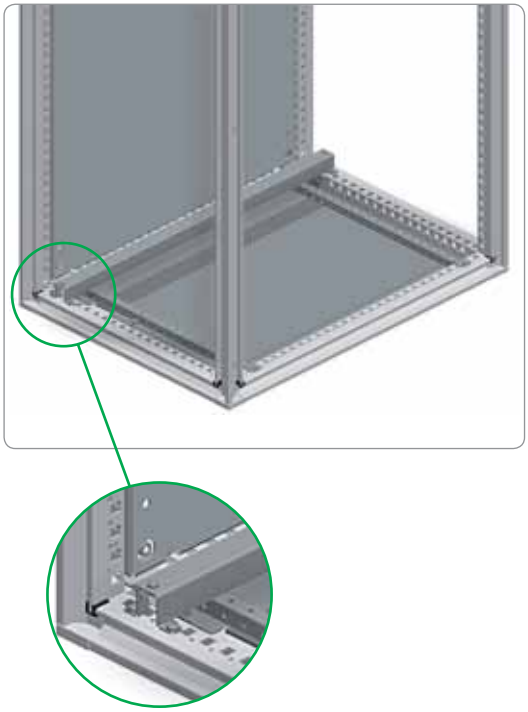
– Angle support at 90°: for vertical cable fixing.
– Angle support at 120°: for fixing cables near the cable entry.

- Material: zinc-coated steel.

Composition: 2 supports and fixing elements.

Nominal dimensions (mm) Width / Depth (B / C)	Support angle	Reference
600	90°	**NSYCFS96**
	120°	**NSYCFS126**
800	90°	**NSYCFS98**
	120°	**NSYCFS128**

Cable management
Cable holding



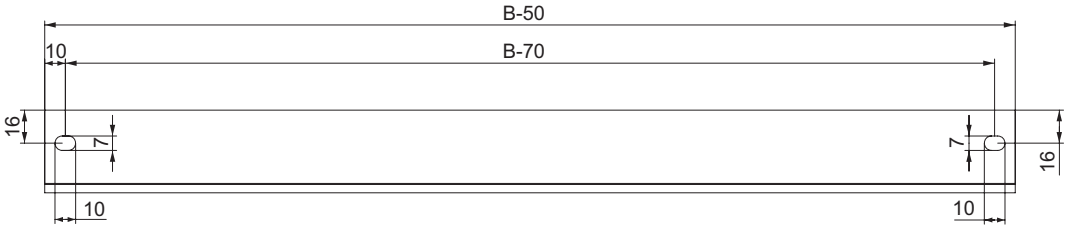
L-rail for fixing cables

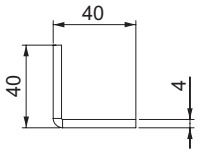
- Rail for fixing cables entering from the bottom.
- **Spacial SF and SFX:** fixing to the bottom frame, above the cable entry, or else to the plinth, using the plinth cross rails, see page **3/47**.
- **Spacial SM and SMX:** fixing to the bottom adjustment rails, above the cable entry, or else to the plinth, using the plinth cross rails, see page **3/47**.
- Adjustable depth with a pitch of 25 mm.
- The cables are fixed to the rail by means of metal clamps.
- Material: zinc-coated steel.
- It is not possible to mount it on a plinth cross rail.

Supply: one rail, two mounting supports and fixing elements.

Nominal dimensions (mm)	Reference
Width	
600	**NSYFCG60**
800	**NSYFCG80**
1000	**NSYFCG100**
1200	**NSYFCG120**
1600	**NSYFCG160**

For ranges SF, SM, SFX, SMX





Cable management
Cable holding

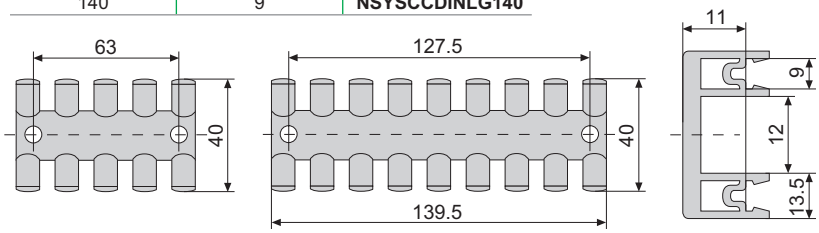
Plastic cable support

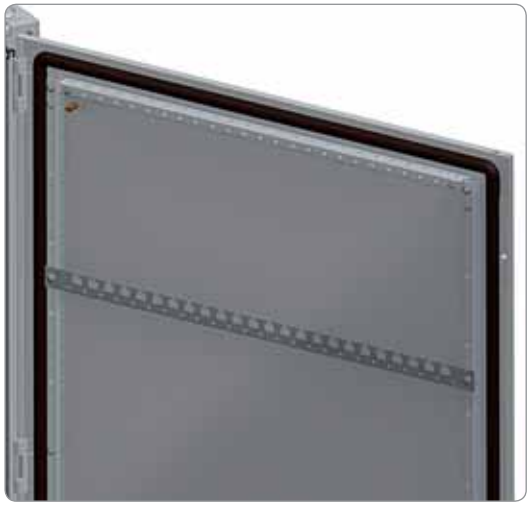
- It clips or screws onto 35-mm symmetric rails or a C-shaped rail.
- Quick and easy fixing of cables using cable ties.

Composition: 10 units.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Width (mm)	Maximum no. of cables	Reference
75	5	**NSYSCCDINLG75**
140	9	**NSYSCCDINLG140**





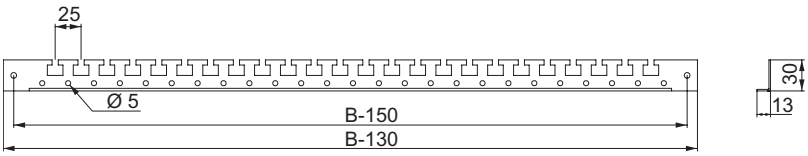
For ranges
SF, SM, SFX, SMX

Door cable-guide cross-rail

- Recommended for fixing cables in the internal equipment of the door.
- Direct fixing on the reinforcement frame.
- Height adjustable every 25 mm.
- Material: zinc-coated steel.

Composition: 2 cable-guide cross-rails and fixing elements.

Spacial dimensions (mm) Width (B)	Reference
500	**NSYSDGCR5**
600	**NSYSDGCR6**
800	**NSYSDGCR8**
1000	**NSYSDGCR10**



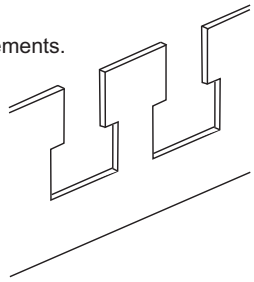
For ranges
S3D, CRN, S3X

Door cable-guide cross-rails for wall-mounting enclosures

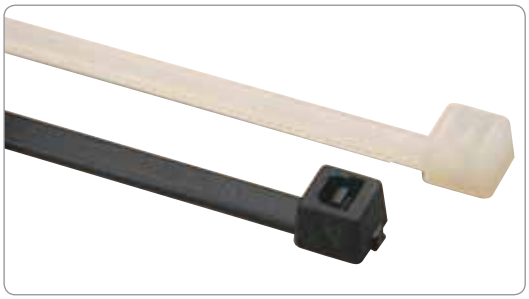
- They are installed on wall-mounting enclosures with heights from 400 mm for Spacial S3D/CRN and 500 mm for Spacial S3X.
- They are fixed to the door reinforcement frame by 2 self-tapping screws. The angle can be directed towards the body of the enclosure or towards the door.
- They make it easy to equip the inside of the door.
- Installation cable ties, page **7/116**.

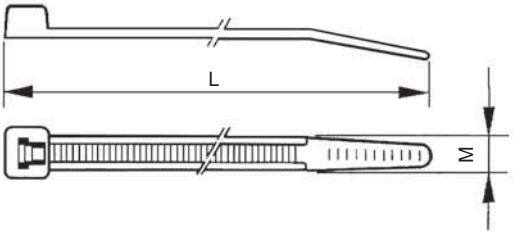
Composition: 2 cable-guide cross-rails and fixing elements.

Door width (mm)	Reference
400	**NSYTFPCRN4**
500	**NSYTFPCRN5**
600	**NSYTFPCRN6**
800	**NSYTFPCRN8**
1000	**NSYTFPCRN10**



Cable management
Cable holding





Adjustable cable tie

- Polyamide 6/6.
- Operation temperature: –40 ... +85 °C.
- Melting point: 250 °C.
- Flame resistance according to UL 94 V-2.
- Glow-wire resistance at 650 °C / 30 s.
- Not sensitive to engine oil, greases, oil products, etc.
- Good resistance to bases and organic acids, chlorinated solvents. Not resistant to phenol.

Composition: 1000 units.

Reference by unit. Order by multiples of 1000 (1000, 2000, 3000...).

Width (mm)	Length (mm)	Maximum tightening Ø (mm)	Minimum resistance to pulling (kg)	Reference	
				Colourless	Black
2.5	100	18	8.2	**NSYLZ25100**	**NSYLN25100**
2.5	200	50	8.2	**NSYLZ25200**	**NSYLN25200**
3.5	200	49	8	**-**	**NSYLN35200**
3.6	140	33	13.6	**NSYLZ35140**	**NSYLN35140**
3.6	200	50	13.6	**NSYLZ35200**	**NSYLN35200**
3.6	295	76	13.6	**NSYLZ35290**	**NSYLN35290**
4.6	150	36	22	**NSYLZ48160**	**NSYLN48160**
4.6	390	109	22	**NSYLZ48390**	**-**
4.8	200	50	22.7	**NSYLZ48200**	**NSYLN48200**
4.8	270	73	22.7	**NSYLZ48280**	**NSYLN48280**
7.6	368	102	54.5	**NSYLZ76380**	**NSYLN76380**

Captive clips

They allow cable ties from series LZ25100 to LZ46390 to be fixed on panels with thicknesses of up to 3.2 mm. Material: 6.6 nylon.

Composition: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

Drill-hole Ø, mm	Max. panel thickness, mm	Figure	Reference
6	3.2	1	**NSYSFC1**

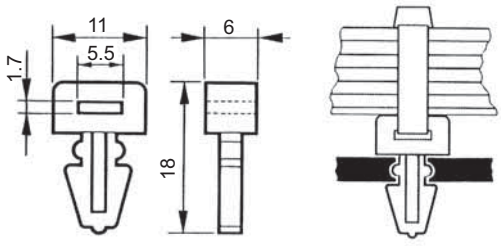


Fig. 1

Cable management
Cable holding

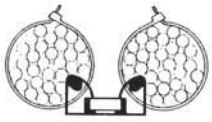
Cable-tie fixing support

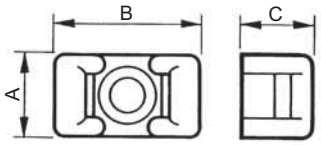
For the installation of one or two cable-ties with a single screw. Material: 6.6 nylon. Compatible with the entire range of cable ties.

Composition: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

A	B	C	Fixing screw	Acceptable cable-tie width	Reference
12	18	9	M4	2.5 ÷ 4.8	**NSYKR6**
14.5	25	12	M6	2.5 ÷ 7.6	**NSYKR8**





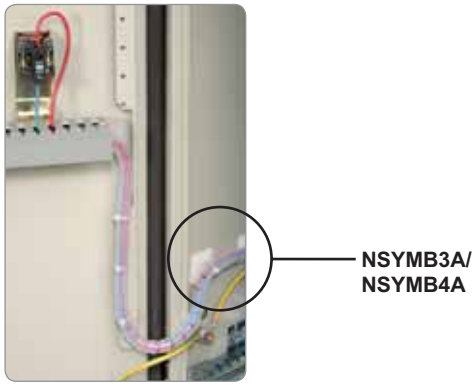
Self-adhesive support bases

- Material: colourless 6/6 polyamide.

Composition: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

H (mm)	W (mm)	D (mm)	Fixing screws	Reference
6	19	19	3.6	**NSYMB3A**
8	26.5	26.5	4.8	**NSYMB4A**



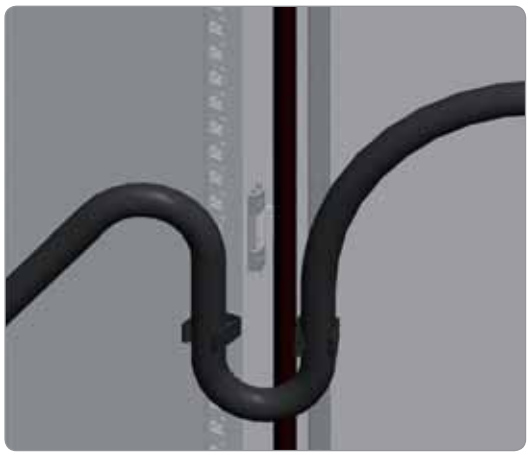
Cable management
Cable distribution

Corrugated cable-gland tube

- Corrugated tube allowing cables to pass between the structure and the door.
- Free from halogens and heavy metals.
- UV protection.
- Material: low-density polyethylene (LDPE), black.

Supply: one 25-m reel.

Nominal diameter (mm)	Inner ∅ (mm)	Outer ∅ (mm)	Reference
17	16.6	21.2	**NSYCPT17**
29	29	34.5	**NSYCPT29**
37	36	42.4	**NSYCPT37**
50	47.7	54.5	**NSYCPT50**



Fixing support for corrugated tube

- Fixing support for the corrugated tube, offering the following mounting options:
– Directly on the enclosure.
– On a swing 19" rack and/or cross rails, by means of a fixing point.
- The supports can be joined together to form sets of tubes, allowing better cable distribution.
- The support includes the base.
- It allows the tube to rotate once it has been fixed to the support and prevents the removal of the corrugated tube subject to a pulling force.
- Material: polyamide (PA), black.

Supply: ten units and fixing elements.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Model n ∅	Reference
17	**NSYCPTS17**
29	**NSYCPTS29**
37	**NSYCPTS37**
50	**NSYCPTS50**

n ∅ = nominal diameter.

Cable management

Cable-gland for body/door

- Spiral strip for bundling cables.
- Allows cables to enter between the body and the door.

Supply: one 50-m reel.

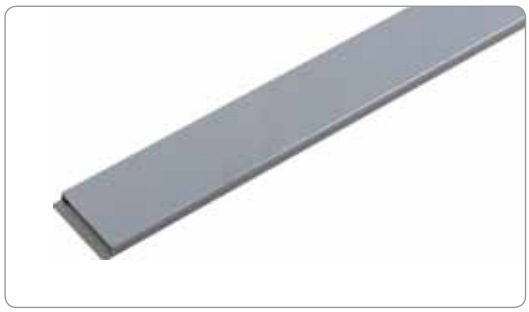
Colour	Tightening range (mm)	Inner Ø (mm)	Outer Ø (mm)	Reference
Colourless	12 to 100	9	12	**NSYTC12100**

Cable management

Cable ducts with cover

- Rigid PVC material; with lateral through slots and rear perforations. Supplied in lengths of 2 m. RAL-7030 grey colour.
- Compliance with standards VDE 0660/506 and DIN 43659.
- Temperature resistance: –5 ... +60 °C.
- Behaviour in fire: material V0 according to UL 94.
- Fire resistance: 960 °C according to IEC 60695-2-1/1.
- Maximum capacity of H07.V.K 1.5-mm^2 flexible wire (filling factor: 0.6).

Dimensions (mm)			Composition (m)	Reference
Width	Height	Maximum capacity		
25	25	25	48	**NSYCD2M2525**
25	50	65	48	**NSYCD2M2550**
37.5	50	110	24	**NSYCD2M3750**
37.5	75	160	24	**NSYCD2M3755**
50	50	160	24	**NSYCD2M5050**
50	75	240	24	**NSYCD2M5075**
75	25	110	48	**NSYCD2M7525**
75	50	250	24	**NSYCD2M7550**
75	75	400	24	**NSYCD2M7575**
100	75	550	12	**NSYCD2M10075**
125	75	700	12	**NSYCD2M12575**



Covers for cable duct

- Replacement covers.
- Supplied in lengths of 2 m.

For cable duct	Composition (m)	Reference
25	48	**NSYCDC2M25**
37.5	24	**NSYCDC2M37**
50	24	**NSYCDC2M50**
75	24	**NSYCDC2M75**
100	12	**NSYCDC2M100**
125	12	**NSYCDC2M125**

Retention bars

- Fixed between 2 cable-duct slats by a hinged screw, preventing cable dropout.
- They can be cut to length to adapt to the width of the ducting.
- Material: flameproof high-impact polystyrene.

Supply: 50 units.

Reference by unit. Order by multiples of 50 (50, 100, 150...).

Reference
NSYCDRB

Cable management

For ranges
SF, SM, S3D, CRN,
PLA, S3X, SFX, SDX

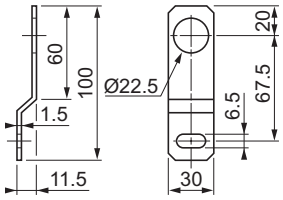
Ø 22-mm cable-duct support

- Installed on the door of the wall-mounting or floor-standing enclosure associated with ∅ 22-mm elements.
- Material: treated steel.

Supply: 10 units.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYSPCP



For ranges
SF, SM, SFX, SMX,
SD, SDX, PLA

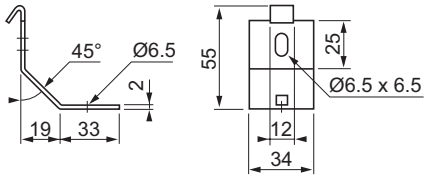
Ducting support on technical upright

- Allows cable ducts to be installed on technical uprights, while increasing the usable surface of the equipment (up to 20% according to the width of the cable duct).
- Material: galvanised steel.

Supply: 10 units.

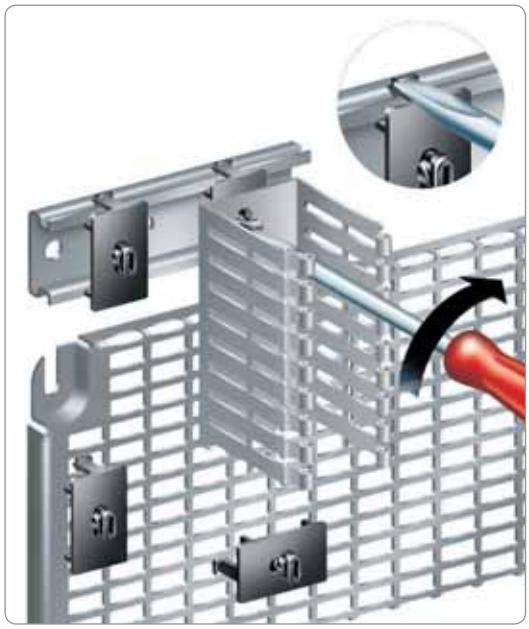
Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYCDS



7

Cable management



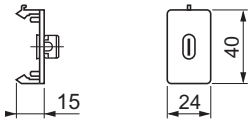
Plastic foot for cable-duct support

- Clips onto the Telequick mounting plate or the 35-mm DIN rail.
- Includes a bolt for fixing the cable ducts through the 6.5 × 14-mm drill holes made in the back.
- The 2 functions, clipping and bolting, provide considerable time savings.
- Material: black polyamide. Behaviour in fire: V0 according to UL 94.
- Respects electrical insulation.

Supply: 20 units.

Reference by unit. Order by multiples of 20 (40, 20, 60...).

Reference
NSYSPC



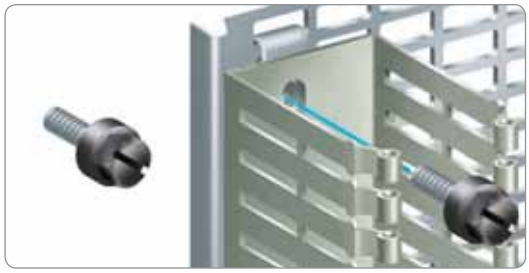
Label frame

- In transparent plastic, clipping onto the slats of the cable ducts. Paper labels supplied.
- Material: polycarbonate.

Supply: 50 units.

Reference by unit. Order by multiples of 50 (50, 100, 150...).

Reference
NSYCDL



Insulated-head screw

- M5 × 10-mm slotted hexagonal head.
- Respects electrical insulation.

Supply: 100 units.

Reference by unit. Order by multiples of 100 (100, 200, 300...).

Reference
NSYSM10M5HP

Cable management

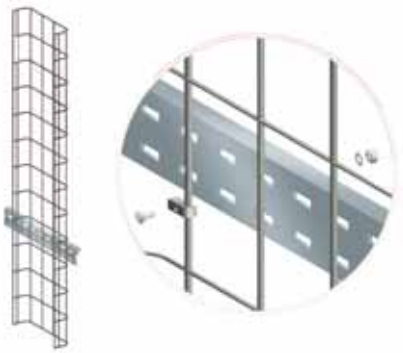
Lyre-shaped clamps

- Clip-on clamps designed for direct installation on the 19" racks and Telequick mounting plates.

Supply: 10 units.

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Reference
NSYGCR



Steel wired cable tray

- Mounting on the cable supports.
- Made from zinc-coated steel wire.
- Dimensions (2 types):

– 1845 × 200 × 35 mm.
– 1845 × 200 × 54 mm.

Supply: 1 vertical steel wired cable tray and fixing elements.

Necessary depth (mm)	Reference
35	NSYBPC3
70	NSYBPC5

Accessories

Lighting and power socket 7/125

Electrical power distribution rails 7/125

Neon lamp E27 bulb base 7/126

Neon lamp 7/127

Ultra-flat lamp 7/128

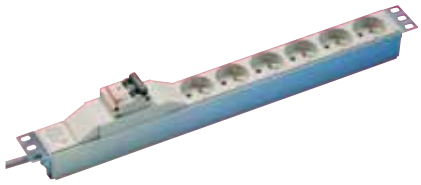
Lamp for 1U 19" rack 7/128

Incandescent lamp 7/128

7

Lighting and power socket
Current distribution accessories

NSYAPU19F9



NSYAPU19F6CB

NSYAPU19F8S

NSYAPU19F7FA

Electrical power distribution rails

- Sockets positioned at 35°, 2P + E, AC 250 V 16 A/3680 W with child protection.
- UTE version according to NFC61314, IEC60884 and NBNC61112-1 standards.
- VDE version according to DIN49 440, VDE0620-1, IEC60884 and UNE20315 standards.
- Anodised-aluminium rail with a height of 1 U.
- Direct fixing to the 19" rack or framework uprights by stainless-steel brackets, supplied.
- Material: fibreglass polyamide plastic with fire resistance to 850 °C.
- 3-m power cord (3 × 1.5 mm²) type H05 VVF, equipped with an overmoulded 2P + E, 250 V, 10/16 A plug according to VDE0620-1, IEC60884, UNE20315 and NBNC61-112-1 standards.

Number of sockets	Width (mm)	Depth (mm)	Type	UTE	VDE
3	10"	44	A	**NSYAPU10F3**	**NSYAPU10S3**
3	10"	44	B	**NSYAPU10F3S**	**NSYAPU10S3S**
9	19"	44	A	**NSYAPU19F9**	**NSYAPU19S9**
8	19"	44	B	**NSYAPU19F8S**	**NSYAPU19S8S**
6	19"	76	C	**NSYAPU19F6CB**	**NSYAPU19S6CB**
7	19"	44	D	**NSYAPU19F7FA**	**NSYAPU19S7FA**
6	19"	44	E	**NSYAPU19F6FT**	**NSYAPU19S6FT**
6	19"	76	F	**NSYAPU19F6F**	**NSYAPU19S6F**
7	704	44	B	**NSYAPUF7S**	**NSYAPUS7S**
10	968	44	B	**NSYAPUF10S**	**NSYAPUS10S**
12	1232	76	C	**NSYAPUF12CB**	**NSYAPUS12CB**

- A: Rail of sockets without protection.
- B: Rail of sockets with recessed green LED switch.
- C: Rail of sockets with bi-polar magnetothermal circuit-breaker C16 type C60N 16 A curve C.
- D: Suppression filter for interferences of up to 30 MHz, nominal frequency 400 Hz, attenuation 20 dB per decade.
- E: Interference suppression filter and surge arrester, 6.5 kA short-circuit protection, protection level Up 1.5 kV, voltage test Uoc 5 kV Uc 255 V, 50 Hz. Operating LED, interferences of 30 MHz, nominal frequency 400 Hz, attenuation 20 dB per decade.
- F: Differential protection 30 mA, 2 poles 25 A NC type.

NSYAPUB

NSYAPUBV

Fixing brackets

- For vertical assembly of distribution rails.
- Batch of 2 brackets, adaptable to all rails, delivered with fixings.
- Material: treated steel, thickness 10/10 mm.
- Fixing to the ends of the rail: reference **NSYAPUBV**.
- Fixing with an orientation of 90°: reference **NSYAPUB**.

Fixing	Reference
Orientation of 90°	**NSYAPUB**
Ends of the rail	**NSYAPUBV**

Lighting and power socket

NSYLAMDP

NSYLAMIN

NSYLAMPO

Neon lamp with E27 bulb base

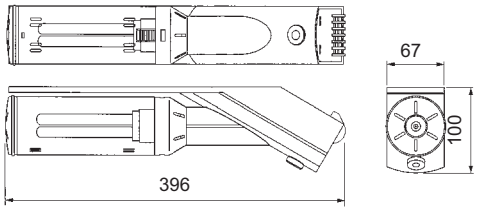
- Available in three versions:
– With motion sensor.
– With On-Off switch.
– Portable lamp with simple support, power cord and plugs.
- The references **NSYLAMDP** and **NSYLAMIN** allows the connection terminal for serial connection of a door switch and another lamp.

Designation	Reference	Fixation
Lamp with motion sensor	**NSYLAMDP**	Screws or magnetic*
Lamp with on/off switch	**NSYLAMIN**	
Portable lamp	**NSYLAMPO**	Adhesive

* It is impossible to fix it magnetically in stainless steel enclosures.

Technical characteristics

- Power consumption: 20 W.
- Voltage: 220 V / 50 – 60 Hz.
- Luminosity: 1000 Lm.
- Service life: 10000 h.
- Switch: Movement detector PIR, 3 min. lasting aprox.
- Connection: 4-pole screw connector 2.5 mm² (torque 0.5 Nm max.).
- Casing: Plastic according to UL94 V-0, light grey.
- Weight: Approx. 0.60 kg.
- Fitting position: Variable.
- Operating/Storage temperature: –20 to +50 °C (–4 to +122 °F) / –45 to +70 °C (–49 to +158 °F).
- Protection type/Protection class: IP20 / II (double insulated).
- According with the standard: IEC 55014 and IEC 50082-1.



Accessories

- Separate power cord for ref. **NSYLAMDP** and **NSYLAMIN**.

Description	Reference
Power cord (1)	**NSYCLAM**

(1) Cord length: 2 m.

Lighting and power socket

Neon lamp

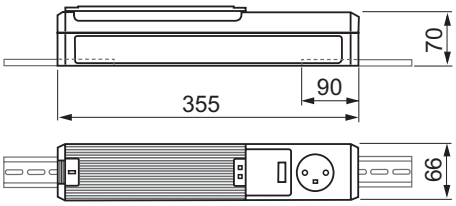
- Compact neon lamp, low consumption with switch and power socket.
- Magnetic fixing* or on a 35 mm DIN rail (non supply).
- Delivered with a protective glass.

* It is impossible to fix it magnetically in stainless steel enclosures.

Type of power socket	Luminosity	Power consumption	Voltage	Reference
UTE (16 A)	900 Lm	11 W	220/50 Hz	**NSYLAM75UTE**
VDE	900 Lm	11 W	220/50 Hz	**NSYLAM75**
BS (British Standard)	900 Lm	11 W	220/50 Hz	**NSYLAM75BS**
UL-CSA	700 Lm	9 W	115/60 Hz	**NSYLAM75120**
None	900 Lm	11 W	220/50 Hz	**NSYLAC75**

Technical characteristics

- Service life: 5000 h.
- Switch: Integrated.
- Connection: 3-pole screw connector 2.5 mm² (torque 0.5 Nm max.).
- Casing: Plastic light grey.
- Dimensions: 355 × 65 × 70 mm.
- Weight: Aprox. 1.0 kg.
- Fitting position: Variable.
- Operating/Storage temperature: –20 to +50 °C (–4 to +122 °F) / –45 to +70°C (–49 to +158 °F).
- Protection type/Protection class: IP20.



Lighting and power socket

Ultra-flat lamp

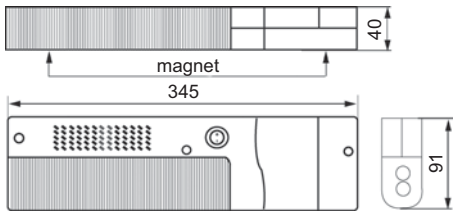
- Plain and compact lamp of low consumption with 2G7 socket.
- Magnetic fixing* or by screw M5 (non supply).

* It is impossible to fix it magnetically in stainless steel enclosures.

Designation	Socket	Reference
Ultra flat lamp VDE	SCHUKO	**NSYLAMS75**
Ultra flat lamp UTE	-	**NSYLAMS75UTE**
Ultra flat lamp VDE	-	**NSYLAMX75**

Technical characteristics

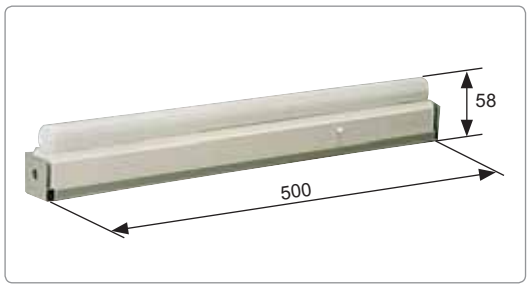
- Power consumption: 11 W.
- Voltage: 220 V / 50 – 60 Hz.
- Luminosity: 900 Lm.
- Service life: 10000 h.
- Switch: Integrated.
- Connection: Screw connector 2.5 mm² (torque 0.8 Nm max.).
- Casing: Plastic according to UL94 V-0, light grey.
- Dimensions: 345 × 91 × 40 mm.
- Fitting position: Narrow surface/broad surface.
- Operating/Storage temperature: –20 to +50 °C (–4 to +122 °F) / –45 to +70 °C (–49 to +158 °F).
- Protection type/Protection class: IP20.



Lamp for 1 U 19" rack

- Compact neon lamp 11 W, 220 V/50 Hz with switch and power socket.
- Delivered with the fixings required for installation.
- Fixing on the 19" rack.

Type of socket	Reference
UTE	**NSYLAM1UF**
VDE	**NSYLAM1US**



Incandescent lamp

Incandescent lamp specifically designed for use in electrical enclosures.

- Connection voltage: 220 V/50-60 Hz.
- Consumption: 60 W.
- On/off switch.
- Input connection terminal.

Reference
NSYLAIOL68

Accessories

Door accessories 7/130

Plastic and metal document pocket 7/130

Folding support tray 7/131

Door retainer 7/132

Door holding system 7/133

Door switch 7/134

Window for modular equipment IP 65 7/135

Plastic window IP 65 7/136

Acrylic window IP 65 7/137

Control protection frame IP 54 7/137

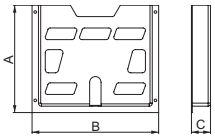
Door accessories

Plastic document pocket

- Fixing by adhesive tape.
- Formats: A5 and A4.
- Material: polystyrene (PS), RAL-7035 grey.

Supply: 1 plastic document pocket.

Document format (mm)	A	B	C	Reference
A5	174	188	22	**NSYDPA5**
A4	234	278	22	**NSYDPA4**
A4	234	278	40	**NSYDPA44**
A3	258	476	35	**NSYDPA3**



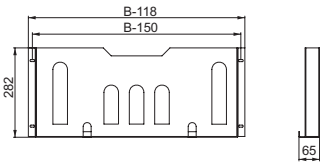
For ranges
SF, SM, SFX, SMX

Metal document pocket

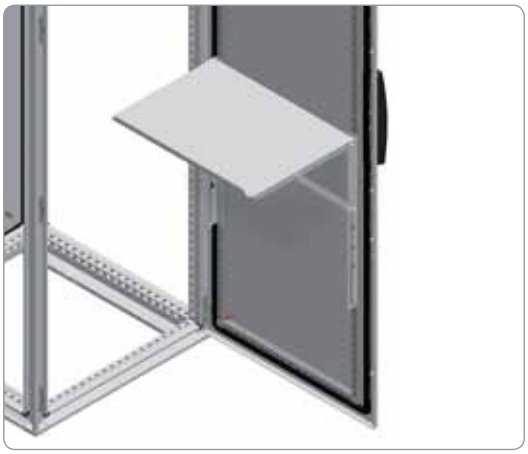
- Direct fixing on the door reinforcement frame.
- Height adjustable in steps of 25 mm.
- Material: steel.
- Finish: painted with epoxy-polyester resin, RAL-7035 grey.

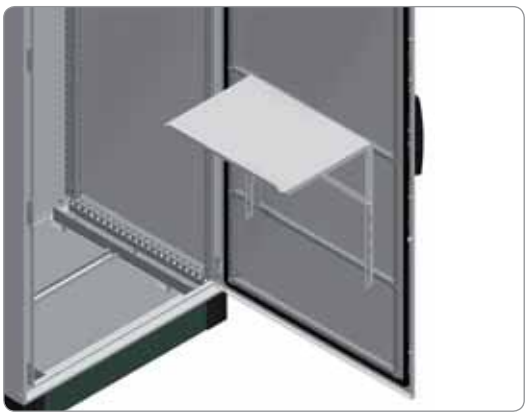
Supply: 1 metal document pocket and fixing elements.

Enclosure dimensions (mm)	Reference
Width (B)	
600	**NSYSDP6M**
800	**NSYSDP8M**



Door accessories





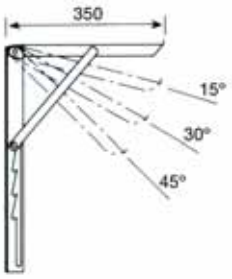
For ranges
SF, SM, SFX, SMX

Folding support tray

- Adjustable horizontal support for laptop computers, documents or any other elements.
- Mounting on the door reinforcement frame.
- It can also be mounted on door cross-rails, see page **7/28**.
- Height adjustable in steps of 25 mm.
- In 1000-mm-wide enclosures, any size can be mounted using door cross-rail ref. **NSYSDCR10**.
- 4 positions: 45°, 60°, 75° and 90°.
- Material: steel.
- Thickness: 1.5 mm.
- Finish: painted with polyester-epoxy resin, RAL-7035 grey.
- Maximum load: 30 kg.

Supply: 1 folding support tray and fixing elements.

Spacial dimensions (mm)	Reference
Width	
500	**NSYSDT5**
600	**NSYSDT6**
800	**NSYSDT8**



Door accessories

For ranges SF, SM

Door retainer

- Door blocker at the opening limit.
- It is fixed directly to the front frame of the enclosure and to the reinforcement frame of the door.
- It can be installed on doors that open both to the right and to the left.
- 2 versions:

– Mechanical door stop, limit 105°.
– Pneumatic door stop, limit 120°.

Supply: door stop and fixing elements.

Door stop model	Reference	For enclosures
Mechanical	**NSYSFMDR**	**Spacial SF**
	NSYSMDR	**Spacial SM**
Pneumatic	**NSYSFNDR**	**Spacial SF**
	NSYSMNDR	**Spacial SM**

Door accessories

For ranges
S3D, CRN, CRNG

Steel door retainer

For blocking the door at the end of its travel.
- It is installed on enclosures with heights from 400 mm and widths from 300 mm.
- Earthing connection of the enclosure by means of the reinforcement rail.
- Earthing accessories supplied with the enclosure (earth-connection wire to be ordered separately), see page **7/139**.
- Warning: cannot be installed on 19" mounting plates or on enclosures equipped with internal door.

Description	Reference
Steel door retainer for Spacial wall-mounting steel enclosure	**NSYAEDRSCST**

For ranges
S3D, CRNG

Door-holding system

To hold the door open while working on the enclosure.
- It is installed on the perforated rails of the enclosure doors at the required height.
- Material: polyamide 6 (PA6).
- It is only installed on enclosures with a height of less than 400 mm (no perforated rails).
- It cannot be installed in the Spacial CRN enclosures.

Description	Reference
Door-holding system for Spacial wall-mounting steel enclosure	**NSYAEDRS3DPA6**

7

See also the accessories

Support for cable ducting with diameter 22 page **7/121**

Door cable-guide cross-rail page **7/115**

Door accessories

Door switch for floor-standing enclosures

- The switch is fixed to the structure of the enclosure.
- Drilled M20 cable entry for cable gland.
- NC + NO contact, 10 A/500 V.

Supply: 1 door switch and fixing elements.

Reference	For ranges
NSYDCM20	SF - SFX
NSYMDCM20	SM
NSYSNLPLA	PLA

For ranges
CRN, S3D, S3X

Door switch for wall-mounting enclosures

- Switch/commutator unit equipped with support and fixings for direct fixing to the enclosure.
- Can be used to control lighting, air-conditioning units, etc.
- It is not compatible with installing the 19" swing rack and the internal door.
- NC + NO contact, 10 A/500 V.

Supply: 1 door switch and fixing elements.

Reference
NSYINLCRN

Door accessories

Fig. 1

Fig. 2

Window for modular equipment, IP 65

They provide viewing and access to the inside of the enclosure while keeping the IP 65 protection degree.
Made from transparent polycarbonate.

Supply: 1 window.

N.° of modules	Fig. n.°	A	B	C		Reference	
				Low cover	High cover	Low cover	High cover
2	1	78	60	15	25	**NSYVA272M**	**NSYVA272MA**
4	1	78	95	15	25	**NSYVA274M**	**NSYVA274MA**
6	1	78	130	15	25	**NSYVA276M**	**NSYVA276MA**
8	1	78	165	15	25	**NSYVA278M**	**NSYVA278MA**
10	1	78	200	15	25	**NSYVA2710M**	**NSYVA2710MA**
12	1	78	235	15	25	**NSYVA2712M**	**NSYVA2712MA**
16	2	195	165	13	-	**NSYVA2716M**	**-**
24*	2	196	235	13	-	**NSYVA2724M**	**-**
36*	2	248	235	13	-	**NSYVA2736M**	**-**
51**	2	248	325	13	-	**NSYVA2751M**	**-**

* In rows of 12 modules mounted vertically.
** In rows of 17 modules mounted horizontally.

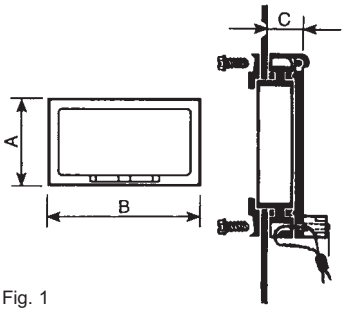


Fig. 1

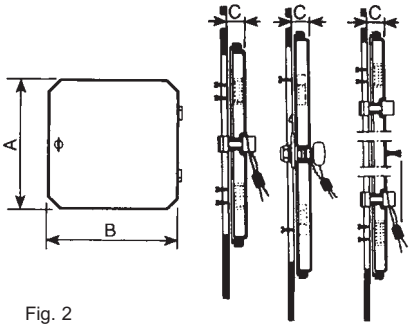


Fig. 2

Door accessories

Plastic window IP 55

- Plastic window with hinged cover for installation on front panel, IP 55.
- Polycarbonate cover and PVC body.
- External dimensions: 213 × 133 mm.
- Internal dimensions of the window: 180 × 78 mm.
- Delivered with a drilling template.

Composition: 1 plastic window.

Reference
NSYMW10M

Modular front panel with IP 55 sealed window

- Frame with transparent hinged cover for mounting modular switchgear on the front panel.
- Opening: 46 × 180 mm (10 modules).

Composition: 1 modular front panel.

Reference
NSYMW10MK

Kit for fixing the switchgear

- The fixing kit includes a DIN rail and its two supports.
- The unit is delivered assembled.

Composition: 1 DIN rail and two supports.

Reference
NSYMW10MR

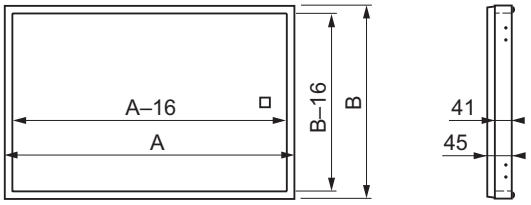
Mounting example:
NSYMW10MK + NSYMW10MR

Door accessories

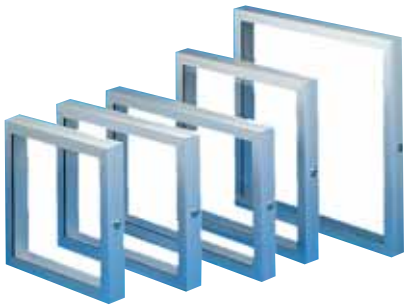
Acrylic window IP 55

- Transparent acrylic window, hinged, with gasket for installation on front panel. IP 55.
- Closure by lock with key nº 1242 E (2 locks for the height of 800 mm).
- Delivered with 2 hinges (3 for the height of 800 mm) and the fixings required for installation.
- Does not filter out UV.

Composition: 1 acrylic window, hinges, fixings and drilling template.



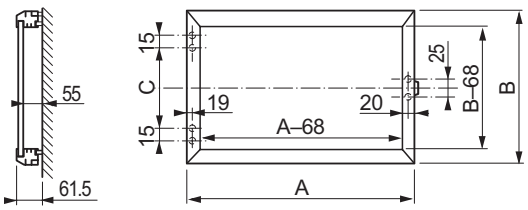
Acrylic window (mm)			Reference
A	B	Depth	
400	200	45	**NSYAW24**
400	400	45	**NSYAW44**
400	500	45	**NSYAW54**
400	600	45	**NSYAW64**
400	800	45	**NSYAW84**
500	200	45	**NSYAW25**
500	400	45	**NSYAW45**
500	500	45	**NSYAW55**
500	600	45	**NSYAW65**
500	800	45	**NSYAW85**
600	200	45	**NSYAW26**
600	400	45	**NSYAW46**
600	500	45	**NSYAW56**
600	600	45	**NSYAW66**
600	800	45	**NSYAW86**



Control protection frame IP 54

- To prevent accidental handling of the control units by any unauthorised person.
- Allows all the displayed information to be read without opening the door.
- Construction: aluminium frame and Altuglas viewing window.
- Equipped with hinges for opening.
- Closure by a nº 1242 E lock, type 911 B Ronis.

Composition: 1 frame with window, hinges, fixings and drilling template.



Door window (mm)			Reference
A	B	C	
400	400	220	**NSYMA44**
500	400	220	**NSYMA45**
600	400	220	**NSYMA46**
800	400	220	**NSYMA48**
500	500	320	**NSYMA55**
500	600	420	**NSYMA56**
600	500	320	**NSYMA65**
800	500	320	**NSYMA58**
600	600	420	**NSYMA66**

Accessories

Earthing accessories 7/139

Floor accessories 7/142

Paint accessories 7/144

7

Earthing accessories

Earth braids

- They guarantee the earth connection for high frequencies, avoiding the disturbing electric currents that are produced.
- Material: tinned copper.

Supply: 10 earth braids (nuts and washers not included).

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Length (mm)	Width (mm)	Section (mm^2)	Terminal ∅ (mm)	Reference
150	12	6	6.5	**NSYEB156D6**
150	17	10	6.5	**NSYEB1510D6**
155	17	16	8.5	**NSYEB1516D8**
200	27	25	8.5	**NSYEB2025D8**
200	33	50	8.5	**NSYEB2050D8**

Earth cables

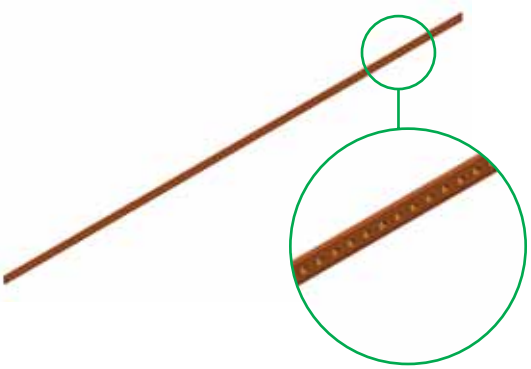
- They make it easier to install a safe earth connection, with a perfect contact, with optimised length.
- Material: brass and copper alloy terminal, green and yellow PVC insulating sheath.

Supply: 10 earth cables (nuts and washers not included).

Reference by unit. Order by multiples of 10 (10, 20, 30...).

Length (mm)	Section (mm^2)	Terminal ∅ (mm)	Reference
130	6	6.4	**NSYEL136D6**
160	6	6.4	**NSYEL166D6**
160	6	8.3	**NSYEL166D8**
170	10	6.4	**NSYEL1710D6**
220	6	6.4	**NSYEL226D6**
220	25	8.3	**NSYEL2225D8**
250	10	6.4	**NSYEL2510D6**
350	25	8.3	**NSYEL3525D8**

Earthing accessories



Earthing strip

- 15 × 3-mm perforated brass bar.
- 1 m long.
- 87 connection points, M5 drill holes.

Composition: 1 earthing strip and fixing elements.

Reference
NSYECB1M153

Central earthing point

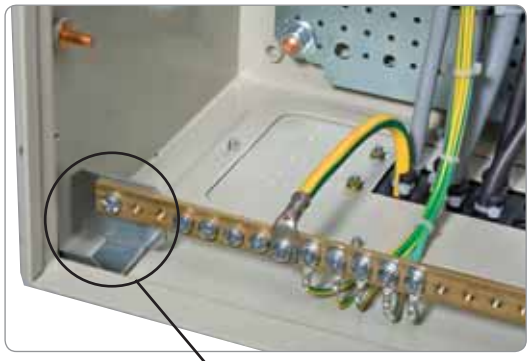
- Connects earthing braids and cables to the structure of the enclosure.
- Fixing to the structure by means of self-tapping screws.
- The earth connection is made by means of the M8 × 18-mm bolt.

Supply: 1 central earthing point, elements for fixing to the structure, and fixings for fixing to the bolt.

Reference
NSYCEP

For ranges SF, SM, SFX, SMX, SD, SDX

Earthing accessories



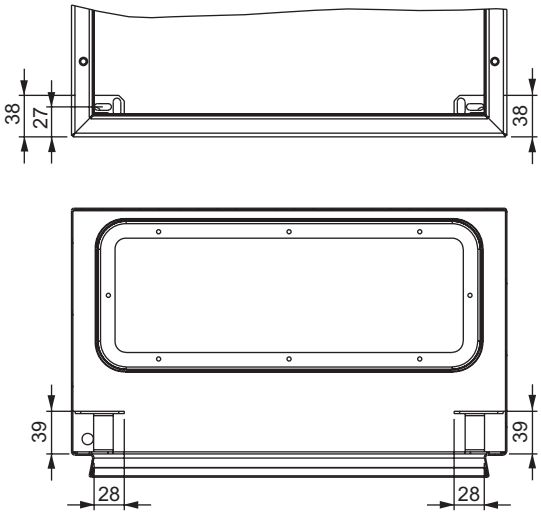
For ranges
S3D, S3X, CRN

Fixing lugs for the earthing strip

- They allow the mounting of an earth-collector rail or a DIN rail at the top and bottom of an enclosure.
- Fixing on holes made in the gutter of the enclosure.
- Mounting incompatible with certain accessories. Please consult us.
- Earthing strip, page **7/137**.

Composition: 2 lugs and fixings.

Reference
NSYEDCOS



Floor accessories

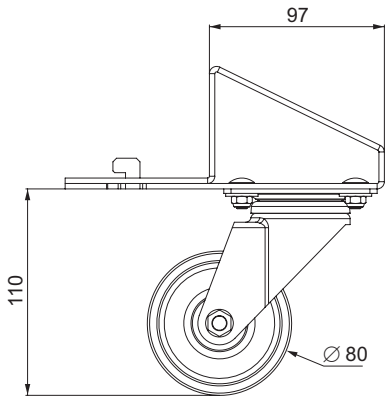
For ranges
SF, SM, SD

Transport casters

- Set of 4 casters, 2 with a blocking system.
- Quick installation on plinths with heights of 100 and 200 mm, except the plinth for enclosure sets.
- They can be installed in front or side position.
- Clipping and fixing to the corner by screws.
- Maximum load: 100 kg per castor.
- For use on flat surfaces.
- Height: 110 mm.

Supply: 4 transport casters (2 with a blocking system) and fixing elements.

Reference
NSYSTW



For ranges
SF, SM, SD,
SDX, SFX, SMX

Enclosure casters

- Set of 4 casters.
- Double casters.
- Maximum load: 160 kg per caster.
- Height: 92 mm.
- Diameter: 64 mm.

Supply: 4 casters and fixing elements.

Reference
NSYSW

Floor accessories

Fixed feet.

Adjustable feet.

For ranges SF, SM, SFX, SMX, SD, SDX

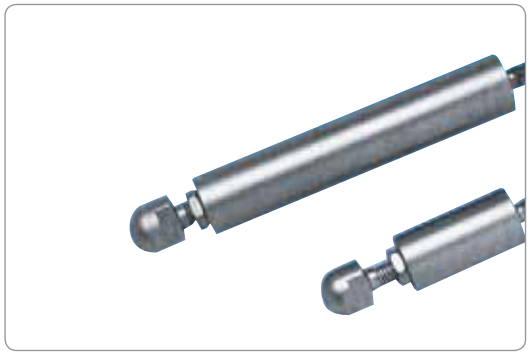
Levelling feet (fixed and adjustable)

- Set of 4 floor feet.
- 2 models:

– Fixed: height 42 mm.
Material: steel.
– Adjustable: height 22 mm.

- Maximum load: 100 kg per foot.

Levelling feet	
Model	**Reference**
Fixed feet	**NSYSPSJ**
Adjustable feet	**NSYSPRJ**



For ranges SF, SM, SFX, SMX, SD, SDX

Hygienic stainless-steel feet

- Set of 4 hygienic feet, made from 316L stainless steel, specific for harsh environments.
- Models:

– Height: 100 mm.
– Height: 200 mm.

- Height adjustment: 20 mm.
- Maximum load: 100 kg per foot.

Supply: 4 feet.

316L stainless-steel hygienic feet	
Model with height (mm)	**Reference**
100	**NSYPHX100**
200	**NSYPHX200**

7

Paint accessories

For ranges
SM, SF, SD,
CRN, S3D, SDB

Aerosol paint can

- Air-drying paint.
- Content: 150 g.
- Colours: RAL 7035 and RAL 7032.

RAL	Reference
7032	**NSYBPA7032**
7035	**NSYBPA7035**

For ranges
SM, SF, SD,
CRN, S3D, SDB

Paint touch-up

- Paint for touching up with a brush.
- Air-drying.
- Colours: RAL 7035 and RAL 7032.

RAL	Reference
7032	**NSYTUP7032**
7035	**NSYTUP7035**

8

Thermal management system

ClimaSys 8/2

ClimaSys CV-CA Ventilation and Airing systems 8/8

ClimaSys CE Exchangers 8/30

ClimaSys CU Cooling Units 8/44

ClimaSys CR Resistance Heaters 8/80

ClimaSys CC Thermal Control 8/92

Thermal management system

Thermal conditioning of electric and electronic switchboards: a need

What is thermal control?

Technological evolution

The miniaturisation of components, the generalisation of electronics and the appearance of new electronically powered products have made temperature management into a growing need which must necessarily be considered when designing electrical and/or electronic switchboards.

What are the advantages of efficient thermal management?

Thermal management of electrical switchboards is a major factor for industrial maintenance.
Many risks are incurred by not having a suitable thermal solution, which can affect the service life of the components and the performance of the facilities to the extent of causing a halt in production.
The service life of the components also depends on the temperature and humidity conditions inside the enclosure. The ideal values range from +25 to +35 °C for the temperature and 40 to 60 % for the relative humidity (RH).

Cooling, heating, controlling

For the same reasons as the IP/IK protection ratings, equipment installed in enclosures requires suitable thermal protection.
Various solutions to these problems have been put forward. They will be chosen according to environmental conditions, the type of components in the electrical switchboard, etc.
In certain cases, it is sufficient to oversize the enclosure, use fans or air-air exchangers, etc. In other cases, where the ambient temperature is higher, it becomes necessary to install air-water exchangers or cooling units.

A solution for each need

We provide a complete Thermal offer to secure your installations.

Cooling	1. Forced ventilation systems 2. Air-air exchangers 3. Air-water exchangers 4. Cooling units
Heating	5. Resistance heaters
Controlling	6. Thermal control accessories
Calculating	7. New ProClima 5.0 software

Risks

Risks associated with the lack of thermal control

Random breakdowns and production halts result in heavy losses

Thermal control of enclosures extends the service life of the components and reduces their breakdown rate.

Reduction of the service life of the components

The service life of the components is considerably reduced if the temperature and humidity in enclosures are not controlled. Repeated sudden variations speed up the aging process.

Example
Batteries – Accumulators
Manufacturers recommend installing batteries in environments where the controlled temperature is 15 °C...25 °C.
Cold slows down the battery charging and discharging cycles. Heat increases the evaporation of water in the electrolyte and speeds up the oxidation of the plates.
Using batteries at temperatures above the recommended value therefore reduces their service life.

Sudden production halt

The appearance of hot spots increases the breakdown rate and endangers the production process.

Example
Electronic equipment
Most electronic industrial control systems are equipped with axial fans for their own thermal control. A failure of the fan can lead to a production halt.
Reduced service life of the fan is one consequence of the enclosure heating up.
24 V DC axial fan.
Temperature range: –20...+70 °C.
Service life at 20 ºC (L10 at 20 ºC): 50000 h.
Service life at 60 ºC (L10 at 20 ºC): 20000 h.

The service life of the equipment can drop from 50000 h to only 20000 h.

The internal temperature increases with a high degree of IP

In agressive atmospheres: dust, humidity, chemical agents, high temperatures, etc., the equipment is installed in industrial enclosures (IP 54) in order to protect it from the external environment. Nevertheless, it causes a reheating phenomenon which, if left unchecked, will be responsible in the short term for a halt in the operation of the components.

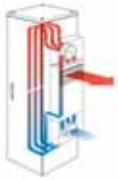
Example
Variable speed drives
A variable speed drive controlling a 45 kW (60 HP) motor is programmed to work at temperatures ranging up to 50 °C or 60 °C.
The power dissipated by this variable speed drive inside the enclosure can reach 1360 W.
This contribution of heat inside the enclosure will cause the top temperature to rise to 60 °C and probably cause a halt in production.

Our solution

Our new thermal offer includes a large range of solutions, suitable for all situations, from installing a ventilation system to exchangers or even a cooling unit.
Do not hesitate to contact us to find out the best thermal solution for your installation.

Choose the solution

How to select the best temperature control auxiliary?



System	Airing	Ventilating	Air-air exchanger
	Natural convection causes the temperature to drop inside the enclosure. Simple solutions for this case include installing grilles (without filter) or lifting the top.	Fans with filters are designed to evacuate a large amount of heat economically.	Air-air exchangers are equipped with an aluminium exchange cassette which separates the internal and external air circuits and prevents the entry of dust.
When should it be used?	This solution can only be used when the power to be dissipated is low, in an environment with small amounts of dust.	When larger amounts of heat need to be evacuated in a polluted environment.	The air-air exchangers are used in highly polluted environments or when it is necessary to evacuate large amounts of heat while guaranteeing the independence of the internal and external air circuits.
Ta: Ambient temperature Td: Desired temperature	 **Ta < Td**	 **Ta < Td**	 **Ta < Td**
The internal and external air circuits must be independent.	**NO**	**NO**	**YES**
Advantages	• Economic solution. • No maintenance. • Quick and easy installation.	• Economic solution. • Easy maintenance. • Quick and easy installation. • Even temperature inside the enclosure. • High protection rating: IP 54 or IP 55.	• The internal and external air circuits are independent. • Easy maintenance. • High protection rating: IP 54.
Disadvantages	• Small amount of heat evacuated. • Reduction of the IP protection rating. • Entry of dust particles.	• The temperature inside the enclosure is always higher than the external temperature. • The internal and external air circuits are in contact. • Maintenance required: filter replacement.	• The temperature inside the enclosure is always higher than the external temperature.
Solutions	 Ventilation devices	 Fans and outlet grilles	 Air-air exchangers

	Air-water exchanger	Cooling	Heating
	Air-water exchangers reduce the temperature inside the enclosure by means of a water-cooled exchange cassette. Temperature control inside the enclosure is performed by a thermostat which opens and closes an electro-valve.	Air-conditioning device providing efficient cooling of the enclosure, regardless of the outside air, and prevention against hot spots.	The resistance heaters prevent the formation of condensation and guarantee the ideal temperature for the correct operation of the electronic components.
	The air-water exchangers are used to evacuate large amounts of heat. They require a cold-water circuit with stable temperature and flow rate. They are specially recommended in difficult, highly polluted environments where there is no external air circuit.	The cooling units can be used in the harshest environments, where the temperature can reach up to 55 ºC. These devices control the temperature inside the enclosure and include an alarm function for signalling operational anomalies.	The resistance heaters are used to reheat the electrical switchboard when the ambient temperature is too low or to prevent the formation of condensation.
	 Ta > Td	 **Ta > Td**	 **Ta < Td**
	YES	**YES**	
	● The temperature inside the enclosure does not depend on the external temperature. ● The internal and external air circuits are independent. ● Security device against possible leaks.	● Even temperature inside the enclosure. ● High protection rating: IP 54. ● Use of an environmentally friendly gas.	● Small dimensions. ● Equipped with a PTC-type heating system, which stabilises the surface temperature of the aluminium profile. ● Available in two versions: insulated with low surface temperature or in aluminium when the surface temperature is limited to 75 ºC. ● The fan-equipped resistances guarantee an even temperature inside the enclosure.
	● A cold-water supply source is required. ● Specific pumping installation.	● Installation of a drain is recommended. ● Maintenance required: filter replacement.	
	 Air-water exchangers	 Cooling units	 Resistance heaters

Choose the solution
A thermal solution for every environment

Ventilation systems with filters

Specially recommended for installations in which:
- The ambient temperature is lower than the desired temperature inside the enclosure.
- A high protection rating is required: IP 54 or IP 55.
- The surrounding environment is relatively clean, allowing air to enter the enclosure.

Large range of solutions

- 42 possible combinations.
- Colours: RAL 7035 as standard, with the option of changing to RAL 7032 (with replacement grille **NSYCAG●●●LPC**).
- 38 to 850 m^3/h.
- According to 5 input voltages:
  AC: 400/440 V, 230 V, 115 V (50/60 Hz),
  DC: 48 V and 24 V.
- Broad range of accessories (filters, IP 55 & EMC covers, anti-vandalism kit).

Air-air exchangers

Specially recommended for installations in which:
- The ambient temperature is lower than the desired temperature inside the enclosure.
- A high protection rating is required: IP 54 or IP 55.
- The outside environment is highly polluted.

Large range of solutions

- 4 models.
- Two installation versions: top-mounting model and side-mounting model.
- Cooling power from 15 to 70 W/ºK .
- According to the input voltage: 230 V (50/60 Hz).

Air-water exchangers

Specially recommended for installations in which:
- The ambient temperature is higher than the desired temperature inside the enclosure.
- The outside environment is corrosive, the internal and external air circuits are independent.
- The outside environment is highly polluted, the temperature is controlled by cold water without requiring the use of an external air circuit.
- It is necessary to extract the heat from the enclosure to the outside of the building.

Large range of solutions

- 3 models.
- Two installation versions: top-mounting model and side-mounting model.
- Cooling power of 2100 W and 3150 W.
- According to the input voltage: 230 V (50/60 Hz).

Choose the solution

Cooling units

They control the temperature inside the enclosure in order to guarantee the correct operation of the components, regardless of the outside temperature, by separating the internal and external air circuits and reducing the humidity of the enclosure.

Large range of solutions

- 32 models.
- Two versions: top-mounting model and side-mounting model.
- Cooling power from 240 to 4000 W.
- Two control versions: electronic and mechanical.
- According to the input voltage: 230 V (50/60 Hz); 3 × 400/440 V (50/60 Hz); 115 V (50/60 Hz).
- Three installation types: surface, flush and partial flush (SLIM version).
- RAL 7035 and stainless steel.

Resistance heaters

With a double objective:
- To prevent the formation of condensation inside the enclosure.
- To reheat the electrical switchboard when the temperature is too low for the components to operate correctly.

Large range of solutions

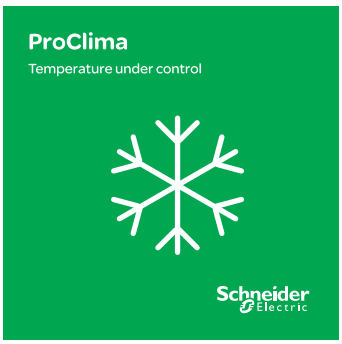
- 30 models.
- Insulated or aluminium versions.
- Versions with natural convection or fan.
- Cooling power from 10 to 550 W.
- According to the input voltage: 12 V to 450 V AC/DC.

Thermal control

Thermostats contol the temperature inside the enclosure and send a signal when certain defined values are exceeded:
- Maximum value (cooling action).
- Minimum value (reheating action).

Large range of solutions

- 15 models.
- Temperature control: adjustable thermostats; single or double.
- Relative humidity control: adjustable hygrostat.
- Temperature and relative humidity control: adjustable hygrotherm.



Calculation assistance: ProClima

We offer our customers and users a software application to help them select thermal accessories.
The programme draws up a heat balance and defines the best ventilation or cooling solution for the inside of the enclosure.

Ventilation systems
Introduction

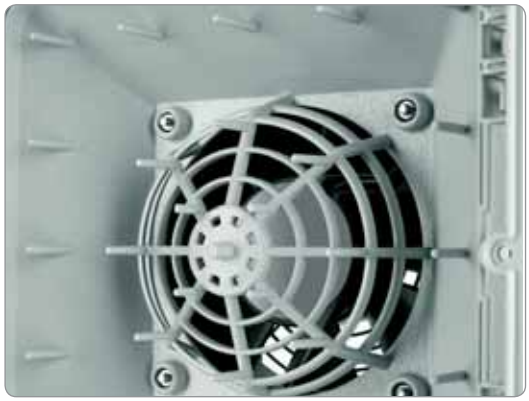
Large range of fans

Flow rate efficiency, high protection rating, quick installation and easier maintenance to secure all the applications.

Optimised flow rate: average increase of 50%

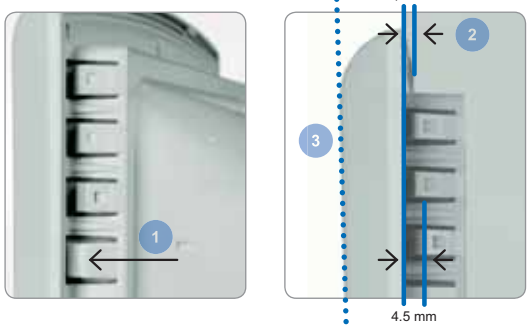
Maximum use of surface

The outlet grille maximises the air circulation.



Minimum loss of pressure

Improved air flow. The corners of the walls, the variable tilt of the slats, the fixing distance of the motor and the dimensions of the device have been studied to guarantee better aerodynamics and a smaller loss of pressure.



High protection rating: IP 54 as standard

Fixing guide (1)

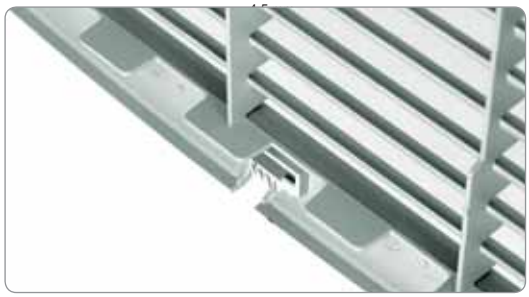
An exclusive new mechanism (patented) is used to centre the body of the fan on the wall of the enclosure. This system corrects machining faults.
In addition, it facilitates the correct operation of the fixing "clips".

Multi-thickness fixing clips (2)

This exclusive device (patented) guarantees easy and reliable fixing of the ventilation system on walls with a thickness of 0.8 to 4.5 mm, with no fixings.
It guarantees perfect compression of the seal around the outline of the cut-out.
The seal between the grille and the wall is guaranteed for all the materials: steel, stainless steel, polyester, aluminium, etc.

Inclined profile of the grille (3)

- This innovating profile helps protect the filter against vertical spraying:
  – Each slat is protected by the slat above it.
  – The external dimensions remain small.



IP 54-55

A patented system allows the evacuation of water absorbed by the filter, in particular during high-pressure spraying.

Hot-fitted sealing gasket

The polyurethane gasket, hot cast, guarantees a long-lasting seal.

Effective system for retaining the filter

The system for holding the synthetic filter in the cavity of the filter holder guarantees a protection rating of IP 54, in the most difficult conditions.

Ventilation systems
Introduction

Innovative design

Innovative design with flowing lines

Easy installation

Quick installation

- Safe, reliable fixing with the assisted fixing device and the system of multi-thickness fixing clips.
- Fixing also possible using screws.
- Easy to invert.
- To operate as extractors, all the motors can be inverted by simply removing four screws.

Easy maintenance

Quick filter replacement

Quick, easy and safe replacement of the filter installed in the fan, even during operation.

Quality of the components

Selection of the motors

Improved flow rate and longer service life.
Large range of input voltages available on all the motors delivered as standard, with alternating 50/60 Hz or direct current.

Ventilation offer

With homologation UL available.

Large range of accessories

Selection of plastic materials

ASA / PC material chosen to manufacture the ventilation system:
- Improved resistance (longer service life) to UV.
- Excellent mechanical operation.
- Standard grille colours: RAL 7035 and RAL 7032 (replacement accessory).

Other colours are available on demand (contact us).
ASA / PC plastic material, self-extinguishing according to standard UL94 V0.

Filtres

IP 55 cover

Large range of accessories

Large variety of filters

- Filters for oily environments (OEM).
- Anti-insect filters.
- Fine filters (improved protection against dust).

See page **8/20**.

Sealing cover IP 55

- Available in two versions:

– Aluzinc: RAL 7035 grey paint.
– Stainless steel.

See page **8/21**.

EMC cover

Thanks to this accessory, the various ventilation systems offer greater resistance to magnetic fields (EMC), preventing any interference with the equipment installed inside the enclosure.
See page **8/22**.

Anti-vandalism kit

Accessory for outdoor applications, in contact with the public.
It prevents unwanted opening of the grille.
See page **8/20**.

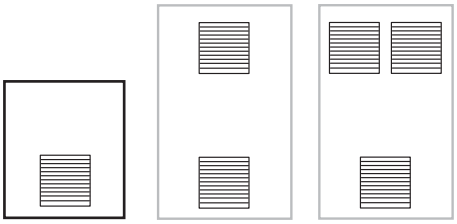
ENVIRONMENTALLY FRIENDLY

Environment

- Recyclable plastic materials and filters.
- Motors according to the RoHS directive.
- Lower power consumption for improved air flow.

Ventilation system
Selection guide

Ventilation systems with filters



	Fan flow rate (m^3/h)			Voltage	Type of connection C = by cable F = by faston (1) B = by terminal block	
	Free with filter	With 1 outlet grille	With 2 outlet grilles			
	50 Hz	50 Hz	50 Hz			
	38	25	33	230 V	C	
	38	27	35	115 V	C	
	58	39	47	24 V DC	C	
	44	34	41	48 V DC	C	
	85	63	71	230 V	F	
	79	65	73	115 V	F	
	80	57	77	24 V DC	F	
	79	59	68	48 V DC	F	
	165	153	161	230 V	F	
	164	153	161	115 V	F	
	188	171	179	24 V DC	F	
	193	171	179	48 V DC	F	
	302	260	268	230 V	F	
	302	263	271	115 V	F	
	262	221	229	24 V DC	F	
	247	210	218	48 V DC	F	
	562	473	481	230 V	B	
	582	485	494	115 V	B	
	838	718	728	230 V	B	
	983	843	854	115 V	B	
	931	798	809	400/440 V	B	

(1) Fan models with connection type (F) are delivered with the connection cord included (2 metres).

	Dimensions (mm)		Reference						
	Total (external)	Cut-out	Fan with filter	Outlet grille	Colour kit	IP 55	IP 55 stainless steel	EMC
			RAL 7035		RAL 7032			
	137 × 117	92 × 92	NSYCVF38M230PF	NSYCAG92LPF	NSYCAG92LPC	-	-	-
			NSYCVF38M115PF					
			NSYCVF38M24DPF					
			NSYCVF38M48DPF					
	170 × 150	125 × 125	NSYCVF85M230PF	NSYCAG125LPF	NSYCAG125LPC	NSYCAP125LZF	NSYCAP125LXF	NSYCAP125LE
			NSYCVF85M115PF					
			NSYCVF85M24DPF					
			NSYCVF85M48DPF					
	268 × 248	223 × 223	NSYCVF165M230PF	NSYCAG223LPF	NSYCAG223LPC	NSYCAP223LZF	NSYCAP223LXF	NSYCAP223LE
			NSYCVF165M115PF					
			NSYCVF165M24DPF					
			NSYCVF165M48DPF					
			NSYCVF300M230PF					
			NSYCVF300M115PF					
			NSYCVF300M24DPF					
			NSYCVF300M48DPF					
	336 × 316	291 × 291	NSYCVF560M230PF	NSYCAG291LPF	NSYCAG291LPC	NSYCAP291LZF	NSYCAP291LXF	NSYCAP291LE
			NSYCVF560M115PF					
			NSYCVF850M230PF					
			NSYCVF850M115PF					
			NSYCVF850M400PF					

Ventilation systems
Forced ventilation 38 m³/h

General characteristics

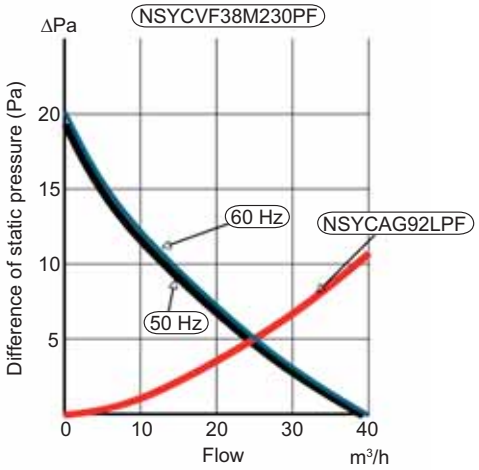
- The fans comprise an axial motor, a protective housing on the front and rear surfaces and a filter designed to retain dust particles.
- This filter can be replaced during operation without risk of contact with the rotating element.
- The cut-out template supplied with the device avoids the need for marking and protects the surface of the enclosure during handling.
- RAL 7035 grey in the standard offer with the possibility to change to RAL 7032 by means of a replacement grille.

Conditions of use

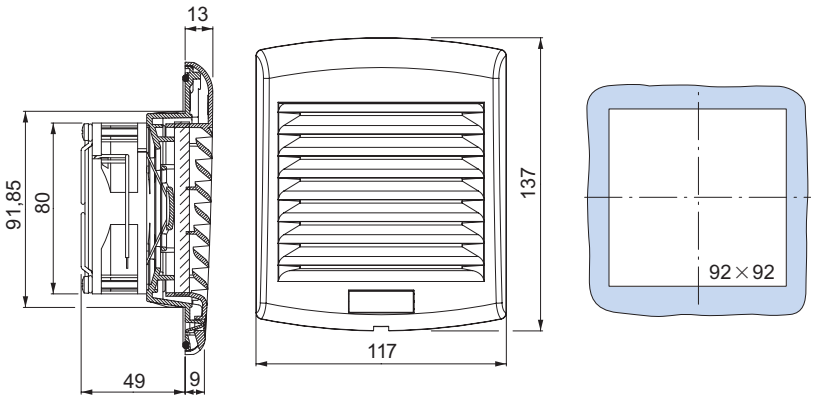
- The outside temperature (Te) must be 5 °C lower than the desired temperature (Ts) inside the enclosure.
- The filters that equip the fans must be cleaned and replaced regularly.
- The surrounding environment must be relatively clean and overfrequent filter replacement should be avoided.
- Bear in mind the pressure losses caused by the outlet element (grille with filter, ventilation louvre or simple opening) when determining the fan flow rate.

Specifications	Reference			
Colour: RAL 7035	**NSYCVF38M230PF**	**NSYCVF38M115PF**	**NSYCVF38M24DPF**	**NSYCVF38M48DPF**
Free flow rate with standard filter (m³/h)	38 (50 Hz) 39 (60 Hz)	38 (50 Hz) 39 (60 Hz)	58	44
Flow rate with 1 outlet grille (m³/h)	25 (50 Hz) 26 (60 Hz)	27 (50 Hz) 28 (60 Hz)	39	34
Nominal voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	150 V...250 V	75 V...125 V	10 V...27.6 V	36 V...56 V
Absorbed power (50/60 Hz)	4.5/4.8 W	3.3/3.5 W	3.6 W	3.6 W
Max. intensity (50/60 Hz)	0.16/0.17 A	0.16/0.16 A	0.18 A	70 mA
Noise level	40/41 dB (A)			
Bearing	Balls			
IP	54			
External dimensions (mm)	137 × 117 × 49			
Cut-out (mm)	92 × 92			
Weight	0.220 kg		0.230 kg	
Material	Injected thermoplastic (ASA PC). self-extinguishing according to UL94 V0			
Operating temperature	-10...+70 °C			
Storage temperature	-40...+70 °C			
Max. static pressure (flow rate 0 m³/h)	29 Pa			

Flow curves



Dimensions



Ventilation systems
Forced ventilation 85 m³/h

General characteristics

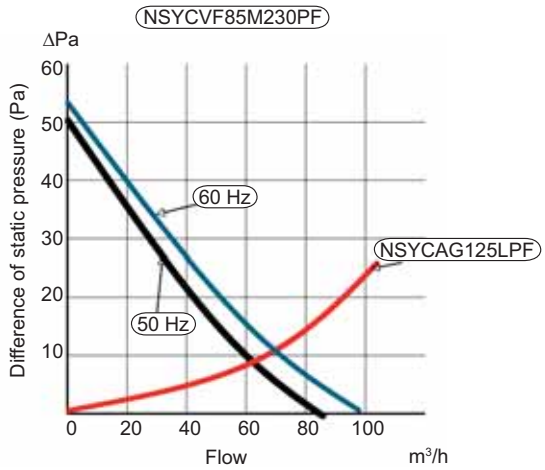
- The fans comprise an axial motor, a protective housing on the front and rear surfaces and a filter designed to retain dust particles.
- This filter can be replaced during operation without risk of contact with the rotating element.
- Optionally, the device can be equipped with a filter that provides even more efficient protection for your sensitive facilities against dust particles.
- The cut-out template supplied with the device avoids the need for marking and protects the surface of the enclosure during handling.
- RAL 7035 grey in the standard offer with the possibility to change to RAL 7032 by means of a replacement grille.

Conditions of use

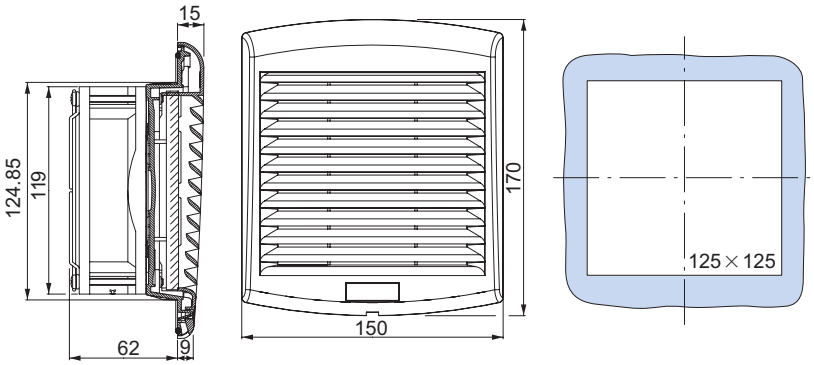
- The outside temperature (Te) must be 5 °C lower than the desired temperature (Ts) inside the enclosure.
- The filters that equip the fans must be cleaned and replaced regularly.
- The surrounding environment must be relatively clean and overfrequent filter replacement should be avoided.
- Bear in mind the pressure losses caused by the outlet element (grille with filter, ventilation louvre or simple opening) when determining the fan flow rate.

Specifications	Reference			
Colour: RAL 7035	**NSYCVF85M230PF**	**NSYCVF85M115PF**	**NSYCVF85M24DPF**	**NSYCVF85M48DPF**
Free flow rate with standard filter (m³/h)	85 (50 Hz) 98 (60 Hz)	79 (50 Hz) 92 (60 Hz)	80 m³/h	
Flow rate with 1 outlet grille (m³/h)	63 (50 Hz) 72 (60 Hz)	65 (50 Hz) 74 (60 Hz)	60 m³/h	
Nominal voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	175 V...253 V	75 V...126 V	10 V...27.6 V	25 V...55.2 V
Absorbed power	17/15 W	16/15 W	7.6 W	8 W
Max. intensity (50/60 Hz)	0.121/0.097 A	0.207/0.179 A	0.30 A	0.173 A
Noise level	46/49 dB (A)			
Bearing	Balls			
IP	54			
External dimensions (mm)	170 × 150 × 62			
Cut-out (mm)	125 × 125			
Weight	0.780 kg		0.480 kg	
Material	Injected thermoplastic (ASA PC). self-extinguishing according to UL94 V0			
Operating temperature	-20...+60 °C		-10...+70 °C	
Storage temperature	-40...+70 °C			
Max. static pressure (flow rate m³/h)	50 Pa			

Flow curves



Dimensions



Ventilation systems
Forced ventilation 165 m³/h

General characteristics

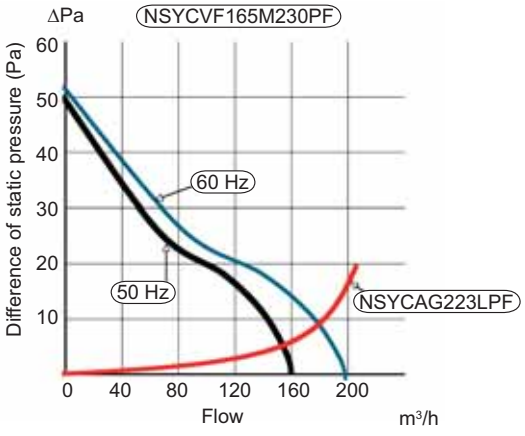
- The fans comprise an axial motor, a protective housing on the front and rear surfaces and a filter designed to retain dust particles.
- This filter can be replaced during operation without risk of contact with the rotating element.
- Optionally, the device can be equipped with a filter that provides even more efficient protection for your sensitive facilities against dust particles.
- The cut-out template supplied with the device avoids the need for marking and protects the surface of the enclosure during the handling.
- RAL 7035 grey in the standard offer with the possibility to change to RAL 7032 by means of a replacement grille.

Conditions of use

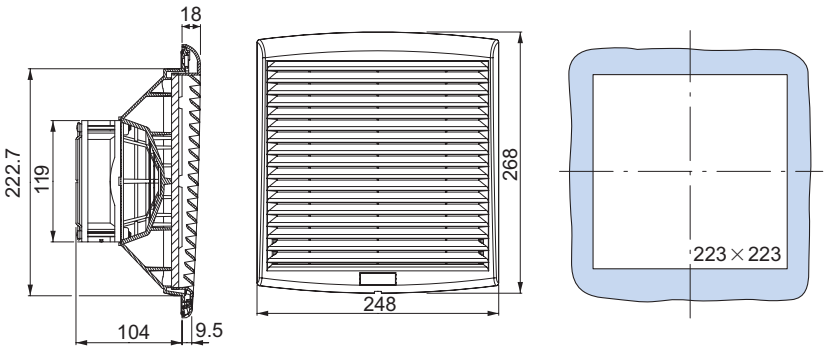
- The outside temperature (Te) must be 5 °C lower than the desired temperature (Ts) inside the enclosure.
- The filters that equip the fans must be cleaned and replaced regularly.
- The surrounding environment must be relatively clean and overfrequent filter replacement should be avoided.
- Bear in mind the pressure losses caused by the outlet element (grille with filter, ventilation louvre or simple opening) when determining the fan flow rate.

Specifications	Reference			
Colour: RAL 7035	NSYCVF165M230PF	NSYCVF165M115PF	NSYCVF165M24DPF	NSYCVF165M48DPF
Free flow rate with filter (m³/h)	165 (50 Hz) 193 (60 Hz)		190 m³/h	
Flow rate with 1 outlet grille (m³/h)	153 (50 Hz) 171 (60 Hz)		171 m³/h	
Flow rate with 2 outlet grilles (m³/h)	161 (50 Hz) 175 (60 Hz)		179 m³/h	
Nominal voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	175 V...253 V	75 V...126 V	10 V...27,6 V	25 V...55,2 V
Absorbed power	16.3/14.3 W	15.5/14.4 W	8 W	8.7 W
Max. intensity (50/60 Hz)	0.12/0.94 A	0.20/0.18 A	0.3 A	0.18 A
Noise level	50/51 dB (A)			
Bearing	Balls			
IP	54			
External dimensions (mm)	268 × 248 × 104			
Cut-out (mm)	223 × 223			
Weight	1140 kg		0.810 kg	
Material	Injected thermoplastic (ASA PC), self-extinguishing according to UL94 V0			
Operating temperature	-20...+60 °C		-10...+70 °C	
Storage temperature	-40...+70 °C			
Max. static pressure	50 Pa			

Flow curves



Dimensions



Ventilation systems
Forced ventilation 300 m³/h

General characteristics

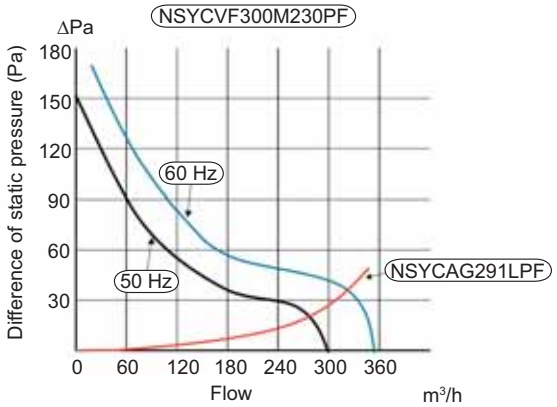
- The fans comprise an axial motor, a protective housing on the front and rear surfaces and a filter designed to retain dust particles.
- This filter can be replaced during operation without risk of contact with the rotating element.
- Optionally, the device can be equipped with a filter that provides even more efficient protection for your sensitive facilities against dust particles.
- The cut-out template supplied with the device avoids the need for marking and protects the surface of the enclosure during handling.
- RAL 7035 grey in the standard offer with the possibility to change to RAL 7032 by means of a replacement grille

Conditions of use

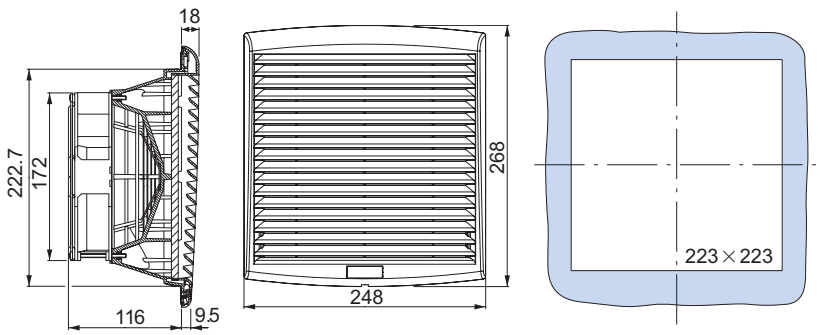
- The outside temperature (Te) must be 5 °C lower than the desired temperature (Ts) inside the enclosure.
- The filters that equip the fans must be cleaned and replaced regularly.
- The surrounding environment must be relatively clean and overfrequent filter replacement should be avoided.
- Bear in mind the pressure losses caused by the outlet element (grille with filter, ventilation louvre or simple opening) when determining the fan flow rate.

Specifications	Reference			
Colour: RAL 7035	NSYCVF300M230PF	NSYCVF300M115PF	NSYCVF300M24DPF	NSYCVF300M48DPF
Free flow rate with filter (m³/h)	300 (50 Hz) 350 (60 Hz)		262 m³/h	
Flow rate with 1 outlet grille (m³/h)	260 (50 Hz) 307 (60 Hz)		221 m³/h	
Nominal voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	24 V DC	48 V DC
Voltage range	145 V...253 V	75 V...126 V	12 V...30 V	25 V...60 V
Absorbed power	36/37 W	36/36 W	13 W	11 W
Max. intensity (50/60 Hz)	0.17/0.16 A	0.35/0.32 A	0.53 A	0.24 A
Noise level	55/56 dB (A)			
Bearing	Balls			
IP	54			
External dimensions (mm)	268 × 248 × 116		268 × 248 × 103,4	
Cut-out (mm)	223 × 223			
Weight	1.3 kg		1.1 kg	
Material	Injected thermoplastic (ASA PC), self-extinguishing according to UL94 V0			
Operating temperature	-10...+70 °C		-10...+70 °C	
Storage temperature	-40...+70 °C			
Max. static pressure	158 Pa			

Flow curves



Dimensions



Ventilation systems
Forced ventilation 560-850 m³/h

General characteristics

- The fans comprise an axial motor, a protective housing on the front and rear surfaces and a filter designed to retain dust particles.
- This filter can be replaced during operation without risk of contact with the rotating element.
- Optionally, the device can be equipped with a filter that provides even more efficient protection for your sensitive facilities against dust particles.
- The cut-out template supplied with the device avoids the need for marking and protects the surface of the enclosure during handling.
- RAL 7035 grey in the standard offer with the possibility to change to RAL 7032 by means of a replacement grille.

Conditions of use:

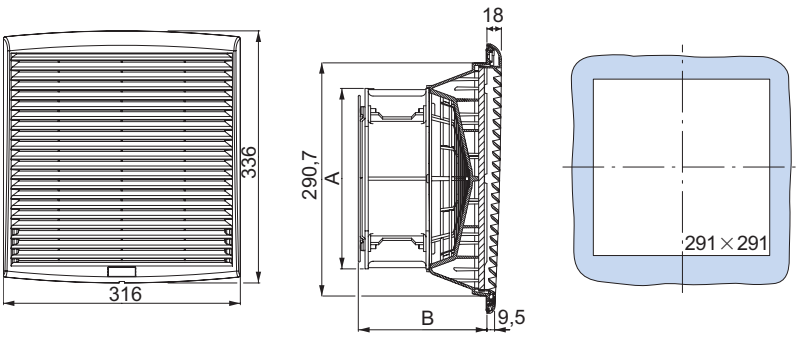
- The outside temperature (Te) must be 5 °C lower than the desired temperature (Ts) inside the enclosure.
- The filters that equip the fans must be cleaned and replaced regularly.
- The surrounding environment must be relatively clean and overfrequent filter replacement should be avoided.
- Bear in mind the pressure losses caused by the outlet element (grille with filter, ventilation louvre or simple opening) when determining the fan flow rate.

Specifications	Reference				
Colour: RAL 7035	NSYCVF560M230PF	NSYCVF560M115PF	NSYCVF850M230PF	NSYCVF850M115PF	NSYCVF850M400PF
Free flow rate with filter (m³/h)	562 (50 Hz) 586 (60 Hz)		838 (50 Hz) 803 (60 Hz)	983 (50 Hz) 944 (60 Hz)	931 (50 Hz) 803 (60 Hz)
Flow rate with 1 outlet grille (m³/h)	473 (50 Hz) 477 (60 Hz)		718 (50 Hz) 568 (60 Hz)	843 (50 Hz) 642 (60 Hz)	798 (50 Hz) 568 (60 Hz)
Nominal voltage	230 V (50/60 Hz)	115 V (50/60 Hz)	230 V (50/60 Hz)	115 V (50/60 Hz)	400 V (50/60 Hz)
Voltage range	207 V...244 V	103 V...122 V	207 V...244 V	103 V...122 V	396 V...466 V
Absorbed power	68/85 W	65/83 W	150/195 W	145/182 W	126/126 W
Max. intensity (50/60 Hz)	0.52/0.370 A	0.60/0.72 A	0.65/0.85 A	1.279/1.6 A	0.226/0.232 A
Noise level	59/59 dB (A)		76/75 dB (A)	78/77 dB (A)	77/75 dB (A)
Bearing	Balls				
IP	54				
External dimensions (mm)	336 × 316 × 161		336 × 316 × 162		
Cut-out (mm)	291 × 291				
Weight	3.2 kg		4.1 kg		
Material	Injected thermoplastic (ASA PC). self-extinguishing according to UL94 V0				
Operating temperature	-15...+60 °C				
Storage temperature	-40...+70 °C				
Max. static pressure	140 Pa		170 Pa		

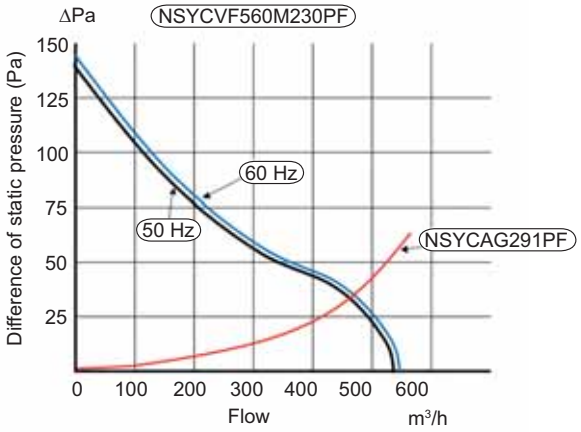
Ventilation systems
Forced ventilation 560-850 m³/h

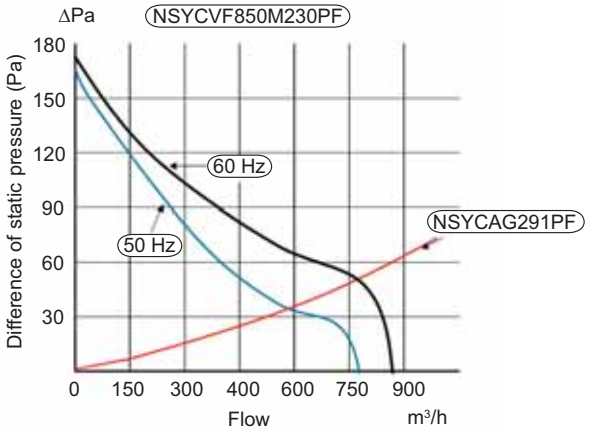
Dimensions

A	B	Reference
225	160.5	**NSYCVF560M230PF** **NSYCVF560M115PF**
280	162	**NSYCVF850M230PF** **NSYCVF850M115PF**



Flow curves





8

Ventilation systems

RAL 7035

Outlet grilles

- Delivered with G2 M1 synthetic standard filter.
- Material: Injected thermoplastic (ASA PC), self-extinguishing according to UL94 V0.

Dimensions (mm)		IP	Reference RAL 7035
Total (external)	Cut-out		
137 × 117 × 13	92 × 92	54	**NSYCAG92LPF**
170 × 150 × 15	125 × 125	54	**NSYCAG125LPF**
268 × 248 × 18	223 × 223	54	**NSYCAG223LPF**
336 × 316 × 18	291 × 291	54	**NSYCAG291LPF**

RAL 7032

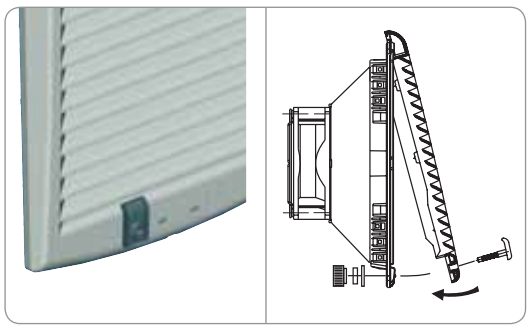
Replacement grilles in RAL 7032

- External part of the grille (for fan or outlet grille) for changing the colour to RAL 7032.

Dimensions (mm) Total (external)	IP	Reference RAL 7032
137 × 117 × 13	54	**NSYCAG92LPC**
170 × 150 × 15	54	**NSYCAG125LPC**
268 × 248 × 18	54	**NSYCAG223LPC**
336 × 316 × 18	54	**NSYCAG291LPC**

Filters

Concept	For fans and grilles		Pack.	Reference
	External dimensions (mm)	Cut-out (mm)		
G2 M1 synthetic standard filters	137 × 117	92 × 92	5	**NSYCAF92**
	170 × 150	125 × 125	5	**NSYCAF125**
	268 × 248	223 × 223	5	**NSYCAF223**
	336 × 316	291 × 291	5	**NSYCAF291**
Filters for greasy environments G2 M1	170 × 150	125 × 125	5	**NSYCAF125O**
	268 × 248	223 × 223	5	**NSYCAF223O**
	336 × 316	291 × 291	5	**NSYCAF291O**
G3 M1 synthetic fine filters	170 × 150	125 × 125	5	**NSYCAF125T**
	268 × 248	223 × 223	5	**NSYCAF223T**
	336 × 316	291 × 291	5	**NSYCAF291T**
Stainless-steel anti-insect filters	137 × 117	92 × 92	1	**NSYCAF92M**
	170 × 150	125 × 125	1	**NSYCAF125M**
	268 × 248	223 × 223	1	**NSYCAF223M**
	336 × 316	291 × 291	1	**NSYCAF291M**



Anti-vandalism kit

- Prevents the grille from being opened from the outside.
- The unlocking thumbwheel is accessed from the inside of the wall-mounting enclosure.
- RAL 7011 colour (same material as the grille: ASA PC).

Minor packaging	Reference
2	**NSYCAAPV**

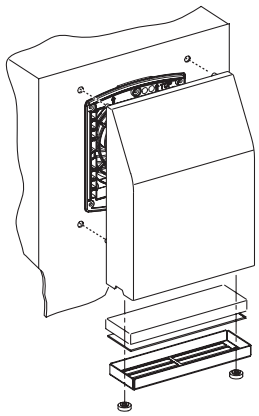
Ventilation systems

Sealing cover IP 55

- This solution protects the fan or the grille from any direct sprays.
- 2 materials available:
– Aluzinc for RAL 7035 outdoor applications.
– Stainless steel 304 for food and beverage applications.
- Protection rating: IP 55.
- Resistance to mechanical impacts: IK 10.
- Double insulation maintained if installed in an insulated enclosure.
- UL certification.
- The cover is placed over the fan or the grille with a filter located at the bottom of the cover to prevent the entry of particles.
- Easy access to the filter: only two screws needed.
- When mounting: remove the external part of the fan or the grille as well as the filter.
- The cover is the preferred solution to guarantee the following:
– An efficient air flow for cooling.
– And true IP 55 rating.
- It is necessary to order 1 fan + 1 grille + 2 covers to have a complete system.

Flow rate (m^3/h)* with cover		Dimensions (mm)		Cover reference		Spare filter for cover	Fan reference	Grille reference
Free	With 1 outlet grille	External	Cut-out	Aluzinc RAL 7035	Stainless steel 304	Minor pack. 5 p	RAL 7035	RAL 7035
74	53	240 × 180 × 60	125 × 125	**NSYCAP125LZF**	**NSYCAP125LXF**	**NSYCAF125L55**	**NSYCVF85M230PF**	**NSYCAG125LPF**
110	82	350 × 305 × 80	223 × 223	**NSYCAP223LZF**	**NSYCAP223LXF**	**NSYCAF223L55**	**NSYCVF165M230PF**	**NSYCAG223LPF**
165	123	350 × 305 × 80	223 × 223	**NSYCAP223LZF**	**NSYCAP223LXF**	**NSYCAF223L55**	**NSYCVF300M230PF**	**NSYCAG223LPF**
316	265	430 × 373 × 105	291 × 291	**NSYCAP291LZF**	**NSYCAP291LXF**	**NSYCAF291L55**	**NSYCVF560M230PF**	**NSYCAG291LPF**
502	430	430 × 373 × 105	291 × 291	**NSYCAP291LZF**	**NSYCAP291LXF**	**NSYCAF291L55**	**NSYCVF850M230PF**	**NSYCAG291LPF**

*The impact on the flow rates of the fans supplied with the other voltages is similar to those provided by the 230 V fans.



Ventilation systems

IP 54 EMC Fan

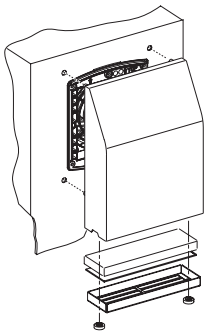
To effectively protect the equipment against electromagnetic disruptions, the EMC fan is equipped with:
- A steel frame covering the plastic elements (self-extinguishing ABS according to standard UL94 V0).
- A metal grille attached to the frame.
- A beryllium gasket guaranteeing conductivity between the perimeter of the fan unit and the enclosure.

Dimensions (mm)		Flow rate (m^3/h)	Voltage (V)	Reference
External	Cut-out			
150 × 150 × 36	125 × 125	56	230	**NSY17990**
250 × 250 × 36	223 × 223	130	230	**NSY17991**
325 × 325 × 36	291 × 291	460	230	**NSY17992**

IP 54 EMC outlet grille

Grille equipped with:
- A steel frame covering the plastic elements (self-extinguishing ABS according to standard UL94 V0).
- A metal grille attached to the frame.
- A beryllium gasket guaranteeing conductivity between the perimeter of the grille and the enclosure.

Dimensions (mm)		Reference
External	Cut-out	
150 × 150 × 36	125 × 125	**NSY17996**
250 × 250 × 36	223 × 223	**NSY17997**
325 × 325 × 36	291 × 291	**NSY17998**



EMC cover IP 55

- This solution guarantees protection against electromagnetic disruptions and guarantees IP 55.
- The EMC cover is installed on the fans or standard IP 54 outlet grilles.
- The cover, made from aluzinc sheet steel, completely covers the fan or outlet grille.
- Conductivity is obtained by means of:

– A conductive coating (2 Ω).
– A conductive copper braid.

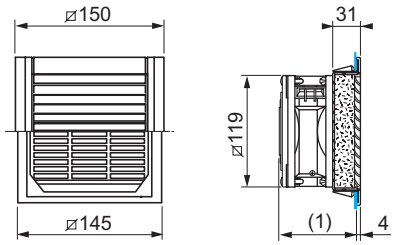
- Protection degree: IP 55.
- Resistance to mechanical impacts: IK 10.
- RAL 7035 grey.
- Absorption curve according to standard IEEE 299 1997 (UNE 50147-1).

Flow rate (m^3/h)*		Dimensions (mm)		Cover ref.	Spare filter for cover	Fan reference	Grille reference
Free	With 1 outlet grille	External	Cut-out	Aluzinc RAL 7035	Minor pack. 5 p	RAL 7035	RAL 7035
74	53	240 × 180 × 60	125 × 125	**NSYCAP125LE**	**NSYCAF125L55**	**NSYCVF85M230PF**	**NSYCAG125LPF**
110	82	350 × 305 × 80	223 × 223	**NSYCAP223LE**	**NSYCAF223L55**	**NSYCVF165M230PF**	**NSYCAG223LPF**
165	123	350 × 305 × 80	223 × 223	**NSYCAP223LE**	**NSYCAF223L55**	**NSYCVF300M230PF**	**NSYCAG223LPF**
316	265	430 × 373 × 105	291 × 291	**NSYCAP291LE**	**NSYCAF291L55**	**NSYCVF560M230PF**	**NSYCAG291LPF**
502	430	430 × 373 × 105	291 × 291	**NSYCAP291LE**	**NSYCAF291L55**	**NSYCVF850M230PF**	**NSYCAG291LPF**

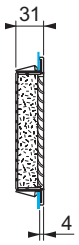
*The impact on the flow rates of the fans with different voltages is similar to the impact of the 230 V fans.

IP 55 EMC dimensions

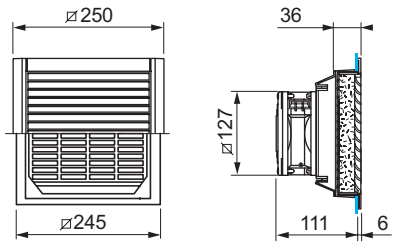
NSY17990



NSY17996

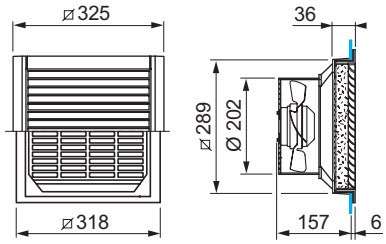


NSY17991

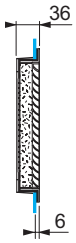


NSY17997

NSY17992

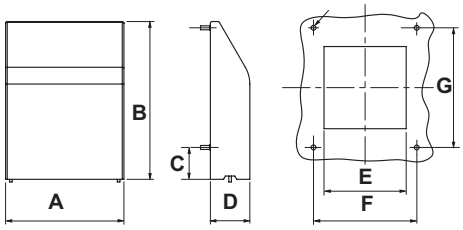


NSY17998



Dimensions of IP 54 and EMC covers

Dimensions (mm)											
A	B	C	D	E	F	G	Nb. of fixing points	Cover reference		
								IP 54		CEM
180	240	49	60	125	157	182	4	NSYCAP125LZF	NSYCAP125LXF	NSYCAP125LE
305	350	61	80	223	283	280	8	NSYCAP223LZF	NSYCAP223LXF	NSYCAP223LE
373	430	73	105	291	351	348	8	NSYCAP291LZF	NSYCAP291LXF	NSYCAP291LE



Ventilation systems
Fans by components

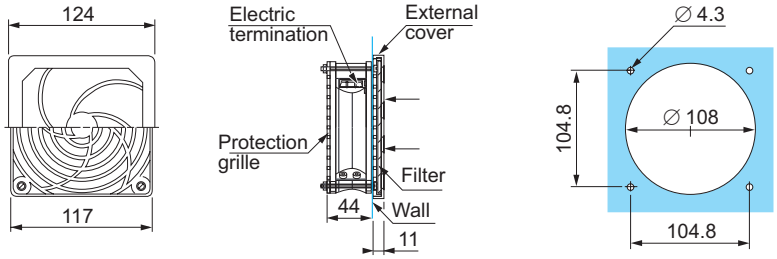
IP 20 fans

- Free flow without filter or grille: 170 m³/h.
- Two models according to the input voltage: 230 and 115 V, 50-60 Hz.
- Accessories: IP 20 outlet grille (ABS, black) and filter (black polyurethane foam).

Voltage (V)	Flow rate (m³/h)	Reference
115	65	**NSYCVF65M115PF**
230	65	**NSYCVF65M230PF**

Accessories

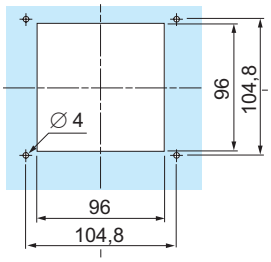
Dimensions (mm)	Description	Reference
124 × 124 × 11 mm	Outlet grille	**NSYCAG108LP**
-	Filter	**NSYCAF108**



IP 33 ventilation kit

- Ventilation kit comprised of:
  – one 120 120 × 120 × 38 mm fan, 230 V-50/60 Hz, free flow rate 170 m³/h, IP 33/IK 10.
  – two 120 × 120 mm metal louvres, RAL 7035.
  – two 115 × 98 mm anti-insect grilles, stainless-steel 304L wire ∅ 0.32 mm braided, 1.07-mm meshes.
  – A power cord.
  – The fixings required for installation.
- Overall flow rate: 54 m³/h.
- Resistance to mechanical impacts: IK 10.

Voltage (V)	Flow rate (m³/h)	Reference
230	54	**NSYCVF54M230MM2**



Top-mounting fan
ref. **NSYCVF575M230MF** / **NSYCVF570M115MF**

Top hood with top fan IP 54

- Fan with hood, for floor-standing enclosures.
- Device delivered with fixings and connection terminal block.
- Electric power: 85 W.
- A flow rate of 350 m³/h is obtained with an outlet grille ref. **NSYCAG291LPF**, (cut-out 291 × 291 mm).
- Noise level: 64 dB (A).
- Installation and removal from the outside.

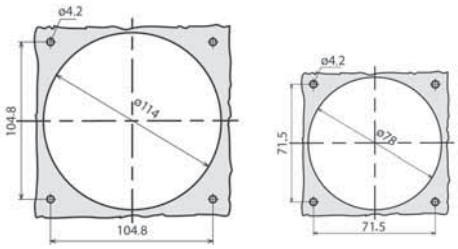
Flow rate* (m³/h)	Voltage (V)	Weight (kg)	Reference
570	115	5.8	**NSYCVF570M115MF**
575	230	5.8	**NSYCVF575M230MF**

* Flow rate measured without counter-pressure.

Ventilation systems
Fans by components

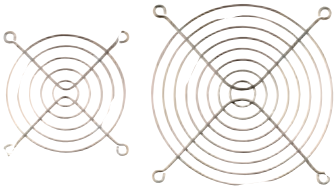
Fan motor

- Turbine-type fan motor for ventilation/extraction.



Outlet grilles

- Outlet filter kit for enclosure ventilation. For coupling to fans **NSYCVF156M●●●** and **NSYCVF35M●●●**.



Rear protective grille

- Protective grille for enclosure fan motor. For coupling to fans **NSYCVF156M●●●** and **NSYCVF35M●●●**.

Fan connection cable

- For coupling to the connection terminal of the fan motors.

Reference
NSYCVAC100

Fan motor reference	Flow rate (m^3/h)	Voltage (V)	Absorbed power (W)	Noise level (dB)	External dimensions (mm)	Outlet grille reference	Protective grille reference
NSYCVF156M230	156	230/50-60	17/15	42	120 × 120 × 38	**NSYCAG114LPF**	**NSYCVA114M**
NSYCVF156M115	156	120/50-60	17/15	42	120 × 120 × 38	**NSYCAG114LPF**	**NSYCVA114M**
NSYCVF35M230	35	230/50-60	16/14	32	80 × 80 × 25	**NSYCAG78LPF**	**NSYCVA78M**
NSYCVF35M115	35	120/50-60	16/14	32	80 × 80 × 25	**NSYCAG78LPF**	**NSYCVA78M**

Ventilation systems
Circulating

Circulation fan

- User protection according to DIN 31001.
- Power: 17 W.
- Dimensions:

– Fan: 119 × 119 × 38 mm.
– Collar: length: 140 mm; fixing centre-to-centre distance: 130 mm.

- Installation on ball-bearing.

Flow rate (1) (m^3/h)	Voltage (V)	Weight (kg)	dB (A)	Reference
170	230	0.82	41	**NSYCVF170M115**
170	115	0.82	41	**NSYCVF170M230**

(1) Free flow.

Tangential fan, 19" 2 U

- Air is sucked in from the front, filtered and forced vertically through the equipment.
- Voltage: 230 V/50-60 Hz.
- Electric power: 37 W.
- Delivered without connection cord.

Flow rate (1) (m^3/h)	Voltage (V)	Reference
300	230	**NSYAVG2U300**

(1) Flow rate measured without counter-pressure.

Circulation fan, 19" 1 U

- Increases the speed of upward air circulation, in particular between trays with cards.
- Frontal operation LED.
- Delivered without connection cord.
- It is advisable to install slides, ref. **NSYGB140** to guarantee optimal support of the fan.

Flow rate (1) (m^3/h)	Voltage (V)	No.	Weight (kg)	Reference
486	230	3	3.3	**NSYAVD1U480**
972	230	6	5.5	**NSYAVD1U970**
1458	230	9	7.8	**NSYAVD1U1450**
552	48 (2)	3	3.3	**NSYAVD1U550M48**

(1) Flow rate measured without counter-pressure.
(2) Direct current.

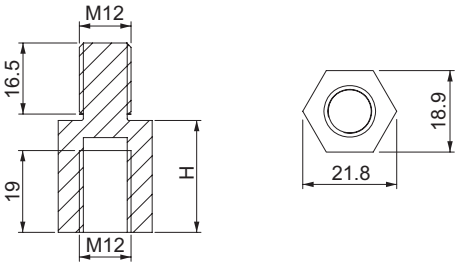
P (W)	I (mA)	dB (A)	Depth (mm)	Reference
45	300	43	208	**NSYAVD1U480**
90	600	44	330	**NSYAVD1U970**
135	900	45	452	**NSYAVD1U1450**
21.3	330	43	208	**NSYAVD1U550M48**

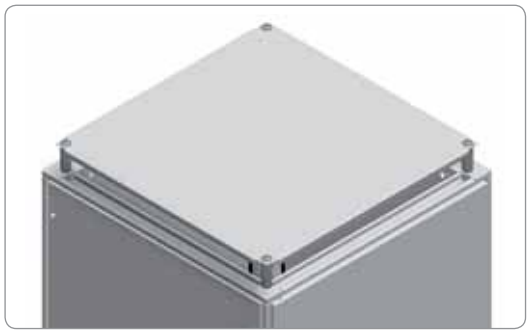
Ventilation systems
Natural airing

Roof elevators

- Allow the roof to be raised, providing natural airing.
- They are screwed onto the structure, at the roof fixing point.
- Material: zinc-coated steel.
- Supply: 4 elevators.

Top elevation (mm) (H)	Reference
26	**NSYRE26**
60	**NSYRE60**

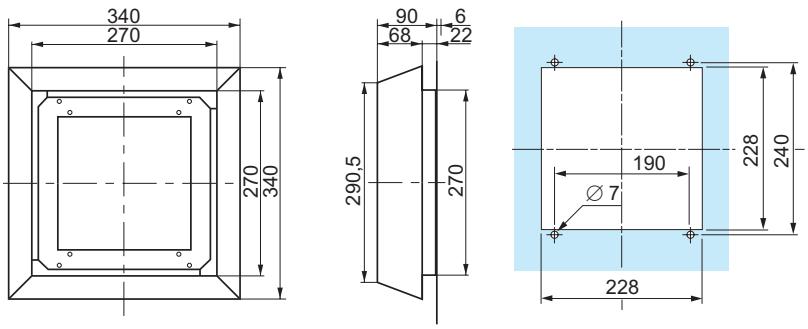




Hood for natural airing, IP 54

- Natural airing device for coupling to the top of metal floor-standing enclosures.
- Solution for combining with the ventilation slots.
- Fixing to the top by means of caged nuts and special screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.
- Protection rating: IP 54.
- Weight: 4.6 kg.
- Supply: one hood for natural airing and fixing elements.

Reference
NSYCAC228RMF



Spare filter

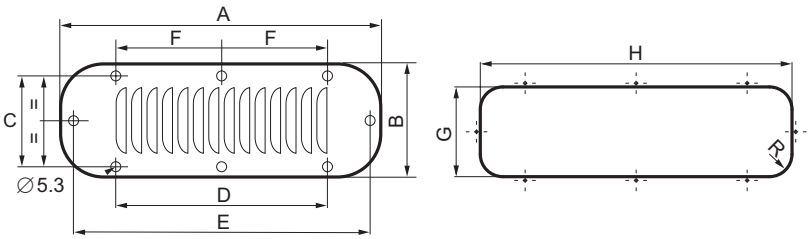
Reference
NSYCAF228R

8

Ventilation systems
Natural airing

Metal louvre plate, rectangular

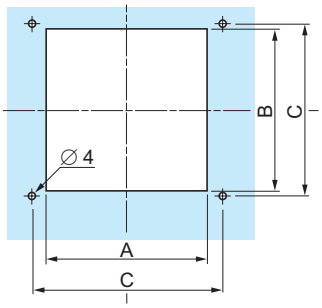
- Louvres designed to be installed on the sides of the enclosure.
- Fixing by screws.
- Material: steel.
- Finish: painted with epoxy-polyester resin, textured RAL 7035 grey.
- Supply: one metal louvre and fixing elements.
- Protection rating: IP 20.



Dimensions (mm)									Reference
A	B	C	D	E	F	G	H	R	
144	62	36	110	-	-	110	46	10	**NSYCAG110X46M**
208	90	72	94	190	-	180	62	18	**NSYCAG180X62M**
244	90	72	130	226	-	216	62	18	**NSYCAG216X62M**
345	118	100	231	327	115.5	317	90.5	30	**NSYCAG317X91M**
345	148	130	231	327	115.5	317	120	30	**NSYCAG317X120M**
445	148	130	267	427	148.5	417	120	30	**NSYCAG417X120M**

Metal louvre plate, square

- Supply: one metal louvre.
- Protection rating: IP 23.



Dimensions (mm)	A	B	C	Slot width	No. of slots	Reference
120 × 120	95	104	104.8	90	5	**NSYCAG104X95LM**
160 × 160	110	130	140	100	5	**NSYCAG130X110LM**
220 × 220	190	170	200	180	5	**NSYCAG170X190LM**

Anti-insect filters for metal louvre plate, square

- Installation is made between the enclosure and the metal louvre.
- Material: Stainless steel 304L ∅ 0.32 mm wire mesh, of 1.07 mm, thickness 0.6 mm.
- Increases protection rating to IP 33.
- Weight: 0.8 kg/m^2.
- Supply: one anti-insect filter.

Louvre plate reference	External dimensions (mm)	Filter reference
NSYCAG104X95LM	98 × 115	**NSYCAF104X95X**
NSYCAG130X110LM	133 × 158	**NSYCAF130X110X**
NSYCAG170X190LM	197 × 215	**NSYCAF170X190X**

Ventilation systems
Natural airing

NSYCAG45LP

NSYCAG33LP

NSYCAG35LP

NSYCAG19LP

NSYCAG38LP

NSYCAG12LPH●

Plastic ventilation louvres

- Four models available according to IP rating, in vertical position.
- Supply: 2 plastic ventilation louvres.

cut-out ∅	IP	Reference
45.5 mm	22	**NSYCAG45LP**
35 mm	30/44 (1)	**NSYCAG35LP**
38 mm	45	**NSYCAG38LP**
33 mm	44	**NSYCAG33LP**
19 mm	45	**NSYCAG19LP**

(1) According to installation in the Thalassa enclosure.

Sealed anti-condensation valve

- Controls the pressure to avoid condensation following an internal temperature increase.
- Maintains IP 68.
- Material: PA6-V2, acrylic co-polymer membrane, water and oil repellent.
- Temperature of use: –40…+105 °C.

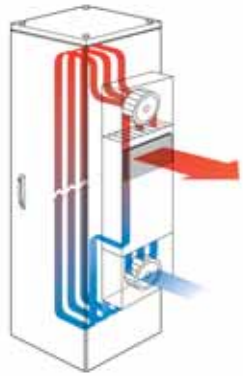
Cut-out ∅	Permeability (1)	Pressure difference (2)	Minor pack.	Reference
M12	16 litres/h	ΔP < 1 bar	10	**NSYCAG12LPH1**
M12	120 litres/h	ΔP < 0.1 bar	10	**NSYCAG12LPH2**

(1) Air flow under ΔP = 0.07 bar.
(2) Condition for IP 68.

Applications

- Protection of equipment for lighting, industrial control, rolling systems, pumps, etc.

Air-air exchanger
Introduction

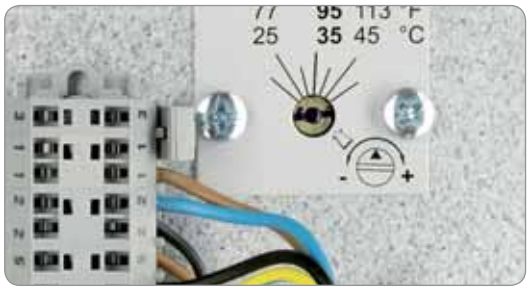


Complete range of solutions, meeting all requirements

- Available in two installation versions: top-mounting model or side-mounting model.
- Power from 15 W/ºK to 70 W/ºK .

Easy maintenance of the exchange cassette

- Easy access to the inside of the ventilation system allowing easier cleaning and maintenance.
- The special configuration of the exchange cassette makes it easier to clean. The space between the slats allows access to the inside aluminium walls for easy maintenance.



Built-in thermostat

The exchangers are equipped as standard with an adjustable thermostat which controls the temperature inside the enclosure and which:

- Avoids the need to install an auxiliary thermostat.
- Guarantees the correct reading of the temperature inside the enclosure.

Temperature control range: +20...+50 ºC.

Without the need of filter

The air-air exchangers do not need to use any filters; they therefore require very little maintenance.

Guaranteed sealing

The internal and external air circuits are independent. The assembly guarantees IP 54.

Two fans guarantee air circulation in each one of the circuits:

- Internal circuit fan:
  It operates permanently and guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- External circuit fan:
  The internal thermostat controls the fan of the external circuit and starts it up when the internal temperature exceeds the maximum value displayed.

Air-air exchanger
Applications

Air circuits separation for very harsh environments

The specific configuration of the air-air exchangers is the ideal solution for cooling electric enclosures installed in highly polluted environments.
It is advisable to use this type of device in cases where the ambient temperature is at least 5 ºC lower than the desired internal temperature.
The exchanger is specially recommended in cases in which:
- The internal and external air circuits must be independent.
- The air inlet filters can be blocked by a large concentration of dust or greasy material in suspension.

Solution

The air-air exchanger is the ideal solution for cooling the inside of floor-standing enclosures installed in the following environments:
- Cement works.
- Ceramic factories.
- Workshops.
- Wastewater treatment plants.

Installation tips

- Make the cut-outs in accordance with the indications of the cut-out template enclosed with the device.
- Make sure the devices are not damaged by external impacts.
- Do not install any cable ducts or devices against the opening of the enclosure since the air flow, and therefore the performance of the exchanger, could be affected.
- Do not obstruct, even partially, the air inlets and outlets. A minimum distance of 40 cm must be left between these openings and a wall or a partition.
- Install the side-mounting exchanger as high as possible to aspirate hot air and improve circulation.

Air-air exchanger
Selection guide

Dimensions (mm)			Performance	Voltage	Assembly	Built-in thermostat	Reference
Height	Width	Depth					
700	270	144	15 W/°K	230 V/50 Hz-60 Hz	Side	Yes	**NSYCEA15W230VL**
780	325	144	35 W/°K	230 V/50 Hz-60 Hz	Side	Yes	**NSYCEA35W230VL**
780	325	144	35 W/°K	230 V/50 Hz-60 Hz	Side	No	**NSYCEA35W230VLE**
1480	450	144	70 W/°K	230 V/50 Hz-60 Hz	Side	Yes	**NSYCEA70W230VL**
340	600	360	50 W/°K	230 V/50 Hz-60 Hz	Top	Yes	**NSYCEA50W230VRE**

Air-air exchanger
Side-mounting models

General characteristics

- Main components: thermostatic adjustment system, exchange cassette, circulation fans for internal and external circuits.
- The desired temperature inside the enclosure can be adjusted over a range of +25 ... +50 °C.
- The internal and external air circuits are completely separated (IP 54). Two fans guarantee air circulation in each of these circuits. The one on the internal circuit (which circulates the air inside the enclosure) is permanently on to avoid the appearance of hot spots in the electric circuits or components.
- The devices are delivered with a cut-out template, an instruction sheet and a sealing gasket to be placed between the exchanger and the enclosure.
- RAL 7035 grey.
- Voltages on demand with 400 V AC, three phase or single phase.

Conditions of use

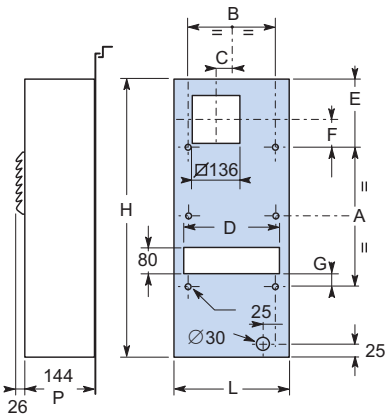
- The exchangers can only be used if the outside temperature is at least 5 ºC lower than the desired temperature inside the enclosure.
- The enclosure must be sealed to prevent the entry of external air: at least IP 54.

	Reference			
	NSYCEA15W230VL	**NSYCEA35W230VL**	**NSYCEA35W230VLE**	**NSYCEA70W230VL**
Cooling characteristics				
Specific power (1)	15 W/°K	35 W/°K	35 W/°K	70 W/°K
Air flow of the external circuit	200 m^3/h	450 m^3/h	450 m^3/h	450 m^3/h
Air flow of the internal circuit	200 m^3/h	450 m^3/h	450 m^3/h	450 m^3/h
Exchange surface	1.23 m^2	1.5 m^2	1.5 m^2	6.6 m^2
Adjustment	Yes	Yes	No	Yes
Type	Thermostatic	Thermostatic	-	Thermostatic
Temperature setting range	+25...+50 °C	+25...+50 °C	-	+25...+50 °C
Nature of the fluid	Air	Air	Air	Air
Electric characteristics				
Input voltage	230 V - 50/60 Hz	230 V - 50/60 Hz	230 V - 50/60 Hz	230 V - 50/60 Hz
Starting/rated current	2.1/0.7 A	2.1/0.7 A	2.1/0.7 A	2.1/0.7 A
Electrical energy absorbed	150 W	150 W	150 W	150 W
Physical characteristics				
External dimensions A × B × C (mm)	700 × 270 × 144	780 × 325 × 144	780 × 325 × 144	1480 × 450 × 144
Internal IP / external IP	IP 54/IP 22	IP 54/IP 22	IP 54/IP 22	IP 54/IP 22
Weight of unit	12 kg	15 kg	15 kg	35 kg
Noise level	64 dB	64 dB	64 dB	64 dB

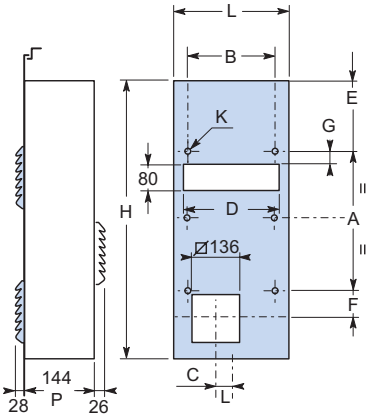
(1) The power in watts is obtained by multiplying the specific power by the difference between inside temperature and outside temperature.
Example: for exchanger ref. **NSYCEA35W230VL** with Δ ºC = 10º, the system power is 35 × 10 = 350 W.

Air-air exchanger
Side-mounting models

External mounting



Internal mounting



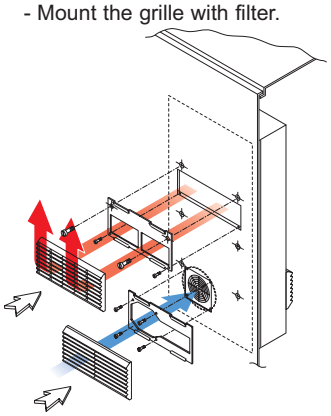
Dimensions in mm	NSYCEA15W230VL	NSYCEA35W230●●●	NSYCEA70W230VL
A	366	413	1113
B	226	266	393
C	40	52	115
D	220	294	420
E	167	183.5	183.5
F	82	77.5	77.5
G	13	35.5	35.5
H	700	780	1480
K	4 × 8 ∅	4 × 8 ∅	6 × 8 ∅
L	270	325	450

Accessories for internal mounting of the exchanger

- Installation principle of the filter-holder grilles when installing a side-mounting exchanger inside the enclosure.
- Filter ref. **NSYCEAF**.
- To be ordered in multiples of 24 filters.

For exchanger	Grille reference
NSYCEA15W230VL	NSYCEA15WG
NSYCEA35W230●●●	NSYCEA35WG
NSYCEA70W230VL	NSYCEA70WG

- Tips for installing the exchanger on the inside:
  - Place the top of the exchanger at the bottom and then turn it upside down. See diagram.
  - Change the thermostat connection.
  - Mount the grille with filter.



Installation (internal mounting)

Air-air exchanger
Top-mounting model

NSYCEA50W230VRE

General characteristics

- Main components: thermostatic adjustment system, exchange cassette, circulation fans for internal and external circuits.
- The desired temperature inside the enclosure can be adjusted over a range of +25 ...+50 °C.
- The internal and external air circuits are completely separated (IP 54). Two fans guarantee air circulation in each of these circuits. The one on the internal circuit (which circulates the air inside the enclosure) is permanently on to avoid the appearance of hot spots in the electric circuits or components.
- The devices are delivered with a cut-out template, an instruction sheet and a sealing gasket to be placed between the exchanger and the enclosure.
- RAL 7035 grey.
- Voltages on demand with 400 V AC, three phase or single phase.

Conditions of use

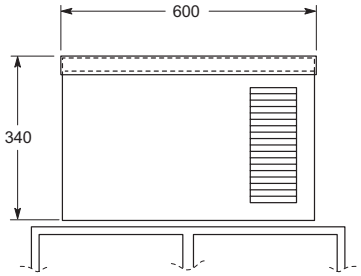
- The exchangers can only be used if the outside temperature is at least 5 °C lower than the desired temperature inside the enclosure.
- The enclosure must be sealed to prevent the entry of external air.

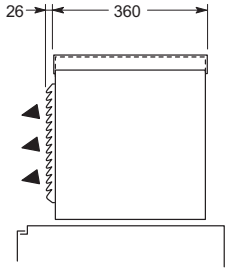
Reference	NSYCEA50W230VRE
Cooling characteristics	
Specific power (1)	50 W/°K
Air flow of the external circuit	450 m^3/h
Air flow of the internal circuit	450 m^3/h
Exchange surface	3.3 m^2
Adjustment	Yes
Type	Thermostatic
Temperature setting range	+20...+50 °C
Nature of the fluid	Air
Electric characteristics	
Input voltage	230 V - 50/60 Hz
Starting/rated current	2.1/0.7 A
Electrical energy absorbed	150 W
Physical characteristics	
External dimensions A × B × C (mm)	390 × 600 × 365
Internal IP / external IP	IP 54/IP 22
Weight of unit	19 kg
Noise level	64 dB

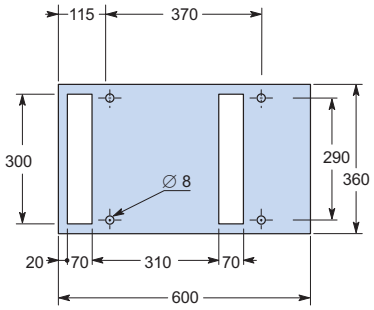
(1) The power in watts is obtained by multiplying the specific power by the difference between inside temperature and outside temperature.

Air-air exchanger
Dimensions

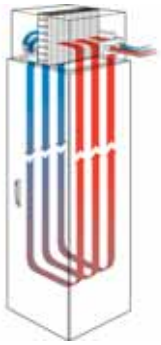
Top-mounting model







Air-water exchanger
Introduction



Side-mounting or top-mounting model.

Available in two installation versions: top-mounting model or side-mounting model.

Easy maintenance

Easy and practical installation and removal. Easy access to the exchange battery allows for easier cleaning.
The principle of the air-water exchanger does not require inlet filters, thus reducing maintenance.

Internal temperature control

The exchangers are equipped as standard with an adjustment thermostat that controls the temperature inside the enclosure. It avoids the need to install an auxiliary control thermostat and guarantees a precise reading of the temperature inside the enclosure.
Temperature control range: +20...+50 °C.

Guaranteed sealing

- Guaranteed protection rating: IP 54.
- The fan runs permanently to maintain an even temperature inside the enclosure and prevent the appearance of hot spots.

ANTI-LEAK system

Maximum safety

- The thermostat controls the water inlet electro-valve and regulates the temperature. The risk of condensation is therefore very low.
- In cases of a loss in the circuit, the detection system automatically closes the water inlet.

Air-water exchanger
Applications

- Minimum maintenance in very difficult environments.
- The air-water exchanger is recommended even when the ambient temperature is higher than the desired internal temperature.
- It is particularly suitable for highly polluted environments since it fully prevents the entrance of outside air.
- The heat produced by the components is evacuated to the outside of the workshop.

Examples: printing presses, paper plants, chemical factories, etc.

Installation tips

- Make the cut-outs in accordance with the indications of the cut-out template delivered with the device.
- Make sure the devices are not damaged by external impacts.
- Do not install any cable ducts or devices against the openings of the enclosure since the air flow, and therefore the performance of the exchanger, would be reduced.
- Interrupt the operation of the exchanger when the door of the enclosure is open.
- Make sure there is a water source near the electric enclosure with stable temperature and flow rate (cold-water supply and evacuation of reheated water).

Air-water exchanger
Selection guide

Dimensions (mm)			Cooling power L 35/W 10/200 W	Voltage	Assembly	Reference
Height	Width	Depth				
830	360	113	2100 W	230 V/50 Hz-60 Hz	Side	**NSYCEW2100W230VL**
950	400	190	3150 W	230 V/50 Hz-60 Hz	Side	**NSYCEW3150W230VL**
310	600	365	2100 W	230 V/50 Hz-60 Hz	Top	**NSYCEW2100W230VR**

Air-water exchanger
Side and top-mounting models

General characteristics

- Main components: thermostatic adjustment system, exchange cassette, fans for the internal circuit of the enclosure, safety device against possible leaks.
- The desired temperature inside the enclosure can be adjusted over a range of +25...+50 °C.
- The alarm which detects an interruption in the water circuit is activated by closing a switch. This can be used to activate a light or a siren, connected to the input of an automation device. The water supply is automatically cut.
- System for evacuating condensation water to the outside.
- RAL 7035 grey.

Conditions of use

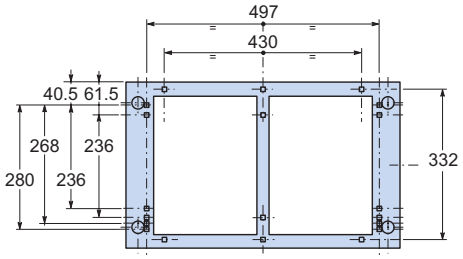
- Air-water exchangers can be used even when the outside temperature is higher than the desired temperature inside the enclosure.
- The enclosure must be sealed to prevent the entry of external air: at least IP 54.

	Reference		
	NSYCEW2100W230VR (top)	NSYCEW2100W230VL (side)	NSYCEW3150W230VL (side)
Cooling characteristics			
Specific power A 35 W 10-200 l/h	2100 W	2100 W	3150 W
Maximum water pressure	1 MPa	1 MPa	1 MPa
Air flow of the external circuit	250 m^3/h	350 m^3/h	820 m^3/h
Adjustment	Yes	Yes	Yes
Type	Thermostatic	Thermostatic	Thermostatic
Temperature setting range	+25...+50 °C	+25...+50 °C	+8...+50 °C
Nature of the fluid	Water	Water	Water
Electric characteristics			
Input voltage	230 V - 50/60 Hz	230 V - 50/60 Hz	230 V - 50/60 Hz
Starting/rated current	1/0.5 A	1/0.5 A	1.3/1.7 A
Electrical energy absorbed	90 W	90 W	295 W/385 W
Type of switching alarm	Inverter contact	Inverter contact	Inverter contact
Physical characteristics			
External dimensions A x B x C (mm)	310 × 600 × 365	830 × 360 × 113	950 × 400 × 190
IP-DIN 40050	IP 54	IP 54	IP 55
Weight of unit	26 kg	19 kg	21 kg
Noise level	64 dB (A)	62 dB (A)	54 dB (A)

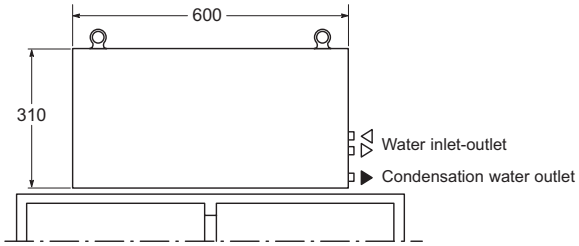
Air-water exchanger
Dimensions

Top-mounting model

Supplies:
- Cut-out template.
- Mounting accessories.
- Installation and operation instructions.

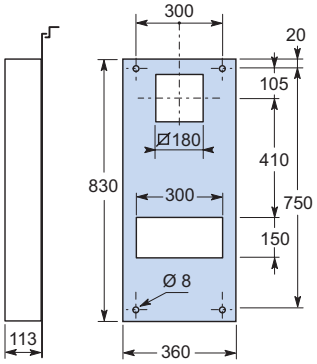


Front view of the enclosure



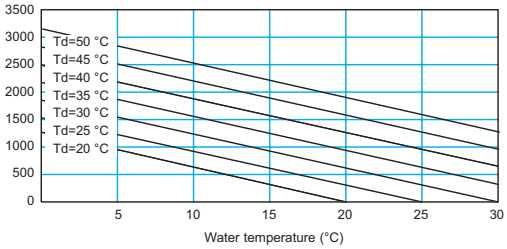
Side-mounting model

Supplies:
- Cut-out template.
- Mounting accessories.
- Installation and operation instructions.
- Installation inside or outside the enclosure.

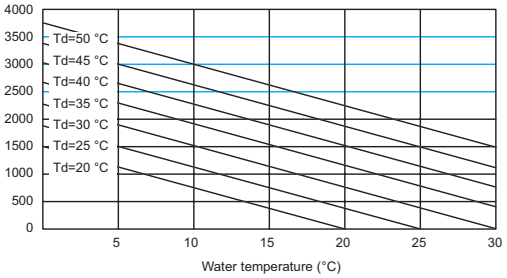


Curves

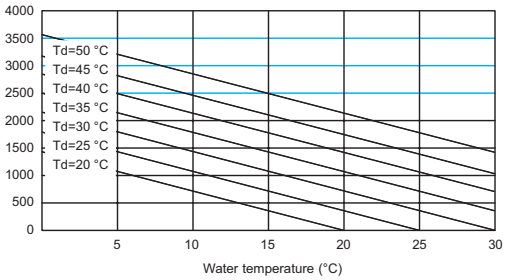
Power exchanged by the exchangers for a water flow of 100 l/h.



Power exchanged by the exchangers for a water flow of 300 l/h.



Power exchanged by the exchangers for a water flow of 200 l/h.



Example: For a water flow of 100 l/h at 15 °C with a desired temperature of 35 °C.
Power = 1400 W.

Cooling unit with mechanical control
Introduction

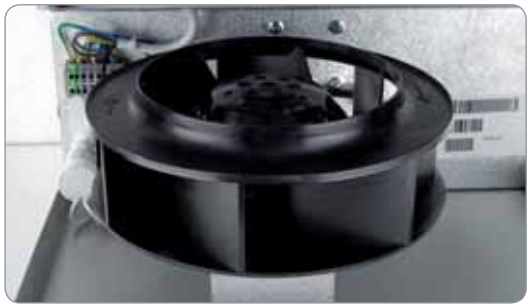
Complete range of solutions, meeting all requirements

- Available in two installation versions: top/side mounting or partial flush model.
- The power of the cooling units with mechanical control ranges from 240 W to 4000 W. This means you will find the equipment that best meets your needs.
- Easy and practical installation and removal.

55 °C

Withstands extreme environments

- Equipped with high-pressure compressors, the cooling units guarantee an optimum operation with temperatures of up to 55 °C.



Guaranteed sealing

The internal and external air circuits are completely separated and maintain the protecting rating of IP 54.
Two fans guarantee air circulation in each one of the circuits:

- **Fan on the internal circuit**
  It operates permanently and guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure. In addition, it provides a correct reading of the temperature inside the enclosure thanks to the thermostat setting.
- **Fan on the external circuit**
  The internal thermostat controls the fan and starts it up when the internal temperature exceeds the maximum value displayed.

Very high efficiency: The best is in the inside

The internal components have been chosen for maximum efficiency and performance.

Built-in thermostat

The cooling units are equipped with an adjustable thermostat which controls the temperature inside the enclosure:
- It avoids the installation of an auxiliary control thermostat.
- It guarantees the exact reading of the temperature inside the enclosure.
  Temperature control range: +20...+50 ºC (pre-set and recommended temperature of 35 ºC).

Automatic evaporation system (top mounting)

- The top-mounting models are additionally equipped with a device for evaporating and controlling the condensation water level which causes the machine to halt or triggers the alarm if the level is exceeded.
- They also have an exclusive evacuation system for draining the water stored in the condensation tray.

Maximum safety

- They are equipped as standard with an automatically reset pressostat, which, when it detects a value greater than the safe pressure value, stops the compressor and the external fan.
- In the event of a breakdown, a relay triggers an alarm and halts the operation of the cooling unit.

Easy maintenance

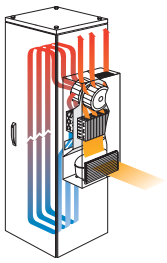
- Easy access to the condenser allows easier cleaning by blowing.
- The high-pressure compressor and the external fan can be maintained without removing the unit.

ENVIRONMENTALLY FRIENDLY

Environmentally friendly

- Respect for the environment.
- Use of ecological gas R134a (HFC).

Cooling unit with electronic control
Introduction



Complete range of solutions, meeting all requirements

- Available in two installation versions: top-mounting model or side-mounting model.
- The power of the cooling units with electronic control ranges from 1100 W to 1800 W (the SLIM range offers powers of 1100 W to 2700 W).
  This means you will find the equipment that best meets your needs.

Easy installation

Easy and practical installation and removal

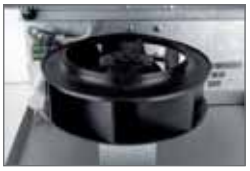
The side-mounting models have an exclusive quick-installation system:
- Two retractable handles allow them to be installed instantly by a single person.
- The quick-fixing device with no screws simplifies the installation on the enclosure and guarantees a protection rating of IP 54.
- The electrical connection is made by means of the supplied removable connectors.

A single cut-out dimension

One single machining size, regardless of the power of the side-mounting cooling unit.

Easy maintenance

Easy access to the inside of the device allows easier cleaning and maintenance.
Thanks to its design, no filter needs to be used in most applications. Nevertheless, in especially polluted environments, it is advisable to install a filter on the external air circuit.
The design of the aluminium slats of the condenser allow for easier, less-frequent maintenance.



Guaranteed sealing

The internal and external air circuits are completely separated and maintain the enclosure's protection rating of IP 54.
Two fans guarantee air circulation inside each of the circuits:
- **Fan on the internal circuit**
  It operates permanently and guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- **Fan on the external circuit**
  The internal thermostat controls the fan and starts it up when the internal temperature exceeds the maximum value displayed.

Electronic temperature control

Electronic control allows:
- Precise control of the temperature setting:
– Switches on the compressor with setting temperature +1 ºC.
– Switches off the compressor with setting temperature -5 ºC.
- Door switch management,
- Alarm management,
- Alarm reset,
- Control of the operating and stand-by times of the compressor.

Automatic evaporation system

All the models are equipped with a system for automatically evaporating condensation.

Environmentally friendly

- Respect for the environment.
- Use of ecological gas R134a (HFC).

ENVIRONMENTALLY FRIENDLY

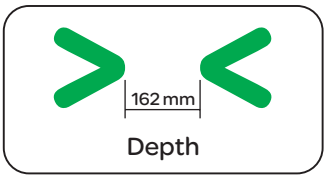
Cooling unit
SLIM electronic control

SLIM for perfect integration

1 bloc:
- 4 power levels
- 3 voltage levels

1 cover:
- Flush
- Partial-flush
- Surface

66 models, from 1100 to 2700 W, 115 to 460 V, flush mounting, partial-flush mounting or surface mounting, with or without electronic display, IP 55, UL compliant.



Minimum depth

All the models of the SLIM range have a depth of 162 mm to maximise the volume inside the enclosure.

Modular system

- There are 66 possible combinations with only 17 catalogue references.
- Three different installation types are possible with the same air-conditioning unit (surface, partial flush and flush).

Power ranges

1100 W, 1500 W, 2200 W and 2700 W.

Versions

- RAL 7035 and stainless steel.
- Option to provide other colours on demand.

Internal IP 55

The SLIM range is supplied as standard with an expanded polyurethane gasket, ensuring optimum sealing with IP 55 throughout the enclosure.

UL/UR certification

UL certification awarded for the entire SLIM range.

The best is inside

The best material has been selected to offer maximum reliability and durability. The compressors, and the fans as well as the rest of the components are top quality.

Electronic regulation as standard

- Programmed to control the enclosure temperature of 35 ºC. This temperature should be enough to protect the electrical and electronic equipment installed in the enclosure.
- Supplied with an electronic thermostat to provide greater reliability and precision for the cooling unit.
- Electronic display as option for reading and controlling the temperature setting, ref. **NSYCUAY**.

55 ºC

High resistance to outside ambient temperatures of up to 55 ºC

The high-quality compressors used allow work to be performed in areas with extreme temperatures of up to 55 ºC.

ENVIRONMENTALLY FRIENDLY

Cooling fluid used: R134a (HFC)

This is a gas that respects the ozone layer.

Easy opening and closing of the covers

The cover of the cooling unit is released by simply unscrewing two screws. This saves time and facilitates maintenance tasks.

Easy maintenance

- Internal details such as the space between the aluminium plates enable easier access during the cleaning process.
- The inside can be accessed by removing only two screws.

Cooling unit
Selection guide

Side-mounting models

External dimensions (mm)	Cooling power EN 14511 L35 - L35 (50 Hz)	Input voltage Vol-Hz	Control	Reference
450 × 350 × 140	240 W (819 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU240W230VL**
620 × 300 × 170	370 W (1263 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU370W230VL**
800 × 350 × 195	760 W (2594 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU760W230VL**
900 × 400 × 195	1050 W (3584 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU1050W230VL**
1010 × 400 × 240	1100 W (3755 Btu/h)	230 V - 50/60 Hz	Electronic controller	**NSYCUE1100W230L**
1010 × 400 × 240	1400 W (4780 Btu/h)	230 V - 50/60 Hz	Electronic controller	**NSYCUE1400W230L**
1010 × 400 × 240	1400 W (4780 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Electronic controller	**NSYCUE1400W400L**
1000 × 400 × 220	1650 W (5631 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU1650W230VL**
1000 × 400 × 220	1800 W (6143 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Thermostat	**NSYCU1800W400VL**
1010 × 400 × 240	1800 W (6145 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Electronic controller	**NSYCUE1800W400L**
1406 × 502 × 300	2500 W (8533 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Thermostat	**NSYCU2500W400VL**
1406 × 502 × 300	4000 W (13652 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Thermostat	**NSYCU4000W400VL**

Cooling unit
Selection guide

Top-mounting models

External dimensions (mm)	Cooling power EN 14511 L35 - L35 (50 Hz)	Input voltage Vol-Hz	Control	Reference
340 × 600 × 350	760 W (2594 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU760W230VR**
400 × 700 × 400	1050 W (3584 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU1050W230VR**
415 × 750 × 412	1400 W (4780 Btu/h)	230 V - 50/60 Hz	Electronic controller	**NSYCUE1400W230R**
400 × 700 × 400	1460 W (4983 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU1460W230VR**
430 × 700 × 400	1650 W (5631 Btu/h)	230 V - 50/60 Hz	Thermostat	**NSYCU1650W230VR**
415 × 750 × 412	1800 W (6145 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Electronic controller	**NSYCUE1800W400R**
430 × 700 × 400	2000 W (6826 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Thermostat	**NSYCU2000W400VR**
470 × 800 × 450	2450 W (8362 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Thermostat	**NSYCU2450W400VR**
470 × 800 × 450	3100 W (10580 Btu/h)	3 × 400 V 50 Hz / 440 V 60 Hz	Thermostat	**NSYCU3100W400VR**

SLIM electronic control models (modular)

- Flush mounting.
- Partial-flush mounting.
- Surface mounting.

	Power	1,100 W	1,500 W	2,200 W	2,700 W
Cooling unit block	230 V	**NSYCUB1100W230S**	**NSYCUB1500W230S**	**NSYCUB2200W230S**	**NSYCUB2700W230S**
	400-460 V (50-60 Hz)	**NSYCUB1100W400S**	**NSYCUB1500W400S**	**NSYCUB2200W400S**	**NSYCUB2700W400S**
	115 V	**NSYCUB1100W115S**	**NSYCUB1500W115S**	**NSYCUB2200W115S**	

Covers	Side-mounting type	
RAL 7035	Surface-mounting	**NSYCUCL**
	Partial flush-mounting	**NSYCUCH**
	Flush-mounting	**NSYCUCF**
Stainless-steel	Surface-mounting	**NSYCUCLX**
	Partial flush-mounting	**NSYCUCHX**
	Flush-mounting	**NSYCUCFX**

Modular version: Always order one SLIM cooling unit reference plus one cover reference.

Cooling unit
Mechanical control

NSYCU760W230VL

Side-mounting

Cooling units for electrical switchboards

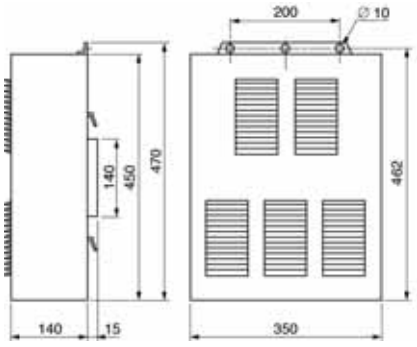
- Respect for the environment by using environmentally friendly gas R134a (HFC).
- Cooling power from 240 W to 4000 W.
- Option of partial-flush mounting for certain models.

General characteristics

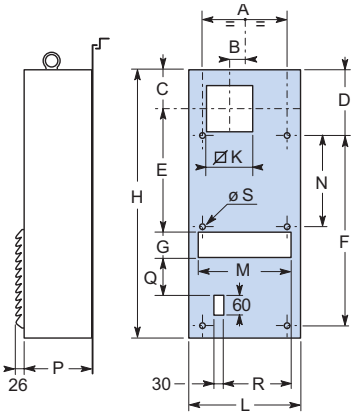
- The temperature setting can be adjusted from +20 to +50 ºC.
- They are equipped as standard with an automatically reset pressure gauge and a switching thermostat which, when it detects a value greater than the safe pressure value, interrupts the compressor and the external fan.
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- The devices are equipped with switches for reporting an alarm.
- Cooling power from 240 W to 4000 W.
- RAL 7035 colour for the standard offer.
- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

Reference	NSYCU240W230VL	NSYCU370W230VL	NSYCU760W230VL
Voltage	230 V, 50/60 Hz		
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 240 W (819 Btu/h) 190 W (649 Btu/h)	 370/390 W (1,263/1,331 Btu/h) 300/310 W (1,024/1,058 Btu/h)	 760/810 W (2,594/2,765 Btu/h) 610/640 W (2,082/2,184 Btu/h)
Dimensions Height Width Depth	 450 mm 350 mm 140 mm + (15 mm internal)	 620 mm 300 mm 170 mm	 800 mm 350 mm 195 mm
Intensity Starting current Rated current	 2.8 A 0.7 A	 5.8/6.7 A 1.5/1.8 A	 7.7/8.8 A 2.0/2.3 A
Power consumption absorbed L35-L35 L35-L50	 140 W 160 W	 290/330 W 330/380 W	 380/440 W 440/500W
Energy efficiency ratio (EER) L35-L35	 1.7	 1.3/1.2	 2.0/1.8
Control type	Thermostat		
Temperature setting range	+20...+45 °C	+20...+50 °C	
Maximum outside temperature	50 °C	55 °C	
Noise level	58 dB (A)	65 dB (A)	67 dB (A)
Air flow of the internal circuit of the external circuit	 160 m^3/h 320 m^3/h	 160/175 m^3/h 210/230 m^3/h	 350/385 m^3/h 350/385 m^3/h
Alarm type	Inverter contact		
Weight of unit	15 kg	21 kg	33 kg
Cooling gas type	R134a (0.25 kg)	R134a (0.3 kg)	R134a (0.5 kg)
IP (IEC 60529) On the internal circuit On the external circuit	 	 54 34	
External circuit filter	Option	Yes	
Assembly	Side		
Thermal protection recommended (fuse melt curve)	T1.6A	T3A	T3A

Cooling unit
Mechanical control

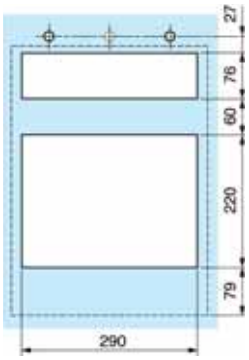


Reference **NSYCU240W230VL**

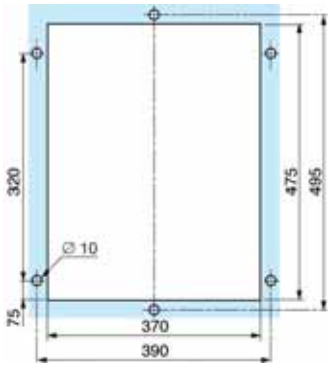


Reference **NSYCU370W230VL** and **NSYCU760W230VL**

NSYCU240W230VL: dimensions and cut-outs



External mounting



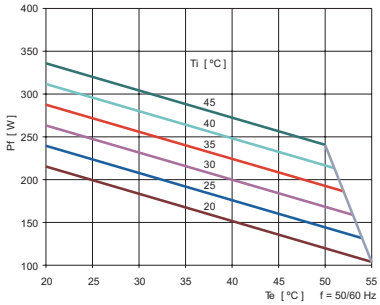
Partial-flush mounting

NSYCU370W230VL and NSYCU760W230VL: cut-out

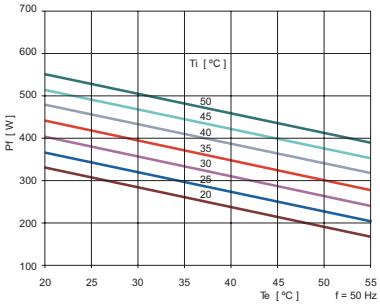
Dimensions in mm	NSYCU370W230VL	NSYCU760W230VL
A	260	266
B	0	52
C	80	116
D	40	193.5
E	300	375
F	540	413
G	60	80
H	620	800
K	136	136
L	300	350
M	240	294
N	-	-
P	170	195
Q	35	149
R	0	24
S	8	8

Curves

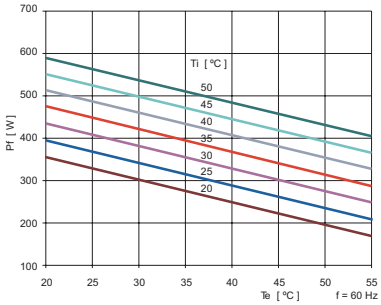
NSYCU240W230VL



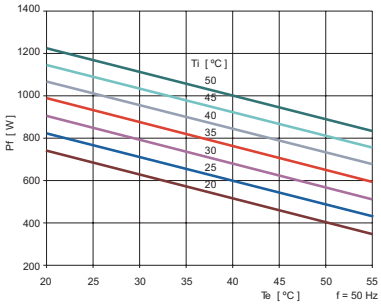
NSYCU370W230VL 50 Hz



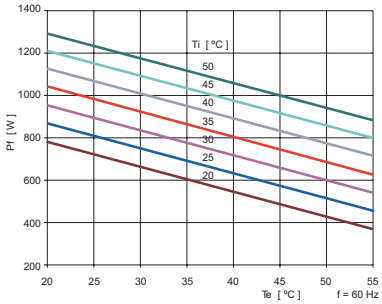
NSYCU370W230VL 60 Hz



NSYCU760W230VL 50 Hz



NSYCU760W230VL 60 Hz



8

Cooling unit
Mechanical control

NSYCU1650W230VL

Side-mounting

Cooling units for electrical switchboards

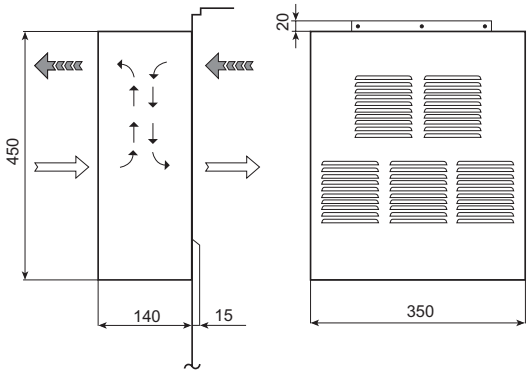
- Respect for the environment by using environmentally friendly gas R134a (HFC).
- Cooling power from 240 W to 4000 W.

General characteristics

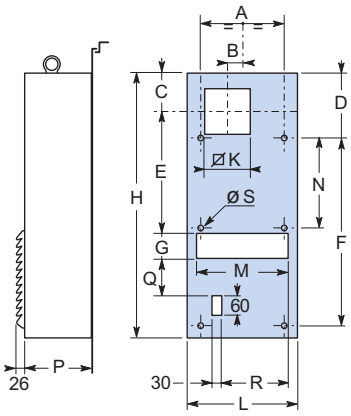
- The temperature setting can be adjusted from +20 to +50 ºC.
- They are equipped as standard with an automatically reset pressure gauge and a switching thermostat which, when it detects a value greater than the safe pressure value, stops the compressor and the external fan.
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- The devices are equipped with switches for reporting an alarm.
- Cooling power from 240 W to 4000 W.
- RAL 7035 colour for the standard offer.
- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

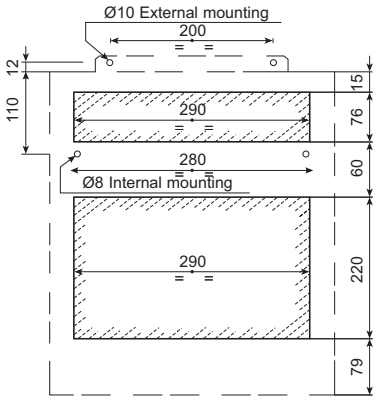
Reference	NSYCU1050W230VL	NSYCU1650W230VL
Voltage	230 V; 50/60 Hz	
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 1050/1100 W (3584/3755 Btu/h) 840/890 W (2867/3038 Btu/h)	 1650/1700 W (5631/5802 Btu/h) 300/1400 W (4438/4779 Btu/h)
Dimensions Height Width Depth	 900 mm 400 mm 195 mm	 1000 mm 400 mm 220 mm
Intensity Starting current Rated current	 10.1/11.6 A 2.7/3 A	 16.1/18.5 A 4.2/4.9 A
Power consumption absorbed L35-L35 L35-L50	 500/580 W 580/660 W	 800/920 W 920/1100 W
Energy efficiency ratio (EER) L35-L35	 2.1/1.9	 2.1/1.9
Control type	Thermostat	
Temperature setting range	+20...+50 °C	
Maximum outside temperature	55 °C	
Noise level	67 dB (A)	67 dB (A)
Air flow of the internal circuit of the external circuit	 350/385 m^3/h 510/560 m^3/h	 550/600 m^3/h 620/680 m^3/h
Alarm type	Inverter contact	
Weight of unit	39 kg	42 kg
Cooling gas type	R134a (0.7 kg)	R134a (0.75 kg)
IP (IEC 60529) On the internal circuit On the external circuit	 54 34	
External circuit filter	Yes	
Assembly	Side	
Thermal protection recommended (fuse melt curve)	T4A	T6A

Cooling unit
Mechanical control



Side-mounting models: dimensions

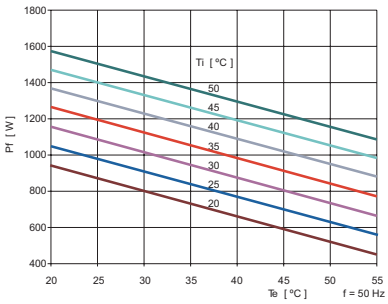




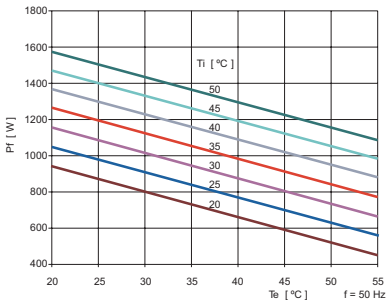
Dimensions (mm)	NSYCU1050W230VL	NSYCU1650W230VL	NSYCU1800W400VL
A	300	300	300
B	0	0	0
C	135	135	135
D	30	30	30
E	465	475	475
F	840	840	840
G	100	100	100
H	900	1000	1000
K	180	180	180
L	400	400	400
M	320	320	320
N	-	470	470
P	195	220	220
Q	35	25	25
R	195	195	195
S	0	10	10

Curves

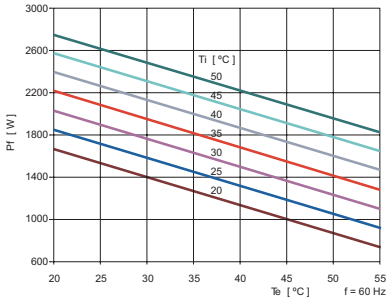
NSYCU1050W230VL 50 Hz



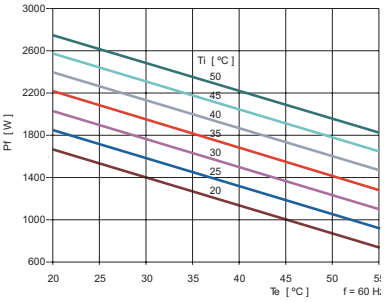
NSYCU1650W230VL 50 Hz



NSYCU1050W230VL 60 Hz



NSYCU1650W230VL 60 Hz



8

Cooling unit
Mechanical control

NSYCU4000W400VL, NSYCU1800W400VL

Side-mounting

Cooling units for electrical switchboards

- Respect for the environment by using environmentally friendly gas R134a.
- Cooling powers of 2500 W and 4000 W.

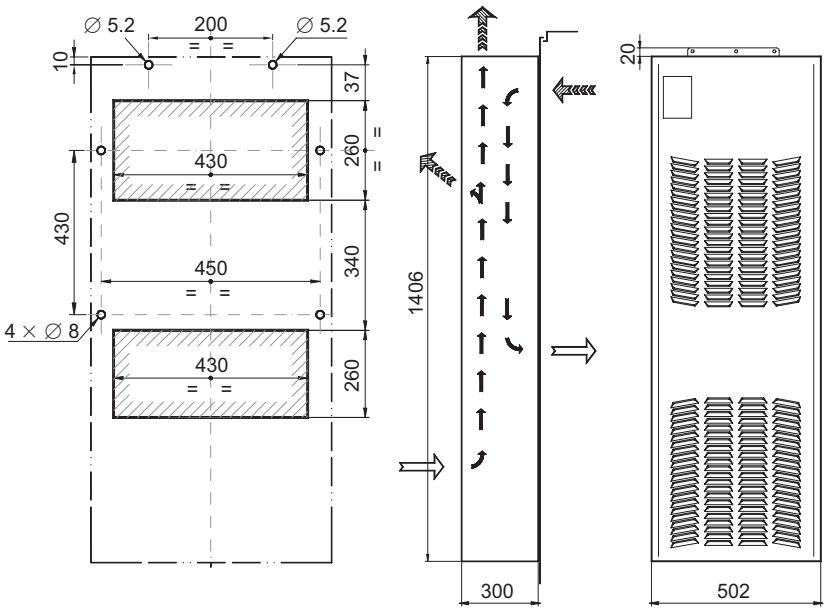
General characteristics

- The temperature setting can be adjusted from +20 to +50 °C.
- They are equipped as standard with an automatically reset pressure gauge and a switching thermostat which, when it detects a value greater than the safe pressure value, stops the compressor and the external fan.
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- The devices are equipped with switches for reporting an alarm.
- Option of partial-flush mounting.

Reference	NSYCU1800W400VL	NSYCU2500W400VL	NSYCU4000W400VL
Voltage	3 × 440 V; 50 Hz / 3 × 440 V; 60 Hz	3 × 440 V; 50 Hz / 3 × 440 V; 60 Hz	3 × 440 V; 50 Hz / 3 × 440 V; 60 Hz
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 1800/1900 W (6143/6485 Btu/h) 1400/1500 W (4779/5121 Btu/h)	 2500/2600 W (8533/8876 Btu/h) 2000/2100 W (6828/7169 Btu/h)	 3800/4100 W (12973/13997 Btu/h) 3100/3300 W (10583/11266 Btu/h)
Dimensions Height Width Depth	 1000 mm 400 mm 220 mm	 1406 mm 502 mm 300 mm	 1406 mm 502 mm 300 mm
Intensity Starting current Rated current	 6.8/7.9 A 2.1/2.5 A	 9.8/12.1 A 2.6/3.2 A	 10.0/11.6 A 3.3/3.9 A
Power consumption absorbed L35-L35 L35-L50	 1200/1400 W 1400/1600 W	 1500/1800 W 1800/2100 W	 1900/2200 W 2200/2600 W
Energy efficiency ratio (EER) L35-L35	 1.5/1.4	 1.7/1.4	 2.0/1.9
Control type	Thermostat		
Temperature setting range	+20...+50 °C		
Maximum outside temperature	55 °C		
Noise level	69 dB (A)		
Air flow of the internal circuit of the external circuit	 550/600 m³/h 620/680 m³/h	 750/820 m³/h 1200/1310 m³/h	 1200/1340 m³/h 1070/1190 m³/h
Alarm type	Inverter contact		
Weight of unit	46 kg	75 kg	
Cooling gas type	R134A (0.75 kg)	R134a	
IP (IEC 60529) On the internal circuit On the external circuit (protection of cooling elements)	 54 34	 55 34	
External circuit filter	Yes	No (please consult us for aggressive environments)	
Assembly	Side		
Thermal protection recommended (fuse melt curve)	T 3A	T4 A	T6 A

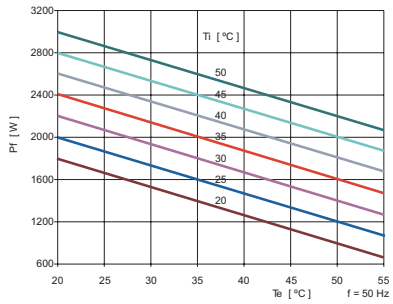
Cooling unit
Mechanical control

Side-mounting models: dimensions

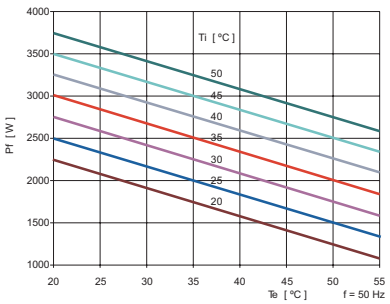


Curves

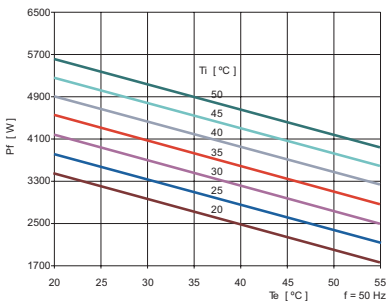
NSYCU1800W400VL 50 Hz



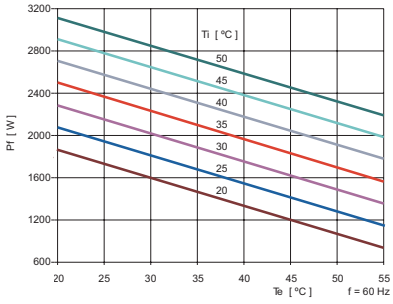
NSYCU2500W400VL 50 Hz



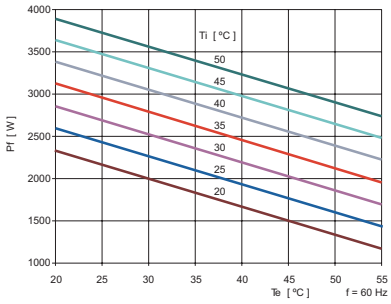
NSYCU4000W400VL 50 Hz



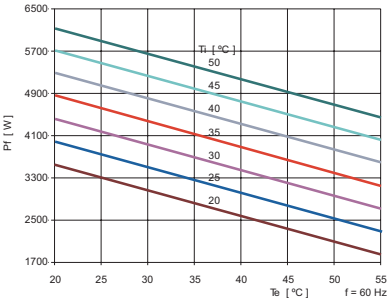
NSYCU1800W400VL 60 Hz



NSYCU2500W400VL 60 Hz



NSYCU4000W400VL 60 Hz



Cooling unit
Mechanical control

NSYCU1050W230VR

Top-mounting

Cooling units for electrical switchboards

- Respect for the environment by using environmentally friendly gas R134a (HFC).
- Automatic evaporation of condensation water.
- Cooling power from 760 W to 3100 W.

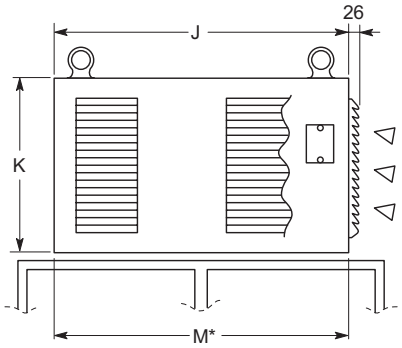
General characteristics

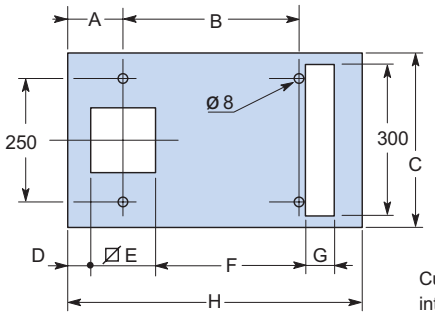
- The temperature setting can be adjusted from +20 to +50 ºC.
- They are equipped as standard with an automatically reset pressure gauge and a switching thermostat which, when it detects a value greater than the safe pressure value, stops the compressor and the external fan.
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- The devices are equipped with switches for reporting an alarm.
- System for automatic recovery and evaporation of condensates.
- RAL 7035 colour for the standard offer.
- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

Reference	NSYCU760W230VR	NSYCU1050W230VR	NSYCU1460W230VR
Voltage	230 V; 50/60 Hz		
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 760/810 W (2594/2765 Btu/h) 610/640 W (2082/2184 Btu/h)	 1050/1100 W (3584/3755 Btu/h) 840/890 W (2867/3038 Btu/h)	 1460/1500 W (4983/5121 Btu/h) 1200/1200 W (4096/4096 Btu/h)
Dimensions Height Width Depth	 340 mm 600 mm 350 mm	 400 mm 700 mm 400 mm	
Intensity Starting current Rated current	 7.7 A/8.8 A 2 A/2.3 A	 10.1/11.6 A 2.7/3 A	 14.1/16.2 A 3.7/4.2 A
Power consumption absorbed L35-L35 L35-L50	 380/440 W 440/500 W	 500/580 W 580/660 W	 730/810 W 810/930 W
Energy efficiency ratio (EER) L35-L35	 2.0/1.8	 2.1/1.9	 2.1/1.9
Control type	Thermostat		
Temperature setting range	+20...+50 °C		
Maximum outside temperature	55 °C		
Noise level	67 dB	69 dB	
Air flow of the internal circuit of the external circuit	 350/385 m^3/h 350/385 m^3/h	 400/440 m^3/h 620/680 m^3/h	
Type of zero-potential alarm	Inverter contact		
Weight of unit	33 kg	41 kg	45 kg
Cooling gas type	R134a (0.5 kg)	R134a (0.7 kg)	R134a (0.75 kg)
IP (IEC 60529) On the internal circuit On the external circuit	 54 34		
External circuit filter	Yes		
Assembly	On top		
Thermal protection recommended (fuse melt curve)	T4A	T6A	

Cooling unit
Mechanical control

Top-mounting models, ref. NSYCU760W230VR-NSYCU1050W230VR-NSYCU1460W230VR



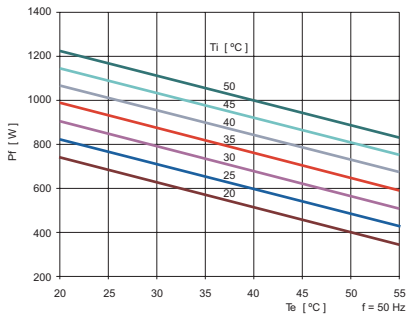


Cut-out template for top mounting without intermediate frame.

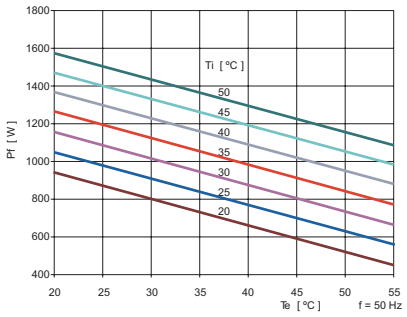
A	B	C	D	E	F	G	H	J	K	M	Reference
108	350	350	40	136	292	80	600	600	340	600	**NSYCU760W230VR**
118	420	400	45	180	328	90	700	700	400	700	**NSYCU1050W230VR**
118	420	400	45	180	328	90	700	700	400	700	**NSYCU1460W230VR**

Curves

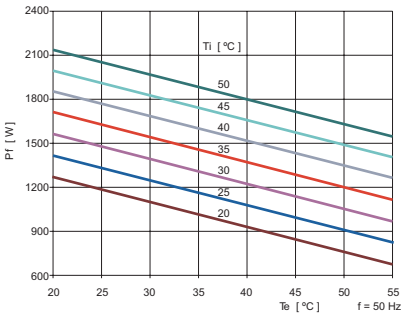
NSYCU760W230VR 50 Hz



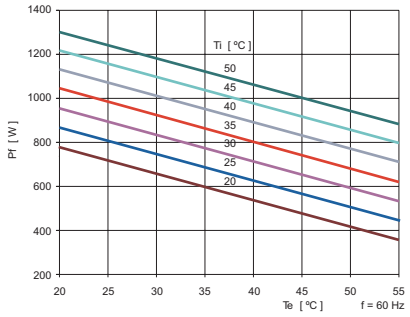
NSYCU1050W230VR 50 Hz



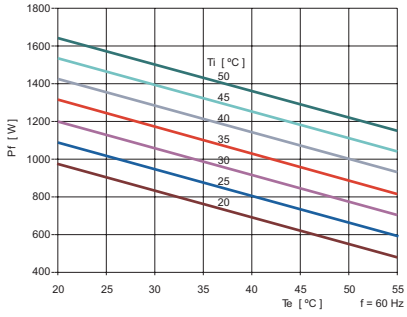
NSYCU1460W230VR 50 Hz



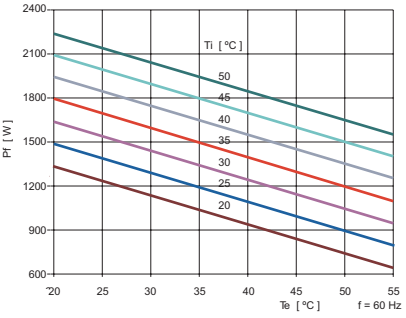
NSYCU760W230VR 60 Hz



NSYCU1050W230VR 60 Hz



NSYCU1460W230VR 60 Hz



Cooling unit
Mechanical control

NSYCU1650W230VR

Top-mounting

Cooling units for electrical switchboards

- Respect for the environment by using environmentally friendly gas R134a (HFC).
- Automatic evaporation of condensation water.
- Cooling power from 760 W to 3100 W.

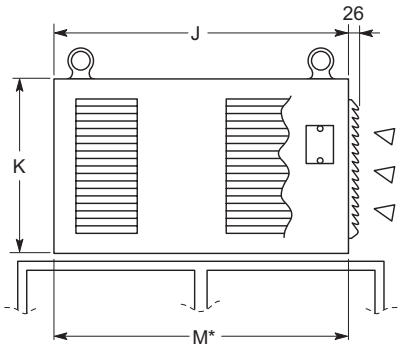
General characteristics

- The temperature setting can be adjusted from +20 to +50 ºC.
- They are equipped as standard with an automatically reset pressure gauge and a switching thermostat which, when it detects a value greater than the safe pressure value, stops the compressor and the external fan.
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- The devices are equipped with switches for reporting an alarm.
- System for automatic recovery and evaporation of condensates.
- RAL 7035 colour for the standard offer.
- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

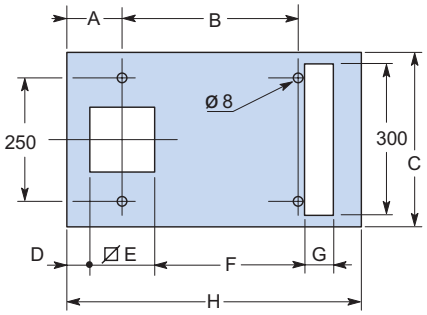
Reference	NSYCU1650W230VR	NSYCU2000W400VR
Voltage	230 V; 50/60 Hz	3 × 440 V; 50 Hz / 3 × 440 V; 60 Hz
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 1650/1700 W (5631/5802 Btu/h) 1300/1400 W (4438/4779 Btu/h)	 2000/2100 W (6826/7169 Btu/h) 1600/1700 W (5462/5803 Btu/h)
Dimensions Height Width Depth	 430 mm 700 mm 400 mm	
Intensity Starting current Rated current	 16.1/18.5 A 4.2/4.5 A	 6.8/7.9 A 2.1/2.5 A
Power consumption absorbed L35-L35 L35-L50	 800/920 W 920/1100 W	 1200/1400 W 1400/1700 W
Energy efficiency ratio (EER) L35-L35	 2.1/2.0	 1.7/1.5
Control type	Thermostat	
Temperature setting range	+20...+50 °C	
Maximum outside temperature	55 °C	
Noise level	67 dB	69 dB
Air flow of the internal circuit of the external circuit	 550/600 m^3/h 620/680 m^3/h	
Type of zero-potential alarm	Inverter contact	
Weight of unit	47 kg	60 kg
Cooling gas type	R134a (1.0 kg)	
IP (IEC 60529) On the internal circuit On the external circuit	 54 34	
External circuit filter	Yes	
Assembly	On top	
Thermal protection recommended (fuse melt curve)	T6A	T3A

Cooling unit
Mechanical control

Top-mounting model, ref. NSYCU1650W230VR-NSYCU2000W400VR



* Maximum dimensions of the intermediate frame.

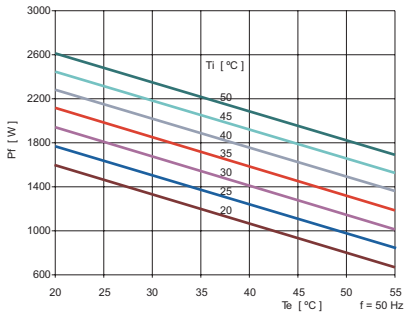


Cut-out template for top mounting without intermediate frame.

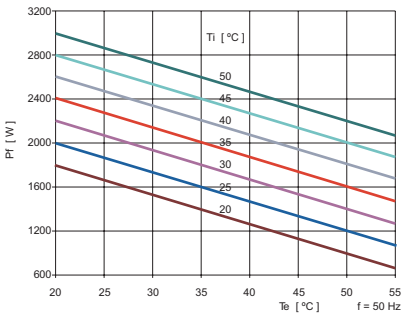
Reference	A	B	C	D	E	F	G	H	J	K	M
NSYCU1650W230VR	118	420	400	45	180	328	90	700	700	430	700
NSYCU2000W400VR	118	420	400	45	180	328	90	700	700	430	700

Curves

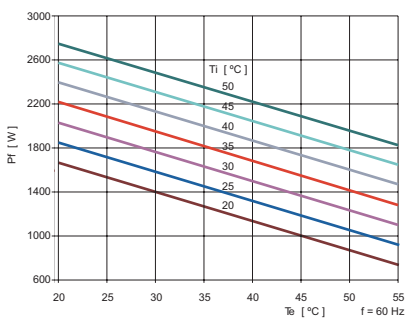
NSYCU1650W230VR 50 Hz



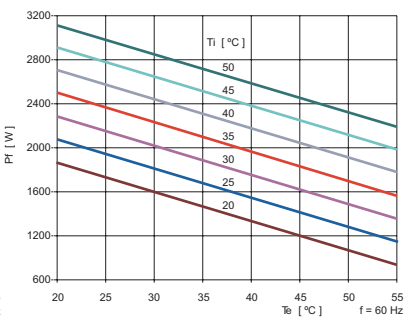
NSYCU2000W400VR 50 Hz



NSYCU1650W230VR 60 Hz



NSYCU2000W400VR 60 Hz



8

Cooling unit
Mechanical control

NSYCU3100W400VR

Top-mounting

Cooling units for electrical switchboards

- Respect for the environment by using environmentally friendly gas R134a (HFC).
- Automatic evaporation of condensation water.
- Cooling power from 760 W to 3100 W.

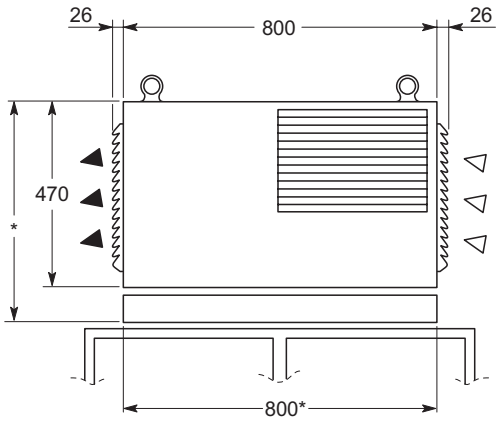
General characteristics

- The temperature setting can be adjusted from +20 to +50 ºC.
- They are equipped as standard with an automatically reset pressure gauge and a switching thermostat which, when it detects a value greater than the safe pressure value, stops the compressor and the external fan.
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
- The devices are equipped with switches for reporting an alarm.
- System for automatic recovery and evaporation of condensates.
- RAL 7035 colour for the standard offer.
- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

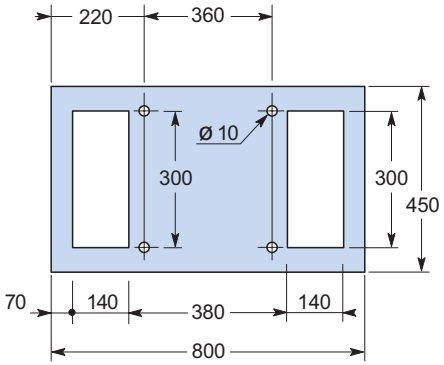
Reference	NSYCU2450W400VR	NSYCU3100W400VR
Voltage	3 × 440 V; 50 Hz / 3 × 440 V; 60 Hz	3 × 440 V; 50 Hz / 3 × 440 V; 60 Hz
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 2450/2600 W (8362/8876 Btu/h) 2000/2100 W (6828/7169 Btu/h)	 3100/3300 W (10580/11266 Btu/h) 2500/2600 W (8532/8876 Btu/h)
Dimensions Height Width Depth	 470 mm 800 mm 450 mm	
Intensity Starting current Rated current	 8.4/10.1 A 2.6/3.2 A	 9.6/11.3 A 3.0/3.5 A
Power consumption absorbed L35-L35 L35-L50	 1500/1800 W 1800/2100 W	 1700/2000 W 2000/2300 W
Energy efficiency ratio (EER) L35-L35	 1.6/1.5	 1.8/1.7
Control type	Thermostat	
Temperature setting range	+20...+50 °C	
Maximum outside temperature	55 °C	
Noise level	69 dB	
Air flow of the internal circuit of the external circuit	 750/820 m^3/h 1200/1310 m^3/h	
Type of zero-potential alarm	Inverter contact	
Weight of unit	65 kg	
Cooling gas type	R134a (1.5 kg)	R134a (1.7 kg)
IP (IEC 60529) On the internal circuit On the external circuit	 IP 54 IP 34	
External circuit filter	Yes	
Assembly	On top	
Thermal protection recommended (fuse melt curve)	T4A	

Cooling unit
Mechanical control

Top-mounting model, ref. NSYCU2450W400VR-NSYCU3100W400VR



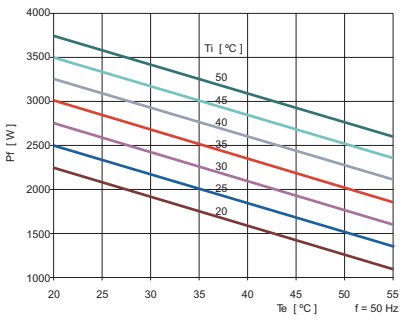
* Maximum dimensions of the intermediate frame.



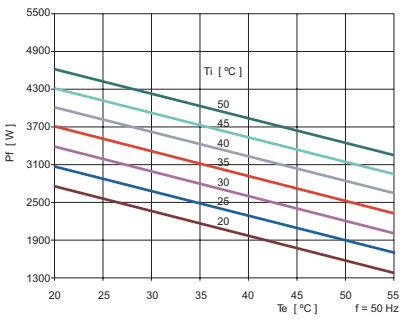
Cut-out template.

Curves

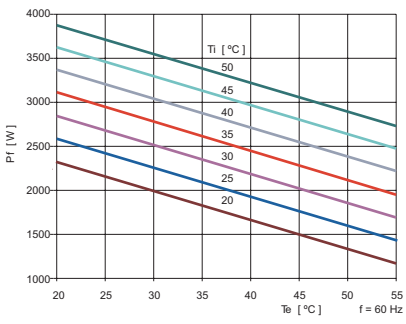
NSYCU2450W400VR 50 Hz



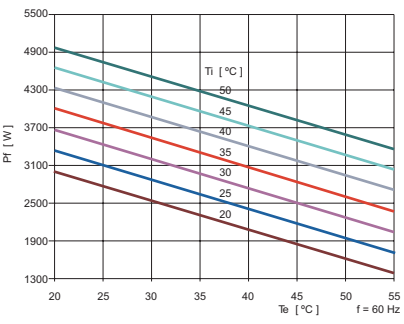
NSYCU3100W400VR 50 Hz



NSYCU2450W400VR 60 Hz



NSYCU3100W400VR 60 Hz

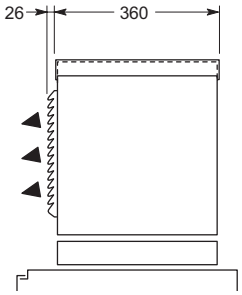


Cooling unit
Accessories

Intermediate frame

- Frame allowing the top-mounting unit ref. **NSYCU760W230VR** mounted on enclosures with a width of 600 and a depth of 400 mm.

Description	Reference
Intermediate frame	**NSYCUAI**



Spare filter

- Filter with a density of 32 kg/m² and a thickness of 13 mm, for all the side-mounting and top-mounting units.
- To be ordered in multiples of 24 filters.

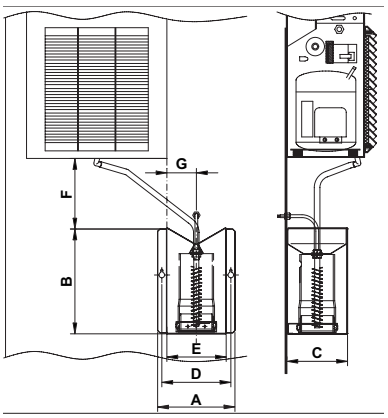
Description	Reference
Spare filter	**NSYCEAF**

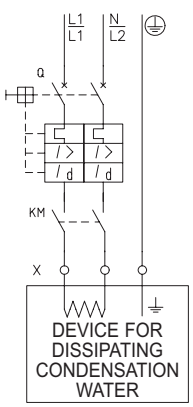
Device for dissipating condensation water (external installation)

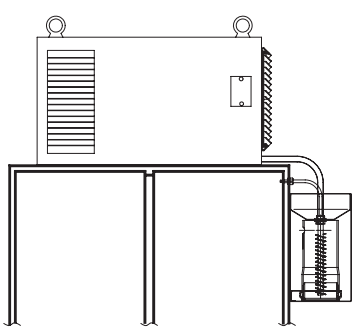
- Device for dissipating condensation water (external installation) allowing the evacuation of condensation water from the internal battery (evaporator).
- Supplied with stainless-steel support.
- Power supply:

	Voltage	Starting current	Thermal protection recommended	Evaporation capacity	Resistance type
Operating voltage ±10%	230 V~	2.9 A	T 3 A	200 cl/h	PTC
	115 V~	5.8 A	T 6 A		

Description	Reference
Heat sink	**NSYCUAD**







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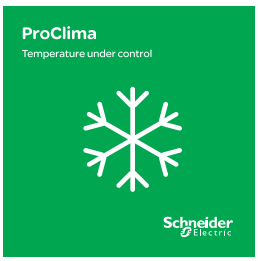
Our software suite

> Spacial.pro

Spacial.pro allows you to make switchboard proposals based on the standard Spacial offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the Bill of Material and 2D drawings for front/side views.

> ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.



> Spacial.ref Thalassa.ref

These digital rules allow you to select the best components from the current extensive product range without the risk of any mistakes, since product and accessory selection take place automatically, saving you time and money.

Cooling unit
Electronic control

NSYCUE1400W230L

Side-mounting

General characteristics

- Main components: a high-temperature compressor, two fans installed on a removable support, two exchange cassettes, an environmentally friendly refrigerant fluid HFC R134a, an electronic controller and a device for evaporating condensates (treated against corrosion) for side-mounting and top-mounting models.
- The temperature setting can be adjusted from +20 to +50 ºC (pre-set and recommended temperature: 35 °C).
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
  Electronic control by microprocessor allows:

– Setting temperature adjustment.
– Door switch management.
– Respect for the following operating parameters:
  Minimum operating time of the compressor.
  Minimum stand-by time of the compressor.
– Switching on the compressor with setting temperature +1 ºC.
– Switching off the compressor with setting temperature –5 ºC.
– Alarm management.
– Alarm reset by "confirmation" (manual reset).
– RAL 7035 colour for the standard offer.

- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

Conditions of use

- They can be used with ambient temperatures ranging from +20 to +50 °C.
- The optional filter is required for installation in the following environments: intensive welding, hot forging, textile fibres, powdery chemicals, rubber processing and other harsh environments.
- The air conditioner is equipped with two handles making it easier to transport.
- The air conditioner is equipped with a quick-fixing device. A simple screw-nut-cage assembly allows the device to be locked from the outside.
- The electrical connection is by plug-in connectors, included with the unit.
- Do not obstruct, even partially, the external air suction and backflow orifices.
- The device must be installed more than 30 cm from the walls and more than 10 cm from the floor.

Cooling unit
Electronic control

Reference	NSYCUE1100W230L	NSYCUE1400W230L	NSYCUE1400W400L	NSYCUE1800W400L
Voltage	230 V; 50/60 Hz		3 × 400 V; 50 Hz / 3 × 440 V; 60 Hz	
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	1100/1200 W (3755/4097 Btu/h) 880/930 W (3004/3175 Btu/h)	1400/1500 W (4780/5121 Btu/h) 1200/1300 W (4097/4438 Btu/h)	1400/1500 W (4780/5121 Btu/h) 1200/1300 W (4097/4438 Btu/h)	1800/1900 W (6145/6485 Btu/h) 1400/1500 W (4780/5121 Btu/h)
Dimensions Height Width Depth	1,010 mm 400 mm 240 mm			
Intensity Starting current Rated current	12.1/13.9 A 3.2/3.7 A	18.1/22.2 A 4.8/5.8 A	3.7/4.3 A 1.2/1.4 A	5.3/6.3 A 1.8/2.1 A
Power cunsumption absorbed L35-L35 L35-L50	600/690 W 690/790 W	900/1,100 W 1100/1300 W	700/810 W 810/930 W	1000/1200 W 1200/1400 W
Energy efficiency ratio (EER) L35-L35	1.8/1.7	1.6/1.4	2.0/1.9	1.8/1.7
Control type	Electronic controller			
Temperature setting range	+20...+50 °C			
Maximum outside temperature	55 °C			
Noise level	62 dB (A)	64 dB (A)	66 dB (A)	69 dB (A)
Air flow of the internal circuit of the external circuit	575/600 m^3/h 860/900 m^3/h	860/900 m^3/h 860/900 m^3/h	860/900 m^3/h 860/900 m^3/h	885/900 m^3/h 1050/1160 m^3/h
Type of zero-potential alarm	Inverter contact			
Weight of unit	45 kg	46 kg	47 kg	50 kg
Cooling gas type	R134a (0.85 kg)	R134a (0.85 kg)	R134a (0.85 kg)	R134a (0.85 kg)
IP (IEC 60529) On the internal circuit On the external circuit	54 34			
External circuit filter	Option			
Assembly	Side			
Thermal protection recommended (fuse melt curve)	T6A	T8A	T2A	T3A

Cooling unit
Electronic control

NSYCUE1400W230R

Top-mounting

General characteristics

- Main components: a high-temperature compressor, two fans installed on a removable support, two exchange cassettes, an environmentally friendly refrigerant fluid HFC R134a, an electronic controller and a device for evaporating condensates (treated against corrosion) for side-mounting and top-mounting models.
- The temperature setting can be adjusted from +20 to +50 ºC (pre-set and recommended temperature: 35 °C).
- The internal and external air circuits are independent. A protection rating of IP 54 is guaranteed between the outside and the inside of the enclosure on which the air conditioner is installed.
- The fan of the internal circuit permanently guarantees prevention against hot spots as well as improved thermal dissipation inside the enclosure.
  Electronic control by microprocessor allows:

– Setting temperature adjustment.
– Door switch management.
– Respect for the following operating parameters:
  Minimum operating time of the compressor.
  Minimum stand-by time of the compressor.
– Switching on the compressor with setting temperature +1 ºC.
– Switching off the compressor with setting temperature –5 ºC.
– Alarm management.
– Alarm reset by "confirmation" (manual reset).
– RAL 7035 colour for the standard offer.

- Units in RAL 7032 as option, please contact us.
- Stainless-steel version and other voltages on demand.

Conditions of use

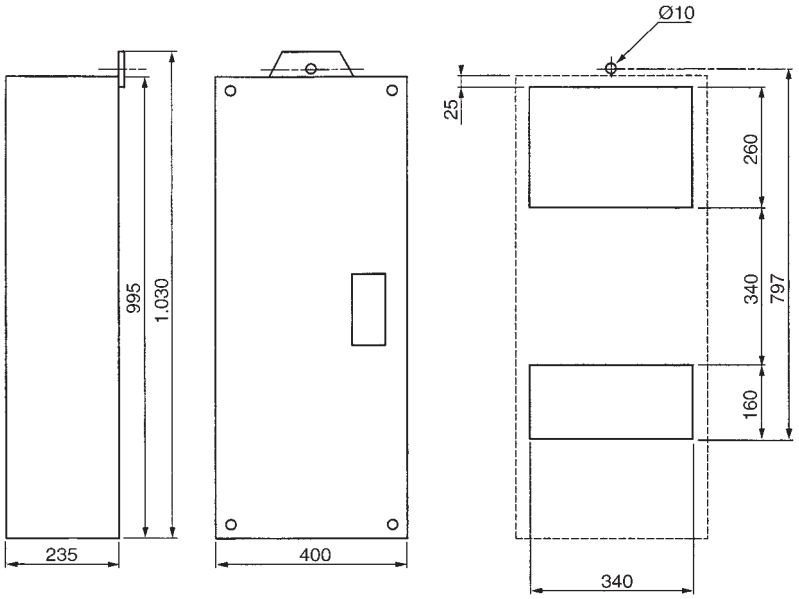
- They can be used with ambient temperatures ranging from +20 to +55 °C.
- The optional filter is required for installation in the following environments: intensive welding, hot forging, textile fibres, powdery chemicals, rubber processing and other harsh environments.
- The air conditioner is equipped with two handles making it easier to transport.
- The air conditioner is equipped with a quick-fixing device. A simple screw-nut-cage assembly allows the device to be locked from the outside.
- The electrical connection is by plug-in connectors, included with the unit.
- Do not obstruct, even partially, the external air suction and backflow orifices.
- The device must be installed more than 30 cm from the walls and more than 10 cm from the floor.

Cooling unit
Electronic control

Reference	NSYCUE1400W230R	NSYCUE1800W400R
Voltage	230 V; 50/60 Hz	3 × 400 V; 50 Hz / 3 × 440 V; 60 Hz
Cooling power (50/60 Hz) according to EN 14511 L35-L35 L35-L50	 1400/1500 W (4780/5121 Btu/h) 1200/1300 W (4097/4438 Btu/h)	 1800/1900 W (6145/6485 Btu/h) 1400/1500 W (4780/5121 Btu/h)
Dimensions Height Width Depth	 415 mm 750 mm 412 mm	
Intensity Starting current Rated current	 18.1/22.2 A 4.8/5.8 A	 5.3/6.3 A 1.8/2.1 A
Power consumption absorbed L35-L35 L35-L50	 900/1,100 W 1100/1300 W	 1000/1200 W 1200/1400 W
Energy efficiency ratio (EER) L35-L35	 1.6/1.4	 1.8/1.7
Control type	Electronic controller	
Temperature setting range	+20...+50 °C	
Maximum outside temperature	55 °C	
Noise level	64 dB (A)	69 dB (A)
Air flow of the internal circuit of the external circuit	 860/900 m^3/h 860/900 m^3/h	 885/900 m^3/h 1050/1160 m^3/h
Type of zero-potential alarm	Inverter contact	
Weight of unit	48 kg	50 kg
Cooling gas type	R134a (0.95 kg)	R134a (0.95 kg)
IP (IEC 60529) On the internal circuit On the external circuit	 54 34	
External circuit filter	Option	
Assembly	On top	
Thermal protection recommended (fuse melt curve)	T8A	T3A

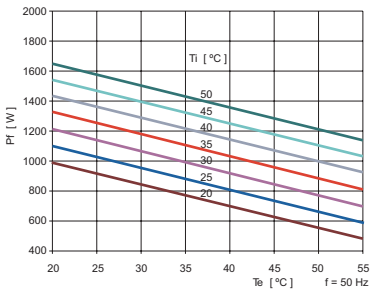
Cooling unit
Electronic control

Cut-out template for side mounting

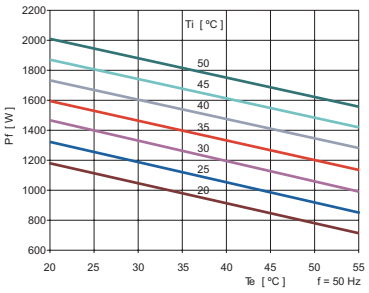


Curves

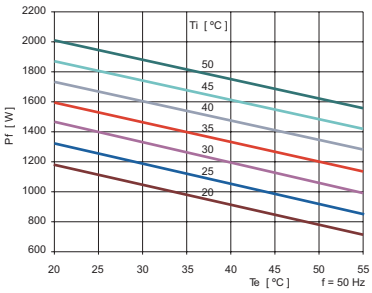
NSYCUE1100W230L 50 Hz



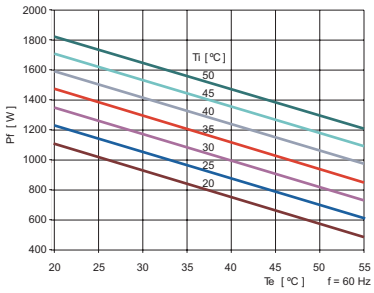
NSYCUE1400W230L 50 Hz



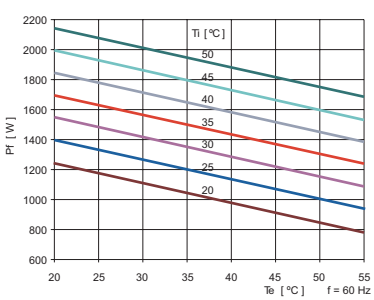
NSYCUE1400W400L 50 Hz



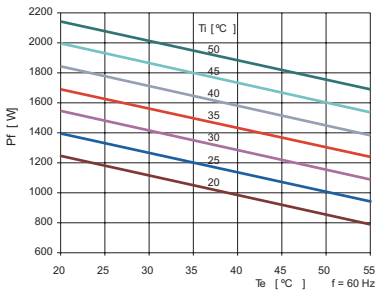
NSYCUE1100W230L 60 Hz



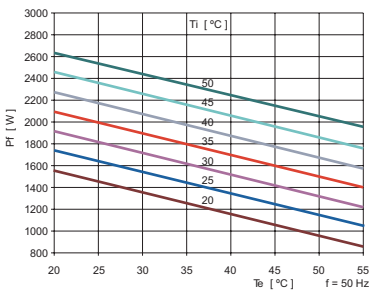
NSYCUE1400W230L 60 Hz



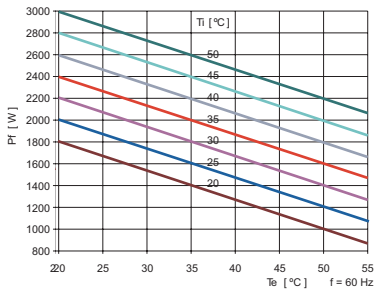
NSYCUE1400W400L 60 Hz



NSYCUE1800W400L 50 Hz

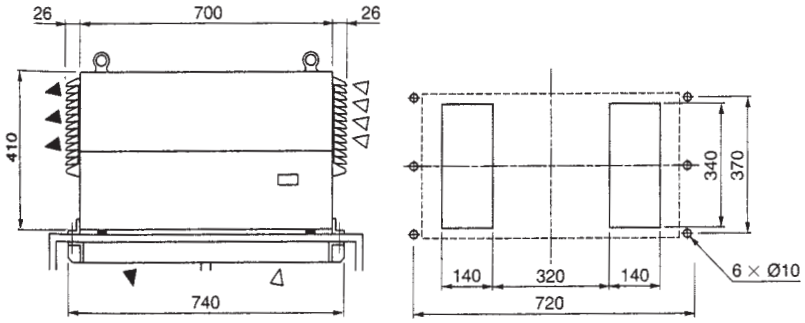


NSYCUE1800W400L 60 Hz



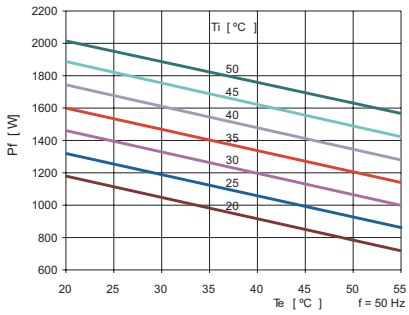
Cooling unit
Electronic control

Cut-out template for top mounting

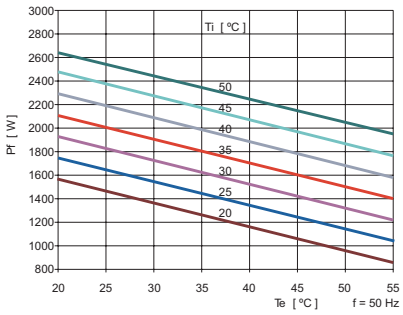


Curves

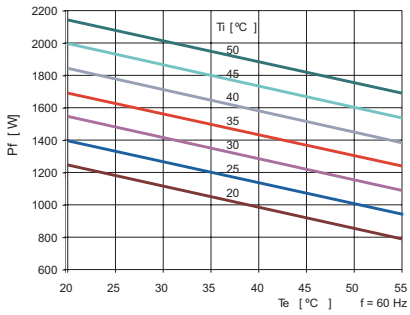
NSYCUE1400W230R 50 Hz



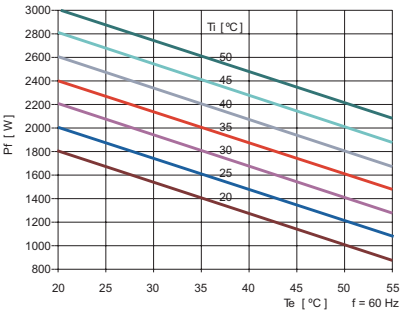
NSYCUE1800W400R 50 Hz



NSYCUE1400W230R 60 Hz



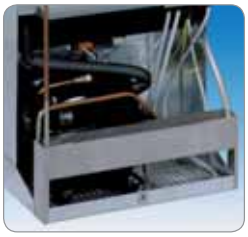
NSYCUE1800W400R 60 Hz



Cooling unit
Accessories

NSYCUART

NSYCUALF



Filter device

- Kit for additional filter required to protect the side-mounting or top-mounting units in a harsh environment.
- Filter clogging detection kit.
- Spare filter (density 32 kg/m^3, thickness 13 mm).
- Kit for quick cleaning of the exchanger cassette to guarantee a good thermal exchange (contains a tray, an drain pipe and a bottle of grease remover).

Pack.	Description	Mounting model	Reference
1	Additional filter kit	Side	**NSYCUALT**
1	Additional filter kit	Top	**NSYCUART**
1	Flush-mounting kit	Side and top	**NSYCUAE**
5	Spare filter	Side	**NSYCUALF**
6	Spare filter	Top	**NSYCUARF**
1	Cleaning kit	Side	**NSYCUALN**

Cut-out side panels

- Set of two Spacial panels (one solid panel and one pre-cut panel).
- Allows instant installation of side-mounting cooling units.
- RAL 7035 grey paint.

For Spacial SF wall-mounting enclosures (mm)		Panel reference
Height	Depth	
1800	600	**NSY2SPC186**
1800	800	**NSY2SPC188**
2000	600	**NSY2SPC206**
2000	800	**NSY2SPC208**

Only 17 references for 66 combinations

1000 to 2700W

UL

115, 230 & 400V

IP 55

Environ-mentally friendly

Easy maintenance

It can withstand external temperatures of up to 55°C

1 Flush
2 Semi-flush
3 Surface

8

Cooling unit
SLIM electronic control

NSYCUB1100W230S

SLIM

- Range of cooling powers from 1100 W to 2700 W.
- 3 installation options: surface, partial flush and flush.
- Versions in RAL 7035 and stainless steel.
- Electronic thermostat with control option (precision of ±1 °C). Option of installing a display as an accessory.
- Minimal depth of 162 mm in every model.
- Internal IP 55 (enclosure side) maintains the IP of the enclosure up to IP 55.
- The unit is controlled by 3 commands:

– Thermostat value.
– Signal of an anomaly (sudden disconnection, incorrect phase installation, filter blocked with dirt, high compressor temperature, high enclosure temperature).
– Door open switch signal.

- A minimum height of 1800 mm and width of 800 mm (door) or 600 mm (side panel) is required to install a SLIM cooling unit in a Spacial enclosure.

General characteristics

- Desired internal temperature adjustable from +20 to +50 °C.
- Maximum ambient temperature: +55 ºC.
- All the units have, in standard version, a pressure gauge with automatic reset. If the high pressure exceeds the safe value (in the high-pressure circuit) the pressure gauge acts by cutting off the power supply to the compressor and the external fan.
- External and internal air circuits separated with IP 55. The fan of the internal circuit operates permanently, preventing the appearance of hot spots in the installation.
- Equipped with alarm relay activated by the pressostat in the high-pressure circuit.
- Respect for the environment using environmentally friendly gas R134a (HFC).

Modular version:
1 bloc + 1 cover

	NSYCUB1100W230S
Dimensions (mm)	
Height	1580
Width (according to installation type)	460 (surface) or 495 (partial flush or flush)
Depth	162
Control type	electronic with control without display (display optional)
Unit control	thermostat+alarm+door closed
Temperature setting range	+20…+50 ºC
Maximum outside temperature	+55 ºC
Type of zero-potential alarm	Inverter contact
Cooling gas type	R134a
IP (IEC 60529)	
On the internal circuit	55
On the external circuit	34
External circuit filter	No (please consult us for aggressive environments)
Mounting model (the correct cover needs to be ordered)	surface, partial flush or flush
Available cover versions	RAL 7035 and stainless steel (please consult us for RAL 7032)
Certifications / marking	UL in process and CE

Modular version: Always order one SLIM cooling unit reference plus one cover reference.

Cooling unit
SLIM electronic control

Reference	NSYCUB1100W230S	NSYCUB1100W400S	NSYCUB1100W115S
	1100 W	1100 W	1100 W
Voltage	230 V 50/60 Hz	3 × 400 V 50 Hz/3 × 460V 60 Hz	115 V 50/60 Hz
Power according to EN14511 L35-35 L35-L50	 1100 W/1200 W (3754/4095 Btu/h) 850 W/900 W (2900/3071 Btu/h)	 1100 W/1200 W (3754/4095 Btu/h) 850 W/900 W (2900/3071 Btu/h)	 1100 W/1200 W (3754/4095 Btu/h) 850 W/900 W (2900/3071 Btu/h)
Intensity Starting current Rated current	 11/13.5 A 2.9/3.5 A	 8.5/10.5 A 2.2/2.3 A	 22/27A 5.8/7 A
Power consumption absorbed L35-L35 L50-L35	 600/710 W 710/850 W	 0.87/0.92 KW 0.99/1.1 KW	 0.6/0.71 KW 0.71/0.85 KW
Energy efficiency ratio (EER) L35-L35	 1.8/1.7	 1.3/1.3	 1.8/1.7
Noise level	67 dB (A)	67 dB (A)	67 dB (A)
Air flow of the internal circuit of the external circuit	 570/620 m^3/h 860/900 m^3/h	 570/620 m^3/h 860/900 m^3/h	 570/620 m^3/h 860/900 m^3/h
Weight of unit	46 kg	42 kg	46 kg
Thermal protection recommended (fuse melt curve)	 T4A	 T6A	 T8A

Reference	NSYCUB1500W230S	NSYCUB1500W400S	NSYCUB1500W115S
	1500 W	1500 W	1500 W
Voltage	230 V 50/60 Hz	3 × 400 V 50Hz/3 × 460V 60Hz	115 V 50/60 Hz
Power according to EN14511 L35-35 L35-L50	 1600/1700 W (5459/5800 Btu/h) 1300/1400 W (4436/4777 Btu/h)	 1500/1600 W (5118/5459 Btu/h) 1200/1300 W (4094/4435 Btu/h)	 1600/1700 W (5459/5800 Btu/h) 1300/1400 W (4436/4777 Btu/h)
Intensity Starting current Rated current	 16.7/19.2 A 4.4/5.1 A	 7.2/9.0 A 2.4/3.0 A	 33.4/38.4 A 8.8/10.2 A
Power consumption absorbed L35-L35 L50-L35	 830/950 W 950/1100 W	 1,300/1,500 W 1500/1 800 W	 0.83/0.95 KW 0.95/1.1 KW
Energy efficiency ratio (EER) L35-L35	 1.9/1.8	 1.2/1.1	 1.9/1.8
Noise level	69 dB (A)	67 dB (A)	69 dB (A)
Air flow of the internal circuit of the external circuit	 860/900 m^3/h 885/990 m^3/h	 860/900 m^3/h 885/990 m^3/h	 885/990 m^3/h 886/990 m^3/h
Weight of unit	49 kg	50 kg	49 kg
Thermal protection recommended (fuse melt curve)	 T6A	 T4A	 T4A

SLIM covers			
	Surface-mounting	Partial flush-mounting	Flush-mounting
RAL 7035	**NSYCUCL**	**NSYCUCH**	**NSYCUCF**
Stainless-steel	**NSYCUCLX**	**NSYCUCHX**	**NSYCUCFX**

Modular version: Always order one SLIM cooling unit reference plus one cover reference.

Cooling unit
SLIM electronic control

Reference	NSYCUB2200W230S	NSYCUB2200W400S	NSYCUB2200W115S
	2200 W	2200 W	2200 W
Voltage	230 V 50/60 Hz	3 × 400 V 50 Hz/3 × 460 V 60 Hz	115 V 50/60 Hz
Power according to EN14511 L35-35 L35-L50	 2200 W/2400 W (7507/8189 Btu/h) 1800 W/2000 W (6142/6824 Btu/h)	 2200 W/2400 W (7507/8189 Btu/h) 1800 W/2000 W (6142/6824 Btu/h)	 2200 W/2400 W (7507/8189 Btu/h) 1800 W/2000 W (6142/6824 Btu/h)
Intensity Starting current Rated current	 22.2/26.2 A 5.8/6.9 A	 7.9/9.5 A 2.6/3.2 A	 44.4/52.4A 11.6/13.8 A
Power consumption absorbed L35-L35 L50-L35	 1100/1300 W 1300/1500 W	 1500/1800 W 1800/2100 W	 1.1/1.3 KW 1.3/1.5 KW
Energy efficiency ratio (EER) L35-L35	 2/1.8	 1.5/1.3	 2/1.8
Noise level	67 dB (A)	69 dB (A)	67 dB (A)
Air flow of the internal circuit of the external circuit	 860/900 m^3/h 885/990 m^3/h	 885/990 m^3/h 885/990 m^3/h	 885/990 m^3/h 886/990 m^3/h
Weight of unit	50 kg	54 kg	50 kg
Thermal protection recommended (fuse melt curve)	 T8A	 T4A	 T16A

Reference	NSYCUB2700W230S	NSYCUB2700W400S
	2700 W	2700 W
Voltage	230 V 50/60 Hz	3 × 400 V 50Hz/3 × 460V 60Hz
Power according to EN14511 L35-35 L35-L50	 2700 W/2900 W (9218/9901 Btu/h) 2200 W/2400 W (7511/8194 Btu/h)	 2700 W/2900 W (9218/9901 Btu/h) 2200 W/2400 W (7511/8194 Btu/h)
Intensity Starting current Rated current	 24.8/28.2 A 6.4/6.7 A	 9/10.6 A 3/3.5 A
Power consumption absorbed L35-L35 L50-L35	 1200/1400 W 1400/1700 W	 1700/2000 W 2000/2300 W
Energy efficiency ratio (EER) L35-L35	 2.3/2.1	 1.6/1.5
Noise level	69 dB (A)	69 dB (A)
Air flow of the internal circuit of the external circuit	 1050/1160 m^3/h 1200/1340 m^3/h	 1050/1160 m^3/h 1200/1340 m^3/h
Weight of unit	57 kg	60 kg
Thermal protection recommended (fuse melt curve)	 T8A	 T4A

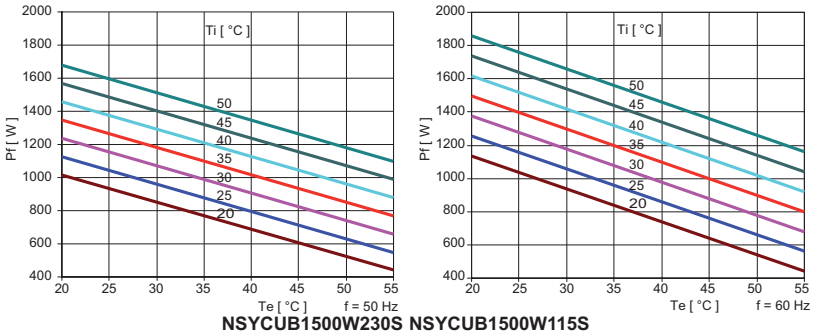
SLIM covers			
	Surface-mounting	Partial flush-mounting	Flush-mounting
RAL 7035	**NSYCUCL**	**NSYCUCH**	**NSYCUCF**
Stainless-steel	**NSYCUCLX**	**NSYCUCHX**	**NSYCUCFX**

Modular version: Always order one SLIM cooling unit reference plus one cover reference.

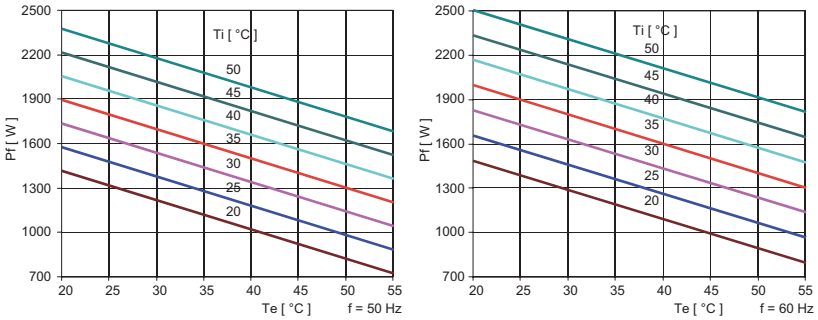
Cooling unit
SLIM electronic control

Curves

NSYCUB1100W•••



NSYCUB1500W230S NSYCUB1500W115S



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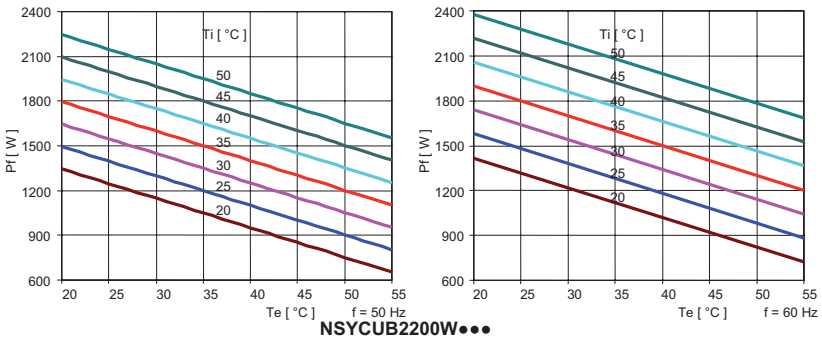

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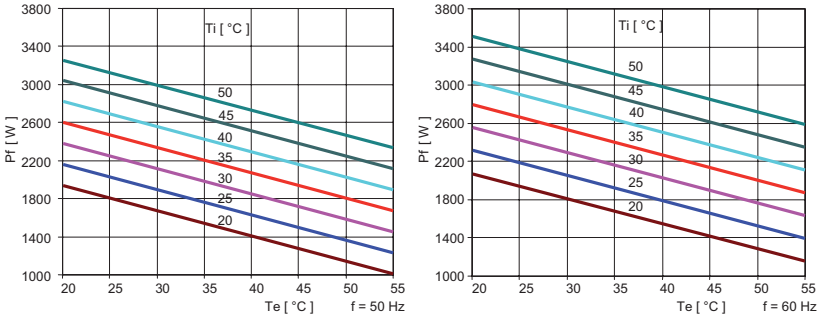

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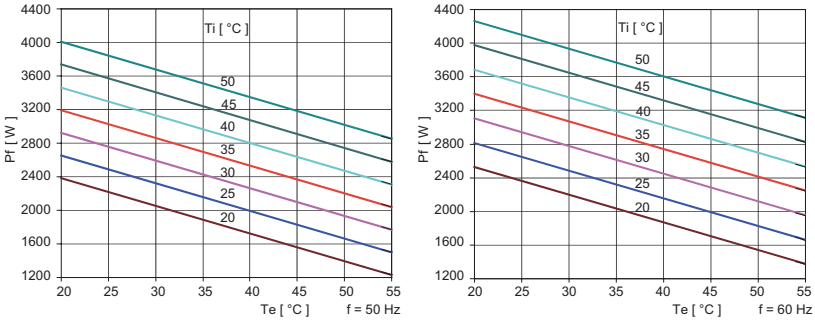
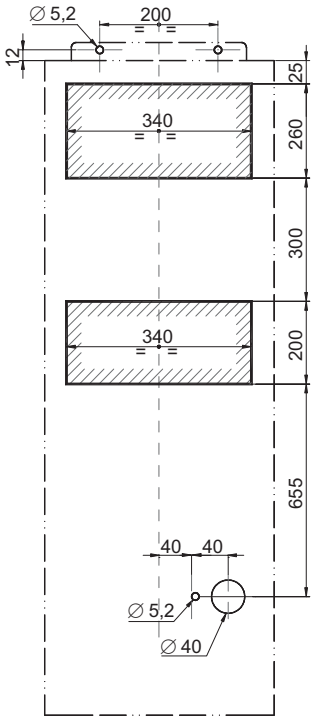
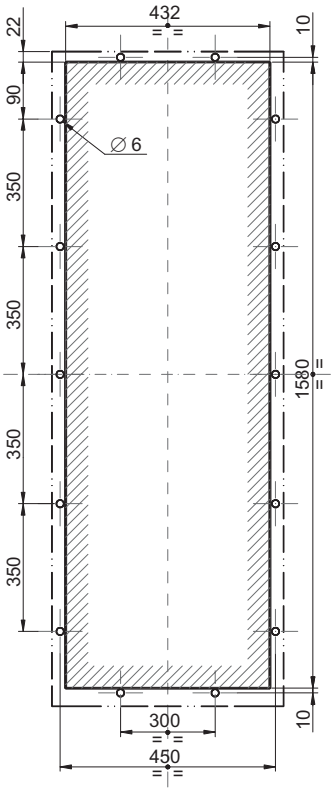


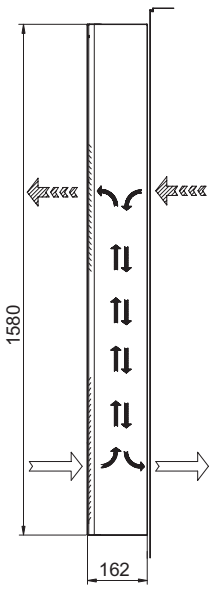
Cooling unit
SLIM electronic control

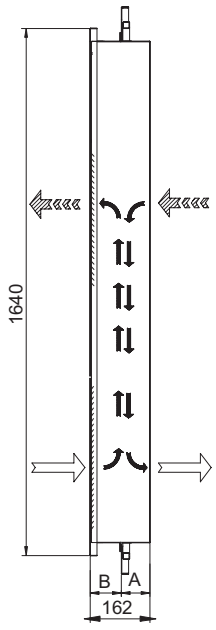
Template for surface mounting

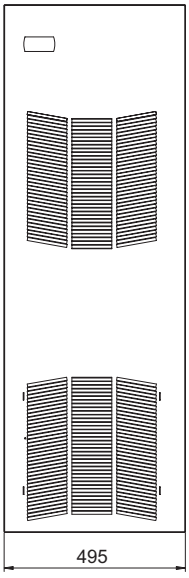


Template for flush-mounting and partial flush-mounting









Version	Flush-mounting	Partial flush-mounting and surface-mounting
A = inside the enclosure	141 mm	81 mm
B = outside the enclosure	21 mm	81 mm

8

Cooling unit
SLIM accessories

Device for dissipating condensation water (internal installation)

- Device for dissipating condensation water (internal installation) allowing the evacuation of condensation water from the internal battery (evaporator).

	Voltage	Starting current	Thermal protection recommended	Evaporation capacity	Resistance type
Operating voltage ±10%	230 V~	2.9 A	T 3 A	200 cl/h	PTC
	115 V~	5.8 A	T 6 A		

Description	Reference
Heat sink	**NSYCUASD**

Electronic display

Enables control of the thermostat and displays the temperature inside the enclosure. The display is supplied with a connection cable and a metal plate for inserting the display in the cover of the cooling unit. No prior programming is required.

Description	Reference
Display	**NSYCUAY**

Insulated resistance heaters
Introduction

The resistance heaters prevent the formation of condensation and guarantee the ideal temperature for the correct operation of the electronic components in the enclosure.

Large range of power levels

- 2 versions: by natural convection and with fan.
- AC or DC power supply.
- 7 power levels, from 10 W to 550 W.

Innovating design

Covered with plastic to prevent direct contact with the aluminium radiator.

Easy installation and connection

- Reduced dimensions.
- Quick electric connection by terminal board.
- No maintenance required.
- Direct clipping onto a 35-mm DIN rail.

Safety

- The protection prevents direct contact with the aluminium radiator.
- Electric protection device with terminal block cover.
- Equipped with a PTC-type heater.
- Surface temperature lower than 70 °C.

High thermal efficiency

- The configuration of the aluminium profile produces a "chimney" effect: high natural convection.
- Low power consumption thanks to self-control of the PTC-type heater.

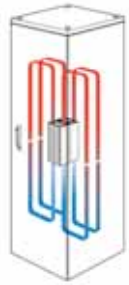
Models with fan

- The heaters equipped with a fan ensure circulation of the air and a uniform temperature inside the enclosure.
- High-flow, silent fan.

Certifications

- CE marking.
- Range compliant with UL and VDE.

Aluminium resistance heaters
Introduction



The resistance heaters prevent the formation of condensation and guarantee the ideal temperature for the correct operation of the electronic components in the enclosure.

Resistance heaters equipped with a PTC-type sensor

The resistance heaters for electrical and electronic enclosures are equipped with PTC-type heating devices (Positive Temperature Coefficient). Thanks to these heaters:

- The surface temperature stabilises at 75 °C when the ambient temperature is –5 °C.
- Power consumption is reduced.

Improved convection

The design of the profile of the resistance heaters produces a "chimney" effect, leading to increased natural convection and maintaining an even temperature inside the enclosure.

Quick fixing

The resistance heaters are fixed by means of fixing clips to a 35-mm DIN rail.

Connection cables

The 10 and 20 W heaters are equipped with a 2 × 0.75 × 300 mm power cord.

Connection terminal boards

Heaters with a power of more than 20 W are equipped with a connection terminal board.

Large range of power levels

8 power levels, from 10 W to 400 W.

Models with fan

Models of 250 to 400 W with fan.

Resistance heaters
Applications

Conditions of use

- The resistance heaters are controlled by a thermostat or a hygrostat.
- The enclosure must be sealed to prevent the entry of air from the outside.

Dew point temperature

The dew point temperature is the minimum temperature that can be reached before condensation begins to form.
Example:
Ambient temperature = 25 °C.
Relative humidity = 50 %.
A temperature of more than 14 °C must be guaranteed inside the enclosure.

Relative humidity (%)	Ambient temperature (ºC)							
	20	25	3 0	35	40	45	50	55
40	6	11	15	19	24	28	33	37
50	9	14	19	23	28	32	37	41
60	12	17	21	26	31	36	40	45
70	14	19	24	29	34	38	43	48
80	16	21	26	31	36	41	46	51
90	18	23	28	33	38	43	48	53
100	20	25	30	35	40	45	50	55

Installation tips

- Install several heaters according to the desired power level at the bottom of the enclosure.
- Respect a safety area of at least 10 cm around the device.
- Do not install any bulky devices above the heater, since this could reduce the effect of natural convection.
- Do not install any components that are particularly sensitive to heat directly above a heater.
- If several heaters are used, they must be installed in parallel. Serial installation is not an option.
- The heater must be installed vertically to ensure optimum convection.

Resistance heaters
Selection guide

Insulated resistance heaters

Power (W)	Voltage (V)	Connection type Terminal block	Reference
10	12-24 DC	•	**NSYCR10WU1C**
10	110-250 AC	•	**NSYCR10WU2C**
21	12-24 DC	•	**NSYCR20WU1C**
21	110-250 AC	•	**NSYCR20WU2C**
55	12-24 DC	•	**NSYCR50WU1C**
55	110-250 AC	•	**NSYCR50WU2C**
55	270-420 AC	•	**NSYCR50WU3C**
100	12-24 DC	•	**NSYCR100WU1C**
100	110-250 AC	•	**NSYCR100WU2C**
100	270-420 AC	•	**NSYCR100WU3C**
147	12-24 DC	•	**NSYCR150WU1C**
147	110-250 AC	•	**NSYCR150WU2C**

Resistance heaters
Selection guide

Insulated resistance heater with fan

Power (W)	Voltage (V)	Connection type Terminal block	Reference
177	230 AC	•	NSYCR170W230VVC

NSYCR350W230VTVC

Thermofans

Power (W)	Voltage (V)	Connection type Terminal block	Reference
350	230 AC	•	NSYCR350W230VTVC
400/550	120 AC	•	NSYCRP1W120VTVC
400/550	230 AC	•	NSYCRP1W230VTVC

Resistance heaters

Power (W)	Voltage (V)	Connection type		Reference
		Terminal block	Cable	
10	12-24 DC		•	NSYCR10WU1
10	110-250 AC		•	NSYCR10WU2
20	12-24 DC		•	NSYCR20WU1
20	110-250 AC		•	NSYCR20WU2
20	270-420 AC	•		NSYCR20WU3
55	12-24 DC	•		NSYCR55WU1
55	110-250 AC	•		NSYCR55WU2
55	270-420 AC	•		NSYCR55WU3
90	12-24 DC	•		NSYCR100WU1
90	110-250 AC	•		NSYCR100WU2
90	270-420 AC	•		NSYCR100WU3
150	12-24 DC	•		NSYCR150WU1
150	110-250 AC	•		NSYCR150WU2
150	270-420 AC	•		NSYCR150WU3

NSYCRS200W230V

Resistance heaters with fan

Power (W)	Voltage (V)	Connection type Terminal block	Reference
250	115 AC	•	NSYCR250W115VV
250	230 AC	•	NSYCR250W230VV
400	115 AC	•	NSYCR400W115VV
400	230 AC	•	NSYCR400W230VV
200	115 AC	•	NSYCRS200W115V
200	230 AC	•	NSYCRS200W230V

NSYCRAFD

NSYCRAF

Fixing accessories

Description	Reference
Set of 5 studs	NSYCRAF
Set of 5 studs and DIN rail	NSYCRAFD

Insulated resistance heaters

Insulated resistance heater 10 W and 20 W

General characteristics

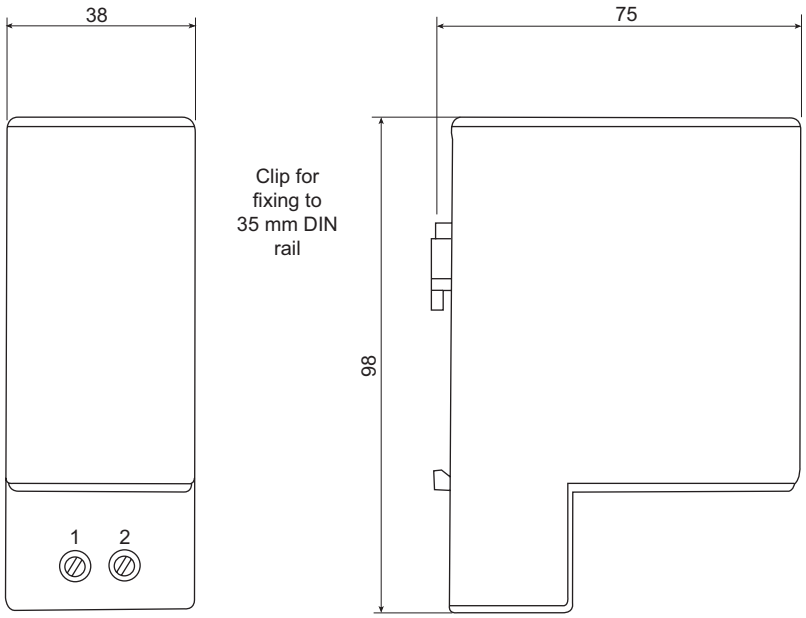
- Compact resistance heater preventing the formation of condensation or frost.
- Designed to ensure good natural convection and high thermal efficiency.
- Compact design with reduced dimensions.
- Extruded aluminium body.
- Covered with a UL94 V0 plastic cover, light grey, to avoid direct contact with the heating elements.
- Surface temperature limited to 70 °C.
- Equipped with a power cable.
- Double insulated.
- Range with PTC technology.
- Quick fixing by clip on a 35-mm DIN rail.
- UL and VDE certifications. CE marking.

Conditions of use

- The heaters must be installed with a thermal controller (see selection table on pages **8/94** and **8/95**) to control the temperature or the humidity inside the enclosure.
- The enclosure must be sealed to prevent the entry of air from the outside.
- An electrical protection device must be installed on the supply side of the unit.

Specifications	Reference			
	NSYCR10WU2C	NSYCR10WU1C	NSYCR20WU2C	NSYCR20WU1C
Power at 0 °C	10 W		20 W	
Voltage	110-250 V AC	12-24 V DC	110-250 V AC	12-24 V DC
Technology	PTC			
Surface temperature	<70 °C, except for the top protection grille			
Electric connection	2 poles, 2.5 mm^2			
Mounting	Quick by clip on a 35-mm DIN rail.			
Cover	UL94 V0 plastic			
Operating position	Vertical			
Operating temperature	–40...+70 °C –10...+158 °F			
IP protection rating	IP 20 class II (double insulated)			
Certifications	VDE and UL			

Dimensions



Insulated resistance heaters

Insulated resistance heater 55 W - 100 W - 147 W

General characteristics

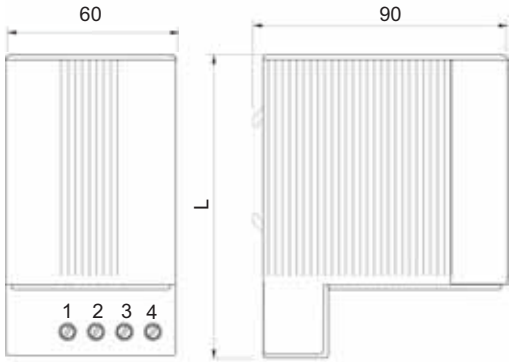
- Compact resistance heater preventing the formation of condensation or frost.
- Designed to ensure good natural convection and high thermal efficiency.
- Compact design with reduced dimensions.
- Extruded aluminium body.
- Covered with a UL94 V0 plastic cover, light grey, to avoid direct contact with the heating elements.
- Surface temperature limited to < 70 °C.
- Equipped with quick-connection terminals: 2.5 mm².
- Double insulated.
- Range with PTC technology.
- Quick fixing by clip on a 35-mm DIN rail.
- UL and VDE certifications. CE marking.

Conditions of use

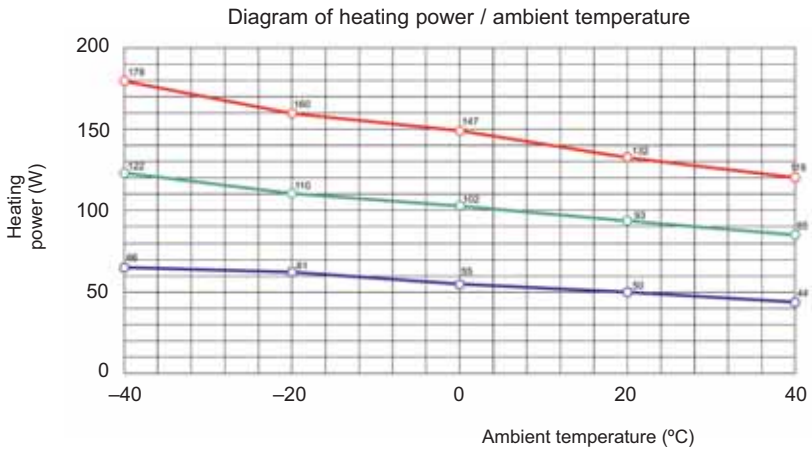
- The heaters must be installed with a thermal controller (see selection table on pages **8/94** and **8/95**) to control the temperature or the humidity inside the enclosure.
- The enclosure must be sealed to prevent the entry of air from the outside.
- An electrical protection device must be installed on the supply side of the unit.

Specifications	Reference							
	NSYCR50WU2C	NSYCR50WU1C	NSYCR50WU3C	NSYCR100WU2C	NSYCR100WU1C	NSYCR100WU3C	NSYCR150WU2C	NSYCR150WU1C
Power at 0 °C	55 W			100 W			147 W	
Voltage	110-250 V AC	12-24 V DC	270-420 V AC	110-250 V AC	12-24 V DC	270-420 V AC	110-250 V AC	12-24 V DC
Technology	PTC							
Surface temperature	<70 °C, except for the top protection grille							
Electric connection	4 poles, 2.5 mm²							
Mounting	By clip on 35-mm DIN rail							
Cover	UL94 V0 plastic							
Operating position	Vertical							
Operating temperature	–40...+70 °C –10...+158 °F							
IP protection rating	IP 20 class II (double insulated)							
Certifications	VDE and UL							
Height (H)	110 mm			150 mm				

Dimensions



Performance diagram



Insulated ventilated resistance heaters

177 W

General characteristics

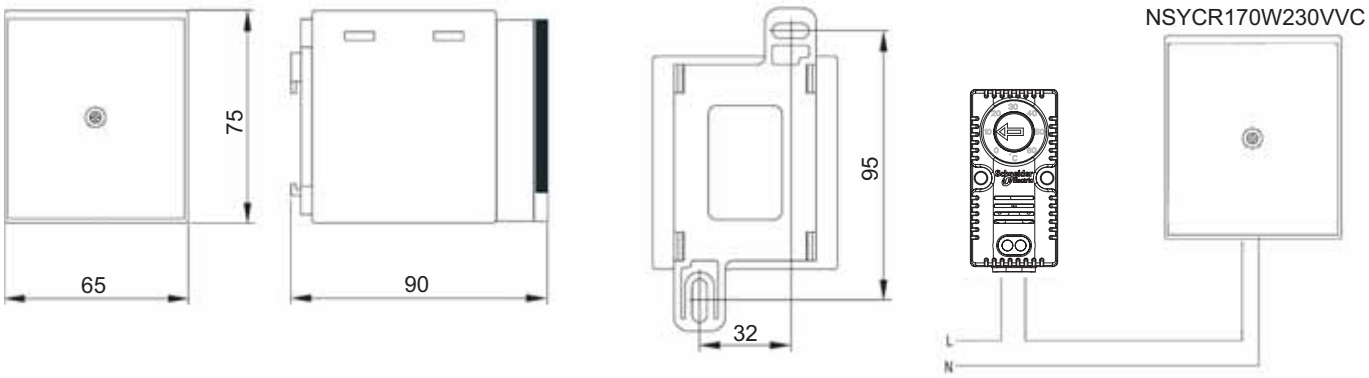
- Compact resistance heater preventing the formation of condensation or frost.
- Equipped with an axial fan for uniform heating inside the enclosure.
- Compact design with reduced dimensions.
- Extruded aluminium body.
- Covered with a UL94 V0 plastic cover, light grey, to avoid direct contact with the heating elements (PTC).
- Surface temperature limited to 50 °C.
- Equipped with quick-connection terminals: 2.5 mm^2.
- Double insulated.
- Range with PTC technology.
- Quick fixing by clip on a 35-mm DIN rail.
- UL and VDE certifications. CE marking.

Conditions of use

- The heaters must be installed with a thermal controller (see selection table on pages **8/94** and **8/95**) to control the temperature or the humidity inside the enclosure.
- The enclosure must be sealed to prevent the entry of air from the outside.
- An electrical protection device must be installed on the supply side of the unit.

Specifications	Reference
	NSYCR170W230VVC
Power at 0 °C	177 W
Voltage	230 V AC; 50-60 Hz
Technology	PTC
Surface temperature	Max. 50 °C in the enclosure, 100 °C on the top protection grille (for an ambient temperature of 20 °C / 68 °F)
Service life	40,000 h at 40 °C
Air flow	13.8 m^3/h
Electric connection	2 poles 2.5 mm^2
Mounting	By clip on 35-mm DIN rail
Cover	UL94 V0 plastic
Operating position	Vertical
Operating temperature	–40...+70 °C –10...+158 °F
IP protection rating	IP 20 class II (double insulated)
Certifications	VDE and UL

Dimensions



Aluminium resistance heaters

General characteristics

- Extruded aluminium body.
- Surface temperature limited to 75 °C when the ambient temperature is –5 °C.
- Heaters equipped with a power cable with a length of 500 mm with silicon insulation, or with a connection terminal block.

Conditions of use

- The heaters must be installed with a thermal controller (see selection table on pages **8/94** and **8/95**) to control the temperature or the humidity inside the enclosure.
- The enclosure must be sealed to prevent the entry of air from the outside.
- An electrical protection device must be installed on the supply side of the unit.

Aluminium resistance heaters

- Range of resistance heaters from 10 to 400 W, heating the electrical switchboard to prevent the formation of condensation.

Power (W)	Voltage (V)	Connection type		Reference
		Terminal block	Power cord	
10	12-24 DC		•	**NSYCR10WU1**
10	110-250 AC		•	**NSYCR10WU2**
20	12-24 DC		•	**NSYCR20WU1**
20	110-250 AC		•	**NSYCR20WU2**
20	270-420 AC	•		**NSYCR20WU3**
55	12-24 DC	•		**NSYCR55WU1**
55	110-250 AC	•		**NSYCR55WU2**
55	270-420 AC	•		**NSYCR55WU3**
90	12-24 DC	•		**NSYCR100WU1**
90	110-250 AC	•		**NSYCR100WU2**
90	270-420 AC	•		**NSYCR100WU3**
150	12-24 DC	•		**NSYCR150WU1**
150	110-250 AC	•		**NSYCR150WU2**
150	270-420 AC	•		**NSYCR150WU3**

NSYCRS200W230V

Resistive heaters with fan

- The presence of a fan guarantees perfect uniformity of the temperature inside the electrical switchboard.
- The heaters must be installed with a thermal controller (see selection table on pages **8/94** and **8/95**) to control the temperature or the humidity inside the enclosure.

Power (W)	Voltage (V)	Connection type Terminal block	Reference
250	115 AC	•	**NSYCR250W115VV**
250	230 AC	•	**NSYCR250W230VV**
400	115 AC	•	**NSYCR400W115VV**
400	230 AC	•	**NSYCR400W230VV**
200	115 AC	•	**NSYCRS200W115V**
200	230 AC	•	**NSYCRS200W230V**

Aluminium resistance heaters

NSYCR350W230VTVC

NSYCRP1W230VTVC

Thermofan

- Combination of a resistance heater and an axial motor to ensure uniform heating of the enclosure.
- Fixing by clip on a DIN rail.
- Thermostat adjustable from 0...+60 °C.
- Visual operation indicator.

Power (W)	Voltage (V)	Connection type Terminal block	Reference
350	230 AC	•	**NSYCR350W230VTVC**
400/550	120 AC	•	**NSYCRP1W120VTVC**
400/550	230 AC	•	**NSYCRP1W230VTVC**

NSYCRAFD

NSYCRAF

Fixing accessories

Description	Reference
Set of 5 studs	**NSYCRAF**
Set of 5 studs and DIN rail	**NSYCRAFD**

Thermal control
Overview

Adjustable thermostats

- NO (blue button) with normally open contact to control the starting of a fan when the temperature exceeds the displayed maximum value.
- NC (red button) with normally closed contact to control the stopping of a resistance heater when the temperature exceeds the displayed value.
- Large range of temperature control.
- Small dimensions.
- Easily accessible terminals.
- High connection power.
- 4 types of fixings (novelty).

Double-adjustable thermostat

- Double temperature control with a resistance heater and a fan with separate operation.
- Red button: with normally closed contact (NC) for controlling the resistance heaters.
- Blue button: with normally open contact (NO) for controlling the fans.
- A double thermostat with separate adjustments and operations within the same device.
- Easily accessible terminals.
- Different installation methods.

The new quick-fixing systems:

- On 35-mm DIN rail.

- On Spacial upright.

- On cross-rail.

- On mounting plate.

Thermal control
Overview

Thermostat with NO/NC contact

- NO/NC inverter for controlling the resistance heaters or the fans.
- Switching by means of two NO/NC contacts.
- Easily accessible terminals.
- High connection power.
- 4 types of quick-fixing systems.
- Versions in °C and °F.

Electronic thermostat with LCD screen

- Three thermostats for different input voltages (9-30 V, 110-127 V, 220-240 V).
- Operating temperature: 0 °C…+50 °C.
- Simple programming.
- Option of installing an external sensor, ref. **NSYCCAST** for remotely reading the temperature (operating temperature: –30 °C…+80 °C).
- Ventilation and heating function (2 separate relays).
- High switching power.
- Hysteresis: 2 K (+/–0.1 K).
- 7 different operating modes.
- Additional operating mode with 1 external sensor: Reads and compares the internal and external temperatures in order to control the ventilation, heating or the alarm.
- Temperature adjustment range: +5 °C…+50 °C.

Electronic hygrotherms

- Electronic hygrotherms for different input voltages (9-30 V, 110-127 V, 220-240 V).
- Operating temperature: 0 °C…+ 50 °C.
- Option of installing an external sensor, ref. **NSYCCAST** for remotely reading the temperature (operating temperature: –30 °C…+80 °C).
- Simple programming.
- 3 different operating modes.
- High switching power.
- T hysteresis: 2 K (+/–0.1 K).
- RH hysteresis: 3%.
- Temperature adjustment range: +5 °C…+50 °C.
- Humidity adjustment range: 20%…80%.

Electronic hygrostat

- Electronic hygrostat for different input voltages (110-240 V).
- Operating temperature: 0 °C…+50 °C.
- Simple programming.
- 2 different operating modes.
- High switching power.
- RH hysteresis: 3%.
- Humidity adjustment range: 20%...80% RH.

Thermal control
Selection guide mechanical version

Control temperature

Control a resistance heater or an alarm

NC thermostat

Setting range	Display	Contact	Application	Control element	Interrupting capacity (resistive load)	Reference
0...+60 °C	°C	O	Heat	Bimetal	30 W DC 120 V AC; 15 A 250 V AC; 10 A	**NSYCCOTHC**
+32...+140 °F	°F					**NSYCCOTHCF**

Control a fan or an alarm

NO thermostat

Setting range	Display	Contact	Application	Control element	Interrupting capacity (resistive load)	Reference
0...+60 °C	°C	NO	Ventilate	Bimetal	30 W DC 120 V AC; 15 A 250 V AC; 10 A	**NSYCCOTHO**
+32...+140 °F	°F					**NSYCCOTHOF**

Control a resistance heater and a fan

Double thermostat

Setting range	Display	Contact	Application	Control element	Interrupting capacity (resistive load)	Reference
0…+60 °C	°C	NC + NO	Heat / Ventilate	Bimetal	30 W DC 120 V AC; 15 A 250 V AC; 10 A	**NSYCCOTHD**
+32…+140 °F	°F					**NSYCCOTHDF**

Control a resistance heater or a fan

Thermostat with inverse contact

Setting range	Display	Contact	Application	Control element	Interrupting capacity (resistive load)	Reference
0…+60 °C	°C	Inverse	Heat or ventilate	Bimetal	Closing: 30 W DC 250 V AC; 5 A Opening: 30 W DC 250 V AC; 10 A	**NSYCCOTHI**
+32…+140 °F	°F					**NSYCCOTHIF**

Thermal control
Selection guide electronic version

Control temperature

Control a resistance heater or a fan

Electronic thermostat

Setting range	Display	Power input	Application	Control element	No. of relays	Interrupting capacity (resistive load)	Reference
+5 °C…+50 °C	°C or °F	9-30 V AC/DC	Heat or ventilate	Electronic	2	8 (5) A 230 V AC 5 A 30 V DC	NSYCCOTH30VID
		110-127 V AC					NSYCCOTH120VID
		220-240 V AC					NSYCCOTH230VID

7 different operating modes.
Option of installing one or two external sensors.

Control temperature and relative humidity

Electronic hygrotherm

Setting range	Display	Power input	Application	Control element	No. of relays	Interrupting capacity (resistive load)	Reference
+5 °C…+50 °C	°C or °F	9-30 V AC/DC	Heat or ventilate	Electronic	2	8 (5) A 230 V AC 5 A 30 V DC	NSYCCOHYT30VID
		110-127 V AC					NSYCCOHYT120VID
		220-240 V AC					NSYCCOHYT230VID

3 different operating modes.
Option of installing an external sensor.

Control relative humidity

Electronic hygrostat

Setting range	Display	Power input	Application	Control element	No. of relays	Interrupting capacity (resistive load)	Reference
20%…80%	% RH	110-240 V AC	Heat or ventilate	Electronic	2	8 (5) A 230 V AC 5 A 30 V DC	NSYCCOHY230VID

2 different operating modes.

PTC external temperature sensor (double insulation)

Temperature sensor

- Length: 3 metres.
- Several types of fixings (on DIN rail, on Spacial SF profile, on VDI cross-rail, on mounting plate).
- Sensor operation or reading range: -30 °C…+80 °C.
- Protection rating: IP 67.

Reference
NSYCCAST

Thermostat installation tips:
The thermostat should be installed at the top of the enclosure (the hottest place). See the various operating modes of each thermostat to choose the one that best meets your needs.

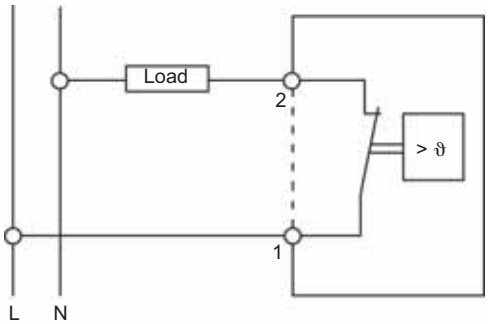
Hygrostat installation tips:
The hygrostat should be installed at the bottom of the enclosure.
60% RH is the optimum value in the enclosure.

Thermal control
Thermostat with NC contact

- Thermostat with NC contact to control the stopping of a resistance heater when the temperature exceeds the displayed value.
- This considerably lengthens the service life of the resistance heaters since they are used less frequently.
- Protection rating: IP 20.
- PC plastic material, self-extinguishing according to standard UL94 V0.
- Temperature adjustment range: 0…+60 °C
- Connection: four 2.5-mm² terminals.
- Multiple fixing systems.
- UL certification.

Display	Max. command I.	Reference
°C	10 A 250 V	**NSYCCOTHC**
°F	10 A 250 V	**NSYCCOTHCF**

Technical features	
Sensor element	Bimetal
Contact	NC, forced rupture
Contact resistance	< 10 m Ω
Service life	> 100000 cycles
Switching capacity	250 V AC; 10 A (resistive load) 120 V AC; 15 A (resistive load) 250 V AC/120 V AC 2 A (inductive load cos ϕ = 0.6) 30 W DC
Connection	Four 2.5-mm² terminals
Mounting	By clip on 35-mm DIN rail
Enclosure	UL94 V0 plastic, light grey
Dimensions	60 × 33 × 43 mm
Weight	40 g
Mounting position	Indifferent
Operating temperature	–20...+80 °C (–4...+176 °F)
Protection rating	IP 20
Hysteresis	7 °K
Temperature setting range	0...+60 °C



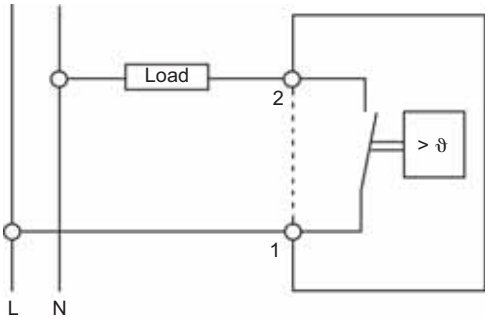
Load = resistance

Thermal control
Thermostat with NO contact

- Thermostat with NO contact to control the starting up of a fan when the temperature exceeds the displayed maximum value.
- It can control the temperature inside the enclosure by only starting up the fan when necessary, thus increasing the service life of the fan and reducing the clogging of the filter.
- Protection rating: IP 20.
- PC plastic material, self-extinguishing according to standard UL94 V0.
- Temperature setting range: 0...+60 °C
- Connection: four 2.5-mm² terminals.
- Multiple fixing systems.
- UL certification.

Display	Max. command I.	Reference
°C	10 A 250 V	**NSYCCOTHO**
°F	10 A 250 V	**NSYCCOTHOF**

Technical features	
Sensor element	Bimetal
Contact	NO, forced rupture
Contact resistance	< 10 m Ω
Service life	> 100000 cycles
Switching capacity	250 V AC; 10 A (resistive load) 120 V AC; 15 A (resistive load) 250 V AC/120 V AC 2 A (inductive load cos ϕ = 0.6) 30 W DC
Connection	Four 2.5 mm² terminals
Mounting	Clip on 35-mm DIN rail
Enclosure	UL94 V0 plastic, light grey
Dimensions	60 × 33 × 43 mm
Weight	40 g
Mounting position	Indifferent
Operating temperature	–20...+80 °C (–4...+176 °F)
Protection rating	IP 20
Hysteresis	7 °K
Temperature adjustment	0...+60 °C



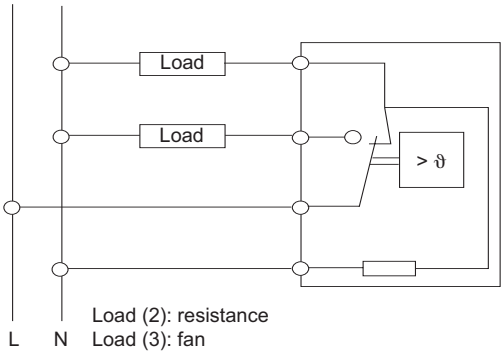
Load = fan

Thermal control
Thermostat with NO/NC contact

- Thermostat (contact adapted to control fans, resistance heaters, ventilation drawers, heat exchangers, etc).
- Signals and controls the temperature inside the enclosure.
- Fixing on a DIN rail.
- Protection rating: IP 20.
- PC plastic material, self-extinguishing according to standard UL94 V0.
- Temperature setting range: 0…+60 °C.
- Connection: four 2.5-mm^2 terminals.

Display	Max. command I.	Reference
°C	(NO) 5 A (NC) 10 A	**NSYCCOTHI**
°F		**NSYCCOTHIF**

Technical features	
Sensor element	Bimetal
Contact	Inverse, forced rupture
Contact resistance	< 10 m Ω
Service life	> 100000 cycles
Switching capacity	250 V AC; 10 A (resistive load)
Maximum interrupting capacity with direct current	250 V AC 4 A (inductive load cos ϕ = 0.6) 30 W DC
Connection	Four 2.5-mm^4 terminals
Mounting	By clip on 35-mm DIN rail
Enclosure	UL94 V0 plastic, light grey
Dimensions	67 × 50 × 44 mm
Weight	100 g
Mounting position	Indifferent
Operating temperature	–20...+80 °C (–4...+176 °F)
Protection rating	IP 20
Hysteresis	7 °K
Temperature setting range	+5...+60 °C

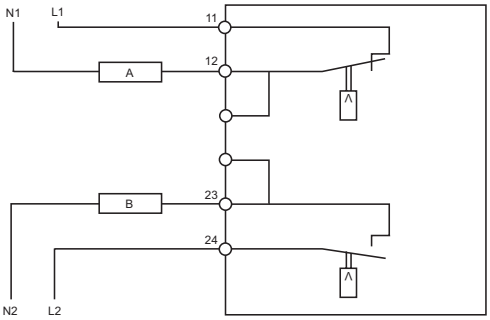


Thermal control
Double thermostat

- Double thermostat: two thermostats in a single device with separate adjustment and operation.
  – Red button: with normally closed contact (NC) for controlling the resistance heaters.
  – Blue button: with normally open contact (NO) for controlling the fans, signalling systems or alarms.
- This thermostat can control the activation of a fan and a heater controlling the temperature independently.
- PC plastic material, self-extinguishing according to standard UL94 V0.
- Multiple fixing systems.
- UL certification.

Display	Max. command I.	Reference
°C	(NO) 5 A (NC) 10 A	**NSYCCOTHD**
°F		**NSYCCOTHDF**

Technical features	
Sensor element	Bimetal
Contact	NO / NC, forced rupture
Contact resistance	< 10 m Ω
Service life	> 100000 cycles
Switching capacity	250 V AC; 10 A (resistive load) 120 V AC; 15 A (resistive load) 250 V AC/120 V AC 2 A (inductive load cos ϕ = 0.6) 30 W DC
Connection	Four 2.5-mm² terminals
Mounting	Clip on 35-mm DIN rail
Enclosure	UL94 V0 plastic, light grey
Dimensions	60 × 33 × 43 mm
Weight	40 g
Mounting position	Indifferent
Operating temperature	–20...+80 °C (–4...+176 °F)
Protection rating	IP 20
Hysteresis	7 °K
Temperature setting range	0...+60 °C



Thermal control
Electronic thermostat with LCD screen

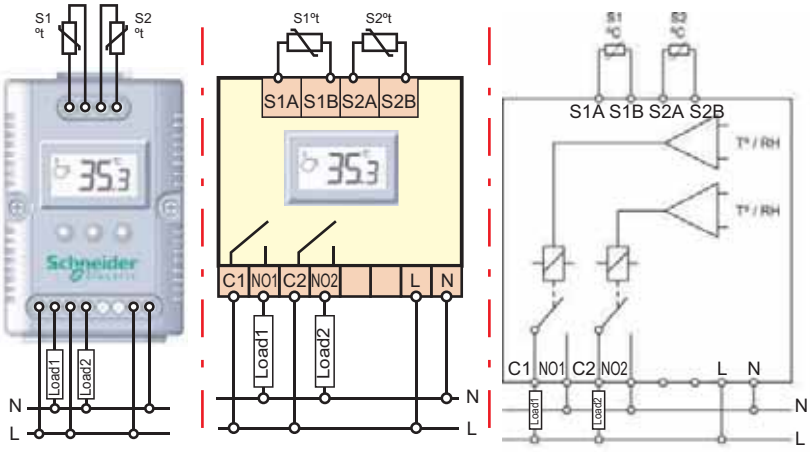
- Electronic temperature controller.
- Input voltages: 9-30 V, 110-127 V and 220-240 V.
- Thermostats with 2 independent switching relays (ventilation / heating function).
- Thermostat precision: +/–1.5 °C.
- Option of installing external PTC sensors, ref. **NSYCCAST**, for remote reading (L = 3 m).
- PC plastic material, self-extinguishing according to standard UL94 V0.
- Option of displaying degrees Celsius °C or Fahrenheit °F in the same thermostat.

Display	Voltage	Type of current	Max. command intensity	Reference
°C or °F	9-30 V	AC DC	8 (5) A 230 V AC / 5 A 30 V DC	**NSYCCOTH30VID**
	110-127 V	AC		**NSYCCOTH120VID**
	220-240 V			**NSYCCOTH230VID**

Technical features	
Operating temperature	0 °C…+50 °C
Temperature setting range	+5 °C…+50 °C
Hysteresis	Programmed 2 °K
Internal sensor element	Internal temperature sensor
Connection	2 × 2.5 mm² (input voltage) + 2 relays (2 × 2.5 mm² + 2 × 2.5 mm²)
Contact	Free with zero potential
Mounting	4 different methods: by DIN rail, Spacial SF profile, on VDI cross-rail or on mounting plate
Enclosure	UL94-V0 plastic, light grey
Certification	UL / UR

7 different operating modes in the same thermostat	
1	Ventilation (the addition of an external sensor inhibits the inner sensor and the reading is that of the external sensor) (activate 1st relay)
2	Heating (activate 2nd relay)
3	Ventilation / Heating (2 relays)
4	Double ventilation (2 relays)
5	Double heating (2 relays)
6	Comparison function (1 or 2 external sensors required). Compares the readings from the external sensor and the internal sensor in order to start up a fan or a heating element
7	Readings of max./min. temperature.

The thermostat automatically detects any connected sensors.



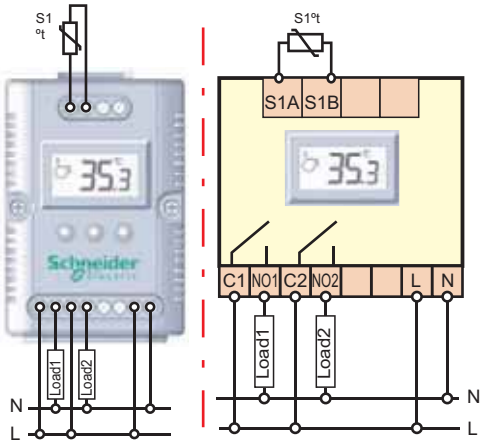
Load (1) = fan/resistance
Load (2) = fan/resistance/alarm

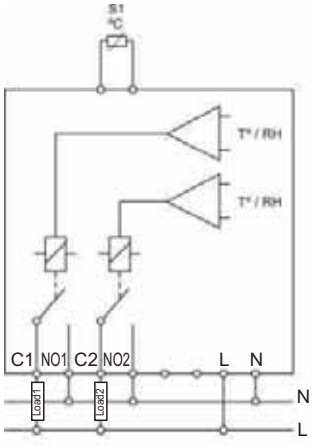
Thermal control
Electronic hygrotherm with LCD screen

- Electronic temperature and humidity controller.
- Input voltages: 9-30 V, 110-127 V and 220-240 V.
- Hygrotherm with 2 independent switching relays (ventilation / heating function).
- Thermostat precision: +/–1.5 °C.
- Hygrostat precision: +/–5% RH, relative humidity.
- Option of installing external PTC sensors, ref. **NSYCCAST**, for remote reading (L = 3 m).
- PC plastic material, self-extinguishing according to standard UL94 V0.
- Option of displaying the temperature in degrees Celsius °C or Fahrenheit °F.

Display	Voltage	Type of current	Max. command intensity	Reference
°C or °F % RH	9-30 V	AC DC	8 (5) A 230 V AC / 5 A 30 V DC	**NSYCCOHYT30VID**
	110-127 V	AC		**NSYCCOHYT120VID**
	220-240 V			**NSYCCOHYT230VID**

Technical features	
Operating temperature	0 °C…+50 °C
Temperature setting range	+5 °C…+50 °C
Humidity setting range	20%…80%
RH hysteresis	3%
Connection	2 × 2.5 mm² (input voltage) + 2 relays (2 × 2.5 mm² + 2 × 2.5 mm²)
Contact	Free with zero potential
Mounting	4 different methods: by DIN rail, Spacial SF profile, on VDI cross-rail or on mounting plate
Enclosure	UL94-V0 plastic, light grey
Certification	UL / UR





Load (1) = fan/resistance
Load (2) = fan/resistance/alarm

Operating modes

Mode 1	Relay 1	Relay 2
Controlled device	**Fan**	**Resistance heater**
Measured variables	Temperature	Temp. (T) and humidity (RH)
Control type	Avoid high temperatures	Avoid low temperatures

Mode 2	Relay 1	Relay 2
Controlled device	**Resistance heater**	**Alarm by switching**
Measured variables	Control of the dew point	Temperature and humidity
Control type	Avoid high humidity	High humidity or temperature alert

Mode 3	Relay 1	Relay 2
Controlled device	**Fan**	**Resistance heater**
Measured variables	External temperature - Internal temperature*	Temperature (T) and humidity (RH)
Control type	Heating by ventilation	Avoid low temperatures

*Comparison mode in relay 2: an external sensor is required for the comparison function (Text - Tint).
Example of mode 3: Decides whether the external temperature is favourable and controls the ventilation (Relay 1) or heating (Relay 2).
Advantage of mode 3: Energy efficiency. Option of efficiently heating the enclosure by ventilation (using hot external air) before bringing the resistance heater into operation. The thermostat automatically detects any connected sensors.

Thermal control
Electronic hygrostat with LCD screen

- Electronic humidity controller.
- Input voltages: 110-240 V.
- Precision: +/- 5% RH, relative humidity.
- Hygrostat with 2 independent switching relays (ventilation / heating function).
- PC plastic material, self-extinguishing according to standard UL94 V0.
- 2 operating modes for RH %: relative humidity control and dew point control.

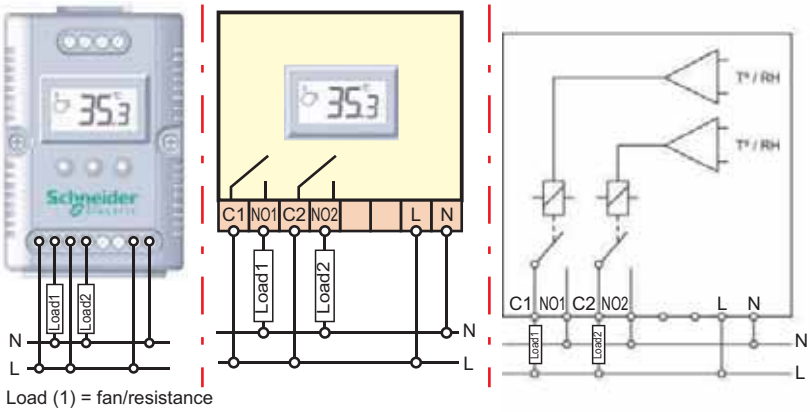
Display	Voltage	Type of current	Max. command intensity	Reference
% RH	110-240 V	AC	8 (5) A 230 V AC / 5 A 30 V DC	**NSYCCOHY230VID**

Technical features	
Humidity setting range	20%...80%
RH hysteresis	3%
Internal sensor element	Internal humidity sensor
Connection	2 × 2.5 mm² (input voltage) + 1 relay (2 × 2.5 mm²)
Contact	Free with zero potential
Mounting	4 different methods: by DIN rail, Spacial SF profile, on VDI cross-rail or on mounting plate
Enclosure	UL94-V0 plastic, light grey
Certification	UL / UR

Operating modes

Mode 1	Relay 1	Relay 2
Controlled device	**Resistance**	**-**
Measured variables	Humidity	-
Control type	Dehumidify RH (%)	-

Mode 2	Relay 1	Relay 2
Controlled device	**Resistance**	**Alarm by switching or resistance**
Measured variables	Humidity	Humidity
Control type	Dehumidify RH (%)	High humidity warning



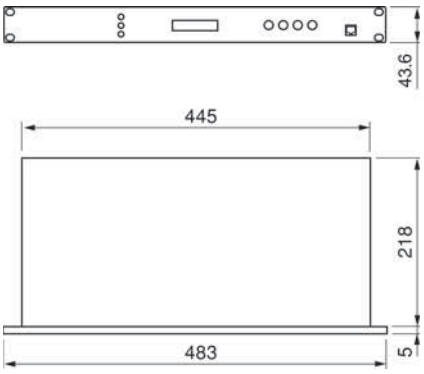
Load (1) = fan/resistance
Load (2) = fan/resistance/alarm

Thermal control

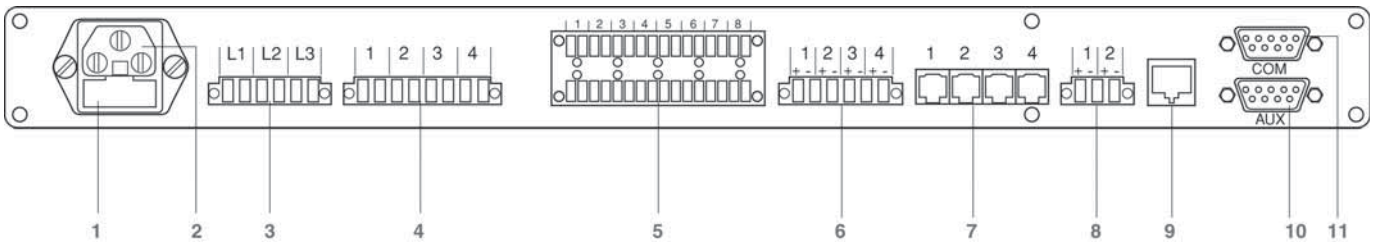
- The enclosure monitor checks and protects all the equipment in the distribution, network and server racks as well as their environment.
- Ambient parameters and operating states can be measured using various sensors and several inputs.
- Signalling and display: on the unit, serial interface, Ethernet network.
- Digital inputs and switching outputs enable permanent monitoring and adapted actions.

Reference
NSY11950

Possibilities for connection to the enclosure monitor:
– 4 sensors ref. **NSY11951**, **NSY11952** and/or **NSY11953**.
– 4 sensors ref. **NSY11954** or **NSY11956**.
– 8 insulated digital inputs (free potential).
– 2 digital inputs.
– 1 series input used for monitoring devices with a communication protocol.

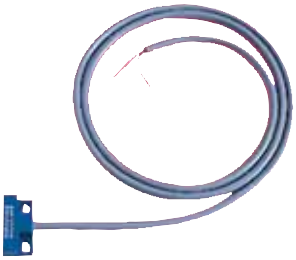


Connections and cabling diagram



1 Contact pin circuit breaker.
2 Connection to the network.
3 Connection of phase surveillance.
4 Digital switching outputs.
5 Digital inputs (ref. **NSY11955** and **NSY11958**).
6 Alarm inputs (ref. **NSY11954** and **NSY11956**).
7 Connection of a sensor, references **NSY11951**, **NSY11952** and **NSY11953**.
8 Connection of uninterruptible power supply.
9 Connection to Ethernet network RJ45.
10 Series interface for external devices.
11 Series interface for connection to a terminal.

Thermal control



Door contact

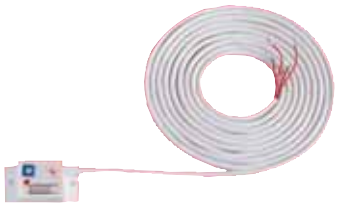
- Monitors door access by means of a magnetic sensor that reacts to any material conducting magnetic flow.
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

Reference
NSY11955

Smoke detector

- Visible smoke detector with VdS approval for rapid fire detection, even with light smoke.
- Usable in temperature range from –20 to +60 °C.
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

Reference
NSY11954



Vibration sensor

- Detects movements and vibrations of varying intensity.
- Adjustable sensitivity.
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

Reference
NSY11956

Movement sensor

- Indicates movements in the area by infrared system.
- Adjustable sensitivity.
- Anti-sabotage protection
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

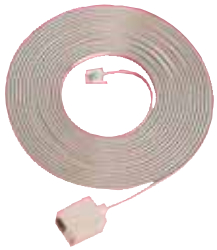
Reference
NSY11958

Thermal control
Sensors

Water sensor

- Detects all liquids that conduct electricity.
- Sensor covered in araldite, 100% sealed.
- Usable in temperature range from –20 to +60 °C.
- Length of cable supplied: 5 m.
- Dimensions: 70 × 50 × 39 mm.

Weight (kg)	Reference
0.400	**NSY11957**



Extension cables

- 4 strand cable for sensors.
- Four lengths available: 5, 10, 15 and 20 metres.
- RJ11 connections.

Length (m)	Reference
5	**NSY11959**
10	**NSY11960**
15	**NSY11961**
20	**NSY11962**

Temperature sensor

- Temperature value range: 0° ... +60°.
- Measurement accuracy: ± 1 °C.
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

Reference
NSY11951

Humidity sensor

- Humidity value range: 10 ... 90% relative humidity between 0° and +60°.
- Measurement accuracy: ± 3% relative humidity.
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

Reference
NSY11952

Thermal control
Sensors

Combined temperature/humidity sensor

- Combines temperature and air humidity sensor functions.
- Temperature value range: 0° ... +60°.
- Measurement accuracy: ± 1 °C.
- Humidity value range: 10 ... 90% relative humidity between 0° and +60°.
- Measurement accuracy: ± 3% relative humidity.
- Length of cable supplied: 4 m.
- Maximum cable length: 20 m.
- Supplied with fixings.

Reference
NSY11953

Selection tools

> www.schneider-electric.com

Our international site allows you to access all the Schneider Electric products in just two clicks with direct links to:

- A complete library of technical documents, catalogues, FAQs brochures, etc.
- Certificates.
- 2D & 3D drawings.
- Selection Guides from the e-catalogue.
- Product discovery sites.

You may also find illustrated overviews, news to which you can subscribe, a list of country contacts and more useful information.

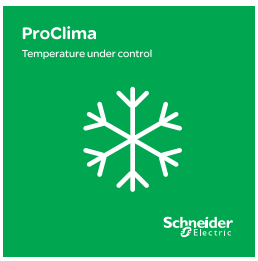
Our software suite

> Spacial.pro

Spacial.pro allows you to make switchboard proposals based on the standard Spacial offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the Bill of Material and 2D drawings for front/side views.

> ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.

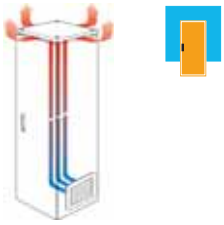


> Spacial.ref Thalassa.ref

These digital rules allow you to select the best components from the current extensive product range without the risk of any mistakes, since product and accessory selection take place automatically, saving you time and money.

Thermal balance
Thermal management system

The miniaturisation of components, the generalisation of electronics and the appearance of new electronically powered products have made temperature management into a need which must necessarily be considered when designing electrical and/or electronic switchboards, in the same way as the protection rating.
Reliability and the search for lower breakdown rates are two determining factors in process industries, where the cost per hour is extremely high. The smallest failure can instantly result in considerable losses. The service life of the components also depends on the temperature and humidity conditions inside the enclosure.
The ideal values are +25…+35 °C for the temperature and 60 % for the relative humidity (RH).
Various solutions to these problems have been put forward. They will be chosen according to environmental conditions, the type of components in the electrical switchboard, and their cost.
In certain cases, all it takes it to oversize the enclosures or use fans. In other cases, when the temperature is higher, it becomes necessary to install air-water exchangers or air coolers operating according to the principle of refrigeration (cooling units). We offer you a range of solutions that adapt to every possible scenario: from the enclosure itself to ventilation systems, resistances or exchangers, and even cooling units.



Natural dissipation

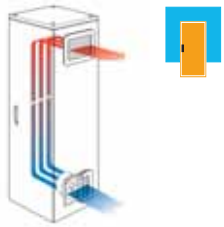
Through the walls of the enclosure

The use of a larger enclosure can, in certain cases, solve your heating problem.

Airing

Natural ventilation

The addition of fresh air from the outside through ventilation louvres improves the dissipation of heat by natural convection. However, this solution can only be used to dissipate small power levels and in environments with a small amount of dust.



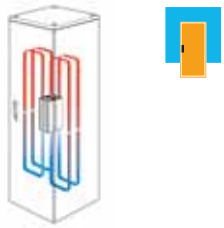
Ventilating

Circulation

Air circulation inside the enclosure with the help of a fan makes it possible to guarantee an even temperature, avoiding hot spots that can damage certain components.

Forced ventilation

The fans are designed to evacuate a considerable amount of heat coming from the components of the electrical switchboards. The service life of the latter is considerably extended, thus guaranteeing the long life and correct operation of the installation.
The fans can only be used if the ambient temperature is at least 5 ºC lower than the desired temperature inside the enclosure.
They offer an efficient solution, one that is easy to implement and maintain, which is also inexpensive, to the problem of temperature increases in the electrical switchboards. Thanks to their standard IP 54 (IP 55 with accessories) they are suitable for use in industrial and tertiary sectors.



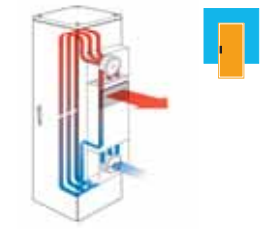
Heating

Resistance heaters

Resistance heaters can be used for two reasons:
- To reheat the electrical switchboard when the ambient temperature is too low for the correct operation of the components.
- To prevent the formation of condensation.

The second phenomenon can cause short-circuits, premature oxidation of the contacts, corrosion of metal parts and, in particular, of the enclosure, a considerable reduction in the service life of the electrical and electronic components.
Condensation occurs when the temperature suddenly drops below the dew point temperature. To avoid this, it is simply necessary to maintain the temperature inside the enclosure at a few degrees above the ambient temperature of the environment.
Thanks to their design, the heaters encourage natural convection and guarantee quick and even heating within the enclosure.

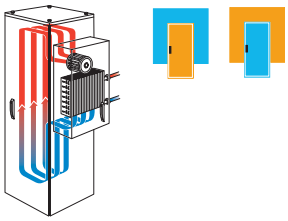
Thermal balance
Thermal management system



Cooling

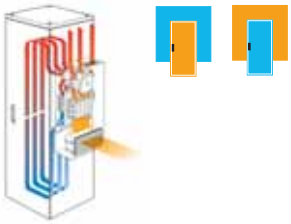
Air-air exchangers

Air-air exchangers are devices that combine efficiency and simplicity. The hot air flows of the enclosure and the cold of the surrounding environment, created by two fans, circulate on either side of hermetic separation walls, preventing the penetration of dust or moisture in the enclosure. The hot air from the switchboard reheats these walls, which in turn are cooled by the fresh air from outside. The transfer always takes place from the hotter side to the cooler side. This is why these devices can only be used if the ambient temperature is at least 5 °C lower than the desired temperature inside the enclosure.
The aluminium exchange cassette forms the core of the system. This element can be cleaned easily by simply removing it. In addition, the permanent operation of the internal fan prevents the appearance of hot spots in the electrical switchboard. The temperature regulation system integrated in the unit turns the external circuit fan on and off.



Air-water exchangers

Air-water exchangers operate on the same principle as air-air exchangers. Fresh air from the outside is replaced with cold water supplied by a network installed on the industrial site. This change of fluid makes it possible to evacuate much larger amounts of heat and, possibly, to reduce the temperature in the enclosure below the temperature of the ambient air.
Temperature control in the enclosure is carried out by modulating the water flow. The water circuit is protected by a shut-off device: your electrical installation is safe.



Cooling units

Cooling units can be used in the harshest environments, where the temperature can reach 55 °C. These devices are especially recommended when the desired temperature inside the enclosure must be lower than the ambient temperature or when a large amount of heat needs to be evacuated. As in the case of the exchangers, they do not affect the IP of the switchboard.
The filter, placed at the inlet of the external air circuit, allows it to operate even when the ambient air is charged with dust or oil particles. Easily replaceable and quite inexpensive, this device guarantees the efficiency of the device throughout its service life. These devices control the temperature inside the enclosure and include an alarm function for signalling operational anomalies.

The ambient temperature is lower than the desired temperature inside the enclosure.

The ambient temperature is higher than the desired temperature inside the enclosure.

The ProClima calculation software, available on our webiste, is an indispensable tool for the selection of a thermal auxiliary.

Thermal balance
Thermal management system

Method of determining the thermal solution

The heat balance, which consists of comparing the power released by the devices with the power exchanged spontaneously through the wall of the enclosure, allows us to calculate the internal temperature obtained in the enclosure, with no thermal accessories, and thus to determine whether it is necessary to install any, bearing in mind the desired internal and external temperatures.
Below we have presented a simple method for implementing this choice.

1 Characteristics of the enclosure

H = Height W = Width D = Depth

Position of the enclosure	Location according to IEC 890 ratio	Formula for calculating S (m^2)
	Accessible from every side	$S = 1.8 \times H \times (W + D) + 1.4 \times W \times D$
	Placed against a wall	$S = 1.4 \times W \times (H + D) \times 1.8 \times D \times H$
	On the end when suited	$S = 1.4 \times D \times (H + W) + 1.8 \times W \times H$
	On the end when suited, placed against a wall	$S = 1.4 \times H \times (W + D) + 1.4 \times W \times D$
	In the middle when suited	$S = 1.8 \times W \times H + 1.4 \times W \times D + D \times H$
	In the middle when suited, placed against a wall	$S = 1.4 \times W \times (H + D) + D \times H$
	In the middle when suited, placed against a wall with the top covered	$S = 1.4 \times W \times H + 0.7 \times W \times D + D \times H$

S = m²

Example
Spacial reference **NSYSF20840**
H = 2000
W = 800
D = 400
Installation method:
Suitable enclosure placed against a wall.

S = 4.13 m²

2 Thermal power dissipated by the operational components

Calculated as the sum of the power dissipated by each of the installed components.
If these are not known, use the ProClima software and page **8/115**, which shows the average values.

Pd = W

Assume that the switchgear dissipates 800 W

Pd = 800 W

3 Characteristics of the environment air

Maximum ambient temperature
Minimum ambient temperature
Average relative humidity
Dew point temperature. Calculation of resistance heater power.

Te_{max} = °C
Te_{min} = °C
RH = %
Tr = °C

The temperature conditions are as follows:

Te_{max} = 35 °C
Te_{min} = 15 °C
RH = 70 %
Tr = 29 °C

4 Average desired internal temperatures

They are defined by the nature of the components and the characteristics of the environment air.
Maximum internal temperature
Minimum internal temperature
(maximum value between the dew point temperature and the minimum operating temperature of the devices)

Ts_{max} = °C
Ts_{min} = °C

Ts_{max} = 40 °C
Ts_{min} = 29 °C

5 Final temperature inside the enclosure with no thermal system

Max. internal temperature: $Ti\ max = \frac{Pd}{KxS} + Te\ max$

Min. internal temperature: $Ti\ min = \frac{Pd}{KxS} + Te\ min$

or
K = 5.5 W/m²/°C for an enclosure made of painted sheet steel
K = 3.5 W/m²/°C for a polyester enclosure
K = 3.7 W/m²/°C for a stainless-steel enclosure
K = 12 W/m²/°C for an aluminium enclosure

Ti_{max} = °C
Ti_{min} = °C

Ti_{max} = 70 °C
Ti_{min} = 50 °C

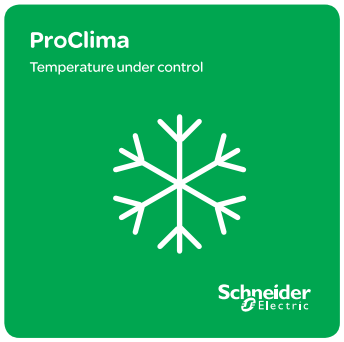
Thermal balance
Thermal management system

6 Determining the type of thermal device and its power: Psyst

If Ts min < Ti min	If Ts min > Ti min	If Ts max < Ti max	If Ts max > Ti max
No need for a thermal system; a circulation fan may be used to even out the temperature.	Need for a thermal system: resistance heater 1/ Permanent operation of the switchboard **Psyst = K × S (Ts_{min} – Te_{min}) – Pd** 2/ Discontinuous operation **Psyst = K × S (Ts_{min} – Te_{min})**	Need for a thermal system: ventilation, fan, exchanger, cooling unit. **Psyst = Pd – K × S (Ts_{max} – Te_{max})** **Psyst = 800 – 5.5 × 4.13 × (40 – 35)** **~ 690 W**	No need for a thermal system; a circulation fan may be used to even out the temperature.

	Temperature conditions	Solution	Advantages	Constraints
CIRCULATING	Avoid hot spots.	Install circulation fans in the enclosure.	Highly economical solution requiring no maintenance, easy to install; Installation IP conserved.	The amount of heat evacuated is relatively low.
COOLING	Final temperature Ts max desired in the enclosure at least 5 °C higher than the ambient temperature Te max. **Ts max ≥ Te max + 5 °C**	Oversize the enclosure or the wall-mounting enclosure.	Economical solution requiring no maintenance, easy to install; Installation IP conserved.	The amount of heat evacuated is relatively low, larger dimensions.
		Install ventilation louvres.	Highly economical solution requiring no maintenance, easy to install.	The amount of heat evacuated is low, it depends on the layout of the components, reduced IP (entry of dust).
		Install fans for introducing fresh air. $D = \frac{Psyst}{(Ts\ max - Te\ max)} \times 3.1\ m^3/h$	Economical solution, easy to install; large amount of heat evacuated; possible temperature control.	Regular filter maintenance. IP slightly reduced.
		Use an air-air exchanger. $q = \frac{Psyst}{(Ts\ max - Te\ max)}\ wk$	Easy to install; IP conserved during installation; temperature control as standard; easy maintenance.	Regular filter maintenance.
	Final temperature Ts max desired in the enclosure lower than the ambient temperature Te max +5 °C. **Ts max ≥ Te max +5 °C**	Use a cooling unit.	Easy to install; allows the evacuation of large amounts of heat, even when the ambient temperature is high, IP conserved during installation, temperature control.	Regular filter maintenance, cannot be used beyond an ambient temperature of 55 °C.
		Use an air-water exchanger.	Easy to install; allows the evacuation of large amounts of heat, even when the ambient temperature is high, IP conserved during installation, temperature control, no filter to maintain.	Needs a water circuit; consumption if supplied by the water mains.
HEATING	Outside temperature lower than the lowest acceptable ambient temperature for the switchgear.	Heat using a resistance heater.	Economical, reliable; see temperature in the table.	Energy consumption; space taken up in the enclosure.
	Risk of condensation.	Heat using a resistance heater in order to maintain the temperature beyond the dew point temperature.	Economical, reliable; the humidity in the switchboard can be regulated.	Energy consumption; space taken up in the enclosure.

Software
ProClima



New ProClima software

- Software package for calculating and selecting the thermal accessories required for enclosures containing electrical and electronic equipment.
- Performs the calculations described on pages **8/112** and **8/113**, as well as the corrected surfaces, according to the dimensions of the enclosure and its position in relation to the walls.
- Available for download on our homepage.

Data entry

The following steps must be followed to conduct this study:

1
Enter the project and customer data (optional).

2
Enter the internal and external temperature data for the enclosure (compulsory).

3
Enter the electrical data for the installation (voltage, rating, etc.) (compulsory).

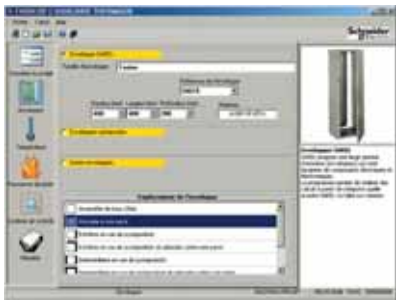
4
Determine the power dissipated by the electrical equipment inside the enclosure (compulsory).
If this value is not known, the software can calculate it:
- Based on the electrical or electronic switchgear that make up the switchboard (type and number),
- Based on a temperature reading.

Software
ProClima

Results

Summary of the heat balance

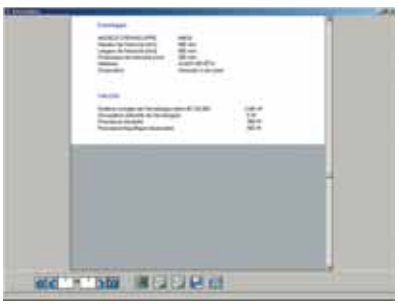
The software offers to print the project summary containing the calculation values, the results obtained and the thermal accessories recommended for maintaining the internal temperature of the enclosure in the specified conditions.
In addition, the summary specifies the power, characteristics and reference of the device, as well as any related accessories.



5
Select the enclosure and the installation method (compulsory).

6
Select the thermal management system (fans, exchangers, etc.) (compulsory).

7
View and print the project summary.



Example of calculation and selection

Data

- **Enclosure data**
  Height: 2000 mm
  Width: 800 mm
  Depth: 500 mm
- **Location:** Placed on the wall
- **Material:** Painted sheet-steel enclosure

- **Thermal power dissipated by the operational components**
  Pd: 950 W

- **Information on temperature and the environment:**

Maximum desired temperature inside the enclosure	Te_{max} : 25 °C
Minimum desired temperature inside the enclosure	Te_{min} : 25 °C
Maximum temperature dissipated in the enclosure	Te_{max} : 35 °C
Minimum temperature dissipated in the enclosure	Te_{min} : 25 °C

Environment: Low pollution and low dust level

Selection and calculation:

The desired maximum temperature inside (Ts_{max}) the enclosure is 10 ºC higher than the maximum value expected for the outside (Ti_{max}).
It is possible to cool the enclosure using the filtered ventilation systems.

Calculation of the required fan:

Usage formulas:
Psis = $Pd - k \times S \times (Ts_{max} - Te_{max})$
Flow = $f \times Psis / (Td_{max} - Te_{max})$

Pd: Thermal power dissipated by the operational components
S = 1.4 × W × (H + D) + 1.8 × D × H = 4.6 m². According to standard IEC 890

K = Constant defined by the material used to manufacture the enclosure

K = 5.5 W/m² × °C for a solid sheet-steel enclosure
K = 3.5 W/m² × °C for a polyester enclosure
K = 3.7 W/m² × °C for a stainless-steel enclosure

In order to make the calculation, it is necessary to know the height above sea level of the installation location:
Height above sea level: 800 m
f = Coefficient relating to the height above sea level (value)

0 to 100 m f = 3.1	500 to 750 m f = 3.4
100 to 250 m f = 3.2	750 to 1000 m f = 3.5
250 to 500 m f = 3.3	.....

Our example:
Psis = 950 – 5.5 × 4.6 × (35 – 25) = 497 W
Flow rate = 3.5 × 697 / (35 – 25) = 244 m³/h
Selection from the fan quick-selection table
1 fan with standard filter ref. NSYCVF300M230PF + 1 grille with standard filter ref. NSYCAG223LPF + 1 thermostat ref. NSYCCOTHO enable a flow rate of 302 m³/h
The minimum outside temperature is lower than the desired minimum temperature inside the enclosure.
It is necessary to install resistance heaters:

Calculation of the useful resistance heater

Usage formula
W = k × S × (Ts$_{min}$-Te$_{min}$)

Our example:

W = 5.5 × 4.6 (15 – 10) = 127 W

Selection from the selection guide of the resistance heaters.
1 resistance heater ref. NSYCR150WU2C + 1 thermostat ref. NSYCCOTHC

Help table to calculate corrected surfaces

Spacial wall-mounting enclosures

Installation mode									
H (mm)	W (mm)	D (mm)	1	2	3	4	5	6	7
300	200	150	0.23	0.21	0.21	0.19	0.20	0.17	0.15
300	250	150	0.28	0.24	0.25	0.22	0.23	0.20	0.18
300	300	150	0.31	0.27	0.29	0.25	0.27	0.23	0.20
300	300	200	0.35	0.32	0.33	0.29	0.31	0.27	0.23
300	400	150	0.38	0.33	0.36	0.32	0.35	0.30	0.26
300	400	200	0.41	0.39	0.41	0.36	0.39	0.34	0.28
400	300	150	0.39	0.34	0.36	0.32	0.34	0.29	0.26
400	300	200	0.44	0.40	0.41	0.36	0.38	0.33	0.29
400	400	200	0.54	0.48	0.51	0.45	0.48	0.42	0.36
400	600	200	0.74	0.65	0.71	0.62	0.68	0.58	0.50
400	600	250	0.82	0.73	0.78	0.69	0.74	0.65	0.54
500	300	200	0.53	0.47	0.49	0.43	0.45	0.39	0.35
500	400	200	0.65	0.57	0.61	0.53	0.57	0.49	0.44
500	400	250	0.73	0.65	0.68	0.60	0.63	0.55	0.48
500	500	200	0.77	0.67	0.73	0.63	0.69	0.59	0.52
500	500	250	0.85	0.75	0.80	0.70	0.75	0.65	0.56
600	400	200	0.76	0.66	0.71	0.62	0.66	0.57	0.51
600	400	250	0.84	0.75	0.78	0.69	0.72	0.63	0.56
600	500	250	1.02	0.87	0.93	0.81	0.87	0.75	0.66
600	600	200	1.03	0.89	0.98	0.84	0.94	0.79	0.71
600	600	250	1.13	0.98	1.07	0.92	1.01	0.86	0.76
600	600	300	1.22	1.08	1.15	1.01	1.08	0.94	0.81
600	600	400	1.42	1.27	1.32	1.18	1.22	1.08	0.91
600	800	300	1.52	1.33	1.45	1.26	1.38	1.19	1.02
700	500	250	1.12	0.98	1.05	0.91	0.98	0.84	0.75
800	600	200	1.32	1.13	1.26	1.06	1.19	1.00	0.92
800	600	250	1.43	1.24	1.35	1.16	1.27	1.08	0.98
800	600	300	1.55	1.36	1.45	1.26	1.36	1.16	1.04
800	600	400	1.78	1.58	1.65	1.46	1.52	1.33	1.16
800	800	250	1.79	1.54	1.71	1.46	1.63	1.38	1.24
800	800	300	1.92	1.66	1.82	1.57	1.73	1.47	1.30
800	1000	300	2.29	1.97	2.20	1.88	2.10	1.78	1.57
800	1200	300	2.50	2.28	2.57	2.18	2.47	2.09	1.84
1000	600	250	1.74	1.50	1.64	1.40	1.54	1.30	1.19
1000	600	300	2.04	1.63	1.75	1.51	1.63	1.39	1.27
1000	600	400	2.14	1.90	1.98	1.74	1.82	1.58	1.41
1000	800	250	2.17	1.85	2.07	1.75	1.97	1.65	1.51
1000	800	300	2.32	2.00	2.20	1.88	2.08	1.76	1.59
1000	800	400	2.61	2.29	2.45	2.13	2.29	1.97	1.74
1000	1000	300	2.76	2.36	2.64	2.24	2.52	2.12	1.91
1000	1200	300	3.20	2.72	3.08	2.60	2.96	2.48	2.23
1000	1200	400	3.44	3.07	3.39	2.91	3.23	2.75	2.42
1200	600	300	2.45	1.91	2.05	1.76	1.91	1.62	1.49
1200	600	400	2.83	2.21	2.30	2.02	2.11	1.82	1.66
1200	800	300	2.71	2.33	2.57	2.18	2.42	2.04	1.87
1200	800	400	3.04	2.66	2.85	2.46	2.66	2.27	2.05
1200	1000	300	3.23	2.75	3.08	2.60	2.94	2.46	2.25
1200	1000	400	3.70	3.10	3.39	2.91	3.20	2.72	2.44
1200	1200	300	3.74	3.17	3.60	3.02	3.46	2.88	2.63
1400	1000	300	3.86	3.14	3.53	2.97	3.36	2.80	2.59

	Installation mode
1	Accessible from every side
2	Placed against a wall
3	On the end when suited
4	On the end when suited, placed against a wall
5	In the middle when suited
6	In the middle when suited, placed against a wall
7	In the middle when suited, placed against a wall, closed covered top

The surfaces are given in m^2.

Use ProClima to save time and find the best solution!

Help table to calculate corrected surfaces

THALASSA wall-mounting enclosures

H (mm)	W (mm)	D (mm)	Installation mode						
			1	2	3	4	5	6	7
310	215	160	0.26	0.23	0.24	0.21	0.22	0.19	0.17
307	255	164	0.29	0.26	0.27	0.24	0.25	0.22	0.19
430	330	200	0.50	0.45	0.47	0.41	0.43	0.38	0.33
530	430	200	0.72	0.63	0.68	0.59	0.64	0.55	0.49
645	435	250	0.95	0.84	0.88	0.77	0.82	0.71	0.63
745	535	300	1.34	1.19	1.26	1.10	1.17	1.01	0.89
845	635	300	1.69	1.47	1.59	1.37	1.49	1.27	1.14
1055	850	350	2.70	2.34	2.55	2.19	2.40	2.04	1.83

THALASSA floor-standing enclosures

H (mm)	W (mm)	D (mm)	Installation mode						
			1	2	3	4	5	6	7
500	500	320	0.96	0.86	0.90	0.80	0.83	0.73	0.62
500	750	320	1.30	1.15	1.24	1.09	1.17	1.02	0.85
500	1000	320	1.64	1.44	1.57	1.37	1.51	1.31	1.08
500	1250	320	1.97	1.72	1.91	1.66	1.85	1.60	1.32
750	500	320	1.33	1.18	1.24	1.09	1.14	0.99	0.88
750	750	320	1.78	1.56	1.68	1.46	1.59	1.36	1.20
750	1000	320	2.23	1.93	2.13	1.83	2.04	1.74	1.51
750	1250	320	2.68	2.30	2.58	2.21	2.49	2.11	1.83
1000	500	320	1.70	1.50	1.57	1.37	1.44	1.24	1.13
1000	750	320	2.26	1.96	2.13	1.83	2.01	1.71	1.54
1000	1000	320	2.82	2.42	2.70	2.30	2.57	2.17	1.94
1000	1250	320	3.39	2.89	3.26	2.76	3.13	2.63	2.35
1250	500	320	2.07	1.82	1.91	1.66	1.75	1.50	1.39
1250	750	320	2.74	2.37	2.58	2.21	2.42	2.05	1.88
1250	1000	320	3.42	2.92	3.26	2.76	3.10	2.60	2.37
1250	1250	320	4.09	3.47	3.93	3.31	3.77	3.15	2.87
1500	500	320	2.44	2.14	2.25	1.95	2.05	1.75	1.64
1500	750	320	3.23	2.78	3.03	2.58	2.84	2.39	2.22
1500	1000	320	4.01	3.41	3.82	3.22	3.63	3.03	2.80
1500	1250	320	4.80	4.05	4.61	3.86	4.42	3.67	3.39
500	500	420	1.12	1.02	1.04	0.94	0.95	0.85	0.71
500	750	420	1.49	1.34	1.41	1.26	1.33	1.18	0.96
500	1000	420	1.87	1.67	1.78	1.58	1.70	1.50	1.20
500	1250	420	2.24	1.99	2.15	1.90	2.07	1.82	1.45
750	500	420	1.54	1.39	1.41	1.26	1.28	1.13	0.99
750	750	420	2.02	1.80	1.89	1.67	1.77	1.54	1.32
750	1000	420	2.51	2.21	2.38	2.08	2.25	1.95	1.66
750	1250	420	2.99	2.61	2.86	2.49	2.74	2.36	2.00
1000	500	420	1.95	1.75	1.78	1.58	1.61	1.41	1.27
1000	750	420	2.55	2.25	2.38	2.08	2.21	1.91	1.69
1000	1000	420	3.14	2.74	2.98	2.58	2.81	2.41	2.11
1000	1250	420	3.74	3.24	3.57	3.07	3.41	2.91	2.54
1250	500	420	2.36	2.11	2.15	1.90	1.94	1.69	1.55
1250	750	420	3.07	2.70	2.86	2.49	2.65	2.28	2.06
1250	1000	420	3.78	3.28	3.57	3.07	3.36	2.86	2.57
1250	1250	420	4.49	3.87	4.28	3.66	4.07	3.45	3.08
1500	500	420	2.78	2.48	2.53	2.23	2.27	1.97	1.83
1500	750	420	3.60	3.15	3.35	2.90	3.10	2.65	2.43
1500	1000	420	4.42	3.82	4.17	3.57	3.92	3.32	3.02
1500	1250	420	5.24	4.49	4.99	4.24	4.74	3.99	3.62

Help table to calculate corrected surfaces

Spacial floor-standing enclosures

H (mm)	W (mm)	D (mm)	Installation mode						
			1	2	3	4	5	6	7
1200	800	300	2.71	2.33	2.57	2.18	2.42	2.04	1.87
1200	1000	300	3.23	2.75	3.08	2.60	2.94	2.46	2.25
1200	1200	400	4.13	3.55	3.94	3.36	3.74	3.17	2.83
1400	600	300	2.52	2.18	2.35	2.02	2.18	1.85	1.72
1400	600	400	2.86	2.52	2.63	2.30	2.41	2.07	1.90
1400	800	300	3.11	2.66	2.94	2.49	2.77	2.32	2.16
1400	800	400	3.47	3.02	3.25	2.80	3.02	2.58	2.35
1400	1000	400	4.09	3.53	3.86	3.30	3.64	3.08	2.80
1400	1200	400	4.70	4.03	4.48	3.81	4.26	3.58	3.25
1600	600	300	2.84	2.46	2.65	2.27	2.46	2.08	1.95
1600	600	400	3.22	2.83	2.96	2.58	2.70	2.32	2.15
1600	800	300	3.50	2.99	3.31	2.80	3.12	2.61	2.44
1600	800	400	3.90	3.39	3.65	3.14	3.39	2.88	2.66
1600	1000	300	4.16	3.52	3.97	3.33	3.78	3.14	2.93
1600	1000	400	4.59	3.95	4.34	3.70	4.08	3.44	3.16
1600	1200	300	4.82	4.06	4.63	3.86	4.44	3.67	3.42
1600	1200	400	5.28	4.51	5.02	4.26	4.77	4.00	3.66
1800	600	300	3.17	2.74	2.95	2.52	2.74	2.30	2.18
1800	600	400	3.58	3.14	3.29	2.86	3.00	2.57	2.40
1800	600	500	3.98	3.55	3.62	3.19	3.26	2.83	2.62
1800	800	300	3.90	3.32	3.68	3.11	3.47	2.89	2.72
1800	800	400	4.34	3.76	4.05	3.47	3.76	3.18	2.96
1800	800	500	4.77	4.20	4.41	3.84	4.05	3.48	3.20
1800	800	600	5.21	4.63	4.78	4.20	4.34	3.77	3.43
1800	1000	400	5.10	4.38	4.81	4.09	4.52	3.80	3.52
1800	1000	500	5.56	4.84	5.20	4.48	4.84	4.12	3.77
1800	1200	400	5.86	4.99	5.57	4.70	5.28	4.42	4.08
1800	1200	500	6.35	5.48	5.99	5.12	5.63	4.76	4.34
1800	1600	400	7.38	6.22	7.09	5.94	6.80	5.65	5.20
1800	1600	500	7.92	6.77	7.56	6.41	7.20	6.05	5.49
2000	600	300	3.49	3.01	3.25	2.77	3.01	2.53	2.41
2000	600	400	3.94	3.46	3.62	3.14	3.30	2.82	2.65
2000	600	500	4.38	3.90	3.98	3.50	3.58	3.10	2.89
2000	800	300	4.30	3.66	4.06	3.42	3.82	3.18	3.01
2000	800	400	4.77	4.13	4.45	3.81	4.13	3.49	3.26
2000	800	500	5.24	4.60	4.84	4.20	4.44	3.80	3.52
2000	800	600	5.71	5.07	5.23	4.59	4.75	4.11	3.78
2000	1000	400	5.60	4.80	5.28	4.48	4.96	4.16	3.88
2000	1000	500	6.10	5.30	5.70	4.90	5.30	4.50	4.15
2000	1200	400	6.43	5.47	6.11	5.15	5.79	4.83	4.50
2000	1200	500	6.96	6.00	6.56	5.60	6.16	5.20	4.78
2000	1200	600	7.49	6.53	7.01	6.05	6.53	5.57	5.06
2000	1600	400	8.10	6.82	7.78	6.50	7.46	6.18	5.73
2000	1600	500	8.68	7.40	8.28	7.00	7.88	6.60	6.04
2000	1600	600	9.26	7.98	8.78	7.50	8.30	7.02	6.35

	Installation mode
1	Accessible from every side
2	Placed against a wall
3	On the end when suited
4	On the end when suited, placed against a wall
5	In the middle when suited
6	In the middle when suited, placed against a wall
7	In the middle when suited, placed against a wall, closed covered top

The surfaces are given in m^2.

Use ProClima
to save time and find
the best solution!

Help table to calculate corrected surfaces

Spacial suitable enclosures

H (mm)	W (mm)	D (mm)	Installation mode						
			1	2	3	4	5	6	7
1200	600	400	2.50	2.21	2.30	2.02	2.11	1.82	1.66
1200	600	600	3.10	2.81	2.81	2.52	2.52	2.23	1.98
1200	800	400	3.04	2.66	2.85	2.46	2.66	2.27	2.05
1200	800	600	3.70	3.31	3.41	3.02	3.12	2.74	2.40
1400	600	400	2.86	2.52	2.63	2.30	2.41	2.07	1.90
1400	800	400	3.47	3.02	3.25	2.80	3.02	2.58	2.35
1600	600	600	3.96	3.58	3.58	3.19	3.19	2.81	2.56
1600	600	800	4.70	4.32	4.19	3.81	3.68	3.30	2.96
1600	800	600	4.70	4.19	4.32	3.81	3.94	3.42	3.09
1600	800	800	5.50	4.99	4.99	4.48	4.48	3.97	3.52
1800	400	400	2.82	2.53	2.53	2.24	2.24	1.95	1.84
1800	400	500	3.20	2.91	2.84	2.55	2.48	2.19	2.05
1800	400	600	3.58	3.29	3.14	2.86	2.71	2.42	2.26
1800	600	400	3.58	3.14	3.29	2.86	3.00	2.57	2.40
1800	600	500	3.98	3.55	3.62	3.19	3.26	2.83	2.62
1800	600	600	4.39	3.96	3.96	3.53	3.53	3.10	2.84
1800	600	800	5.21	4.78	4.63	4.20	4.06	3.62	3.29
1800	800	400	4.34	3.76	4.05	3.47	3.76	3.18	2.96
1800	800	500	4.77	4.20	4.41	3.84	4.05	3.48	3.20
1800	800	600	5.21	4.63	4.78	4.20	4.34	3.77	3.43
1800	1000	400	5.10	4.38	4.81	4.09	4.52	3.80	3.52
1800	1000	500	5.56	4.84	5.20	4.48	4.84	4.12	3.77
1800	1000	600	6.02	5.30	5.59	4.87	5.16	4.44	4.02
1800	1200	400	5.86	4.99	5.57	4.70	5.28	4.42	4.08
1800	1200	500	6.35	5.48	5.99	5.12	5.63	4.76	4.34
1800	1200	600	6.84	5.98	6.41	5.54	5.98	5.11	4.61
2000	300	500	3.09	2.85	2.69	2.45	2.29	2.05	1.95
2000	300	600	3.49	3.25	3.01	2.77	2.53	2.29	2.17
2000	400	400	3.10	2.78	2.78	2.46	2.46	2.14	2.03
2000	400	500	3.52	3.20	3.12	2.80	2.72	2.40	2.26
2000	400	600	3.94	3.62	3.46	3.14	2.98	2.66	2.49
2000	400	800	4.77	4.45	4.13	3.81	3.49	3.17	2.94
2000	600	400	3.94	3.46	3.62	3.14	3.30	2.82	2.65
2000	600	500	4.38	3.90	3.98	3.50	3.58	3.10	2.89
2000	600	600	4.82	4.34	4.34	3.86	3.86	3.38	3.13
2000	600	800	5.71	5.23	5.07	4.59	4.43	3.95	3.62
2000	800	400	4.77	4.13	4.45	3.81	4.13	3.49	3.26
2000	800	500	5.24	4.60	4.84	4.20	4.44	3.80	3.52
2000	800	600	5.71	5.07	5.23	4.59	4.75	4.11	3.78
2000	800	800	6.66	6.02	6.02	5.38	5.38	4.74	4.29
2000	1000	400	5.60	4.80	5.28	4.48	4.96	4.16	3.88
2000	1000	500	6.10	5.30	5.70	4.90	5.30	4.50	4.15
2000	1000	600	6.60	5.80	6.12	5.32	5.64	4.84	4.42
2000	1000	800	7.60	6.80	6.96	6.16	6.32	5.52	4.96
2000	1200	400	6.43	5.47	6.11	5.15	5.79	4.83	4.50
2000	1200	500	6.96	6.00	6.56	5.60	6.16	5.20	4.78
2000	1200	600	7.49	6.53	7.01	6.05	6.53	5.57	5.06
2000	1200	800	8.54	7.58	7.90	6.94	7.26	6.30	5.63
2000	1600	400	8.10	6.82	7.78	6.50	7.46	6.18	5.73
2000	1600	500	8.68	7.40	8.28	7.00	7.88	6.60	6.04
2000	1600	600	9.26	7.98	8.78	7.50	8.30	7.02	6.35
2200	400	600	4.30	3.94	3.77	3.42	3.24	2.89	2.72
2200	600	600	5.26	4.73	4.73	4.20	4.20	3.67	3.42
2200	600	800	6.22	5.69	5.51	4.98	4.81	4.28	3.94
2200	800	600	6.22	5.51	5.69	4.98	5.16	4.46	4.12
2200	800	800	7.23	6.53	6.53	5.82	5.82	5.12	4.67
2200	1000	600	7.18	6.30	6.65	5.77	6.12	5.24	4.82
2200	1200	600	8.14	7.08	7.61	6.55	7.08	6.02	5.52
2200	1200	800	9.26	8.21	8.56	7.50	7.86	6.80	6.13

Selection tools

> www.schneider-electric.com

Our international site allows you to access all the Schneider Electric products in just two clicks with direct links to:

- A complete library of technical documents, catalogues, FAQs brochures, etc.
- Certificates.
- 2D & 3D drawings.
- Selection Guides from the e-catalogue.
- Product discovery sites.

You may also find illustrated overviews, news to which you can subscribe, a list of country contacts and more useful information.

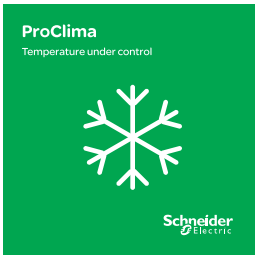
Our software suite

> Spacial.pro

Spacial.pro allows you to make switchboard proposals based on the standard Spacial offer. A full project with several sets of switchboards is quoted in minutes, with automatic creation of the Bill of Material and 2D drawings for front/side views.

> ProClima

Calculate the right choice for your thermal management requirements, according to the environment and the electrical/electronic devices installed inside the enclosure.



> Spacial.ref
Thalassa.ref

These digital rules allow you to select the best components from the current extensive product range without the risk of any mistakes, since product and accessory selection take place automatically, saving you time and money.

9

Technical annexes

Standard certifications 9/2

Degrees of protection: IK and IP 9/4

Material properties 9/6

ATEX 9/10

Electromagnetic compatibility 9/14

NEMA and UL classification 9/17

Enclosure certifications

Product certifications are awarded for enclosures as components.

Range		Aim of the certification				
		International standard for electric power enclosures	Degrees of protection	Standards for industrial equipment and UL classification	Marine environment classification or approval for protection and resistance to vibrations	ATEX
		Standard/Directive				
		IEC 62208	IEC 60529	UL508A and CAN CSA C22-2 no. 14	Rules of certifying bodies	European directive no. 94/9/EC EN 60079-0 and -7 EN 61241-0 and -1
SPACIAL	SF	●		●	● ●	
	SM	●		●	● ●	
	SD		●			
	S3D	●		●	● ● ● ●	● (1)
	CRN	●		●	●	
	S44	●				
	S57	●				
	SFX	●		●		
	SMX	●		●		
	SDX		●			
	S3X	●		●	●	
THALASSA	PLA	●		●	●	● (1)
	PLD	●				
	PLM	●		●	●	● (1)
	PLS	●		●		
	TBS/TBP	●		●		
CLIMASYS	CV			●		

(1) ATEX certifications relate to an adapted part of the range. These ranges are distinguished by their EX endings.

Official certification body								
Bureau Veritas	LCIE (Bureau Veritas)	Bureau Veritas Marine Division	TUV Rheiland Group	Underwriters Laboratories	Laboratorio Oficial J.M. Madariaga	Det Norske Veritas	Germanischer Lloyd	Lloyd´s Register
●	●	●	●	●	●	●	●	●

International enclosure standard
Standards IEC 62208*

Empty enclosures for low-voltage switchgear and controlgear assemblies. General rules.

Application

For empty enclosures before adding the user's switchgear, in the condition as supplied by the manufacturer.

Field of application

Demands for testing the enclosures to be used as part of the switchgear assemblies for voltages of less than 1000 V alternating current and 1500 V direct current.

Information supplied by the manufacturer

- Commercial trademark of the manufacturer: Schneider Electric.
- Mechanical characteristics, materials, conditions for use.
- Conditions for use:
  Ambient air temperature for outdoor installations: –25 to +40 °C.
- Atmospheric conditions for outdoor installations: the humidity can temporarily reach 100% at a temperature of 25 °C.
- Transport and storage conditions: from –25 to +55 °C; for limited periods not exceeding 24 h: up to +70 °C.

* European standard EN 62208 is identical to IEC 62208. European countries publish this standard according to the body in each country (for example BS EN 62208 in the UK).

Standard tests of standard IEC 62208

- Static loads: test 1.25 × maximum admissible load during 1 hour.
- Lifting: applicable to enclosures with lifting accessories.
- Axial loads of metal inserts: 500 N for 10 seconds for M8 inserts.
- IK code: test according to standard IEC 62262 with pendulum impact tester. After testing, the enclosure keeps its IP rating.
- IP rating: test according to standard IEC 60529. Degree of protection against access to dangerous parts and the penetration of solid bodies and against the penetration of water.
- Thermal stability at a temperature of 70 °C: 7 days.
- Resistance to heat: ball test at 70 °C (1).
- Resistance to abnormal heat and to fire: glow wire test according to IEC 60695-2-10 and IEC 60695-2-11 (1).
- Dielectric strength: 5000 V (1).
- Protection circuit continuity (2): resistance not to exceed 0.1 ohm.
- Weather resistance: duration 500 h (cycle: rain 5 minutes + UV lamp 25 minutes).
- Corrosion resistance:

– For indoor enclosures:
  • 6 cycles of 24 hours of the damp heat test at 40 °C and relative humidity of 95%.
  • 2 cycles of 24 hours of the salt mist test at 35 °C.
– For outdoor enclosures:
  • 12 cycles of 24 hours of the damp heat test at 40 °C and relative humidity of 95%.
  • 14 cycles of 24 hours of the salt mist test at 35 °C.

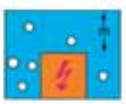
Our empty enclosures are marked CE according to the Low-Voltage Directive (LVD). It is the responsibility of the final equipment manufacturer to respect regulations in force.

(1) Information required for enclosures made from insulating material.
(2) For metal enclosures.

Degrees of protection provided by enclosures

- The degrees of protection provided by the enclosures are defined by standards IEC 60529 (IP) and IEC 62262 (IK).
- Degrees of protection are indicated by the letters IP followed by two characteristic numerals.
  The numerals show the degree of protection offered by the enclosure against access to dangerous parts, the penetration of of solid bodies (1st numeral), and against the penetration of liquids (2nd numeral).
- The protection against external mechanical impact is indicated by the letters IK followed by a characteristic group numeral.

Note: Many EN European standards are harmonised with international IEC standards.
This is the case with enclosure protection standards:
– EN 60529 = IEC 60529.
– EN 62262 = IEC 62262.

	IP	IK
First numeral Protection against solid bodies	**Second numeral** Protection against liquids	Mechanical protection
0 No protection	**0** No protection	**0** No protection
1 Protected against solid bodies larger than 50 mm (e.g.: incidental contact with the hand)	**1** Protected against vertically falling water droplets (condensation)	**01** 7,5 cm Impact energy: 0.150 Joules.
2 Protected against solid bodies larger than 12 mm (e.g.: finger contact)	**2** Protected against water droplets deflected at up to 15° from vertical	**02** 10 cm Impact energy: 0.200 Joules.
3 Protected against solid bodies larger than 2.5 mm (tools, wires)	**3** Protected against rainwater at up to 60° from vertical	**03** 17,5 cm Impact energy: 0.350 Joules.
4 Protected against solid bodies larger than 1 mm (fine tools, small wires)	**4** ⚠ Protection against water spray from all directions	**04** 25 cm Impact energy: 0.500 Joules.
5 ◈ Protected against dust (no harmful deposits)	**5** ⚠⚠ Protected against low-pressure water jets from all directions	**05** 35 cm Impact energy: 0.700 Joules.
6 ◈ Totally dust tight	**6** Protected against powerful water jets from all directions	**06** 20 cm Impact energy: 1.00 Joules.
	7 ❛❛ Protected against the effects of immersion	**07** 40 cm Impact energy: 2.00 Joules.
	8  ❛❛ ... ᵐ Protected against prolonged effects of immersion under pressure	**08** 29,5 cm Impact energy: 5.00 Joules.
		09 20 cm Impact energy: 10.00 Joules.
		10 40 cm Impact energy: 20.00 Joules.

Selection of enclosures

Selection according to the IP protection degrees.

The degrees of protection, explained on the preceding page, is an important element when selecting the enclosures.
The following table shows the protection degrees of the enclosures.

Name	Range	IP 40	IP 41	IP 42	IP 43	IP 44	IP 54	IP 55	IP 65	IP 66
Metal industrial boxes	Spacial S44 and S57									●
Metal derivation boxes	Spacial SDB							●		
Steel universal wall-mounting enclosures	Spacial S3D							● (1)		●
	Spacial CRN									●
	Spacial CRNG							● (1)		●
Steel modular distribution wall-mounting enclosures	Spacial S3DM									●
Terminal wall-mounting enclosures	Spacial S3DB									●
EMC steel wall-mounting enclosures	Spacial S3HF							●		
HMI steel wall-mounting enclosures	Spacial S3CM						●			
ATEX steel wall-mounting enclosures	Spacial S3DEX									●
Stainless-steel wall-mounting enclosures	Spacial S3X									●
ATEX stainless-steel wall-mounting enclosures	Spacial S3XEX									●
Steel floor-standing enclosures	Spacial SM							●		
Steel suitable enclosures	Spacial SF							●		
Stainless-steel floor-standing enclosures	Spacial SMX							●		
Stainless-steel suitable enclosures	Spacial SFX							●		
Steel control desks	Spacial SD							●		
Stainless-steel control desks	Spacial SDX							●		
Thermoplastic industrial boxes	Thalassa TBS-TBP									●
Polyester modular boxes	Thalassa PLS								●	
Polyester wall-mounting enclosures	Thalassa PLM									●
ATEX polyester wall-mounting enclosures	Thalassa PLMEX									●
Polyester floor-standing enclosures	Thalassa PLA (2)					●	●		●	
	Thalassa PLD				●		● (3)			

(1) Double door.
(2) Different IP depending on the version. See introduction in Thalassa PLA section.
(3) With gasket.

Selection according to the environment

The location of the enclosures and the physical, chemical and climatic conditions to which they are exposed will determine the model to be used.

- Steel enclosures are particularly well suited to indoor use in industrial environments.
- Stainless-steel enclosures are particularly well suited to corrosive environments or areas where specific hygiene demands are applicable.
- Polyester enclosures are particularly well suited to severe corrosive atmospheres, indoors or outdoors.

Enclosures made from insulating materials guarantee total insulation, reducing electric hazards for persons.
The main characteristics of the plastic materials of our enclosures and their chemical strength are given on page **9/7**.

Further help for making the selection is given by the NEMA or UL classification of the enclosure, see page **9/17**.

Properties of the plastic materials

Mechanical, electrical, physical and fire-resistance properties

Plastic materials generally used to manufacture our products:
- ABS.
- Polycarbonate.
- PVC (polyvinyl chloride).
- Bayblend® = PC + ABS.
- Polyester reinforced with fibreglass.
- Altuglas.
- Polypropylene.
- Polystyrene.
- Polyamide 6 and 12.
- SBS.

Specifications	Standards	Units	ABS	Polycarbonate	PVC	Bayblend®	Polyester	SBS
Mechanical properties								
Tensile strength	ISO 257	MPa	44	> 65	45	35	85	5
Tensile strain	ISO 527	%	12	> 110	120 to 150	40	0	600
Impact resistance	ISO 179	kJ/m²	125	No breakage	25	No breakage	60	No breakage
Notching resistance	ISO 179	kJ/m²	19	25	20	25	50	-
Electrical properties								
Stress point	IEC 60112	-	-	250-300	> 600	> 550	> 600	-
Surface strength	IEC 60093	ohm	1015	> 1015	> 1013	> 1014	⩾1012	> 1013
Dielectric strength	IEC 60243	kV/mm	16.5	> 30	30	24	18-20	20
Specific resistivity	IEC 60093	ohm³cm	1015	> 1016	⩾ 1015	1016	⩾ 1012	> 1016
Physical properties								
Softening temperature (Vicat B)	ISO 306	°C	95	145-150	79-80	115	(1)	80
Temperature resistance	-	°C	–40...+90	–50...+125	–20...+65	–35...+90	–50...+150	–40...+120
Water absorption	ISO 62	%	0.2 - 0.45	0.15	< 0.1	0.2	0.2	-
Specific weight	ISO 1183	kg/dm³	1.04	1.21	1.4	1.12	1.85	0.3 in 24 h
Fire resistance								
Oxygen index	ISO 4589	%	19	26	45-50	22	24.4	18
Glow wire resistance, 2 mm	IEC 60695-2	°C	650	960	960	750	960	750° (1.5 mm)
Glow wire resistance, 3 mm	IEC 60695-2	°C	650	960	960	750	960	NA

(1) No softening of the polyester.

Specifications	Standards	Units	Altuglas	Polypropylene	Polystyrene	Polyamide 6	Polyamide 12
Mechanical properties							
Tensile strength	ISO 257	MPa	30	35	24	40	30
Tensile strain	ISO 527	%	5	400	36	200	300
Impact resistance	ISO 179	kJ/m²	20	20	63	No breakage	No breakage
Notching resistance	ISO 179	kJ/m²	3	5	50	31.2	15
Electrical properties							
Stress point	IEC 60112	-	-	-	KB175	KB175	KB180
Surface strength	IEC 60093	ohm	⩾ 1014	-	> 1013	1012	5 × 1010
Dielectric strength	IEC 60243	kV/mm	13-15	20	⩽ 40	23	55
Specific resistivity	IEC 60093	ohm³cm	> 1015	> 1016	> 1015	1011	3 × 1011
Physical properties							
Softening temperature (Vicat B)	ISO 306	°C	120-122	75 (vicat A)	79	230	140
Temperature resistance	-	°C	–20...+80	–10...+80	–15...+60	–20...+100	–50...+125
Water absorption	ISO 62	%	< 0.5	0.1 in 24 h	0.1 in 24 h	1.6	1.5
Specific weight	ISO 1183	kg/dm³	1.18	0.91	1.06	1.14	1.03
Fire resistance							
Oxygen index	ISO 4589	%	18.5	18	18	24	22
Glow wire resistance, 2 mm	IEC 60695-2	°C	-	650	650	750	650
Glow wire resistance, 3 mm	IEC 60695-2	°C	960	650	650	850	650

Properties of the plastic materials

Resistance to chemical agents

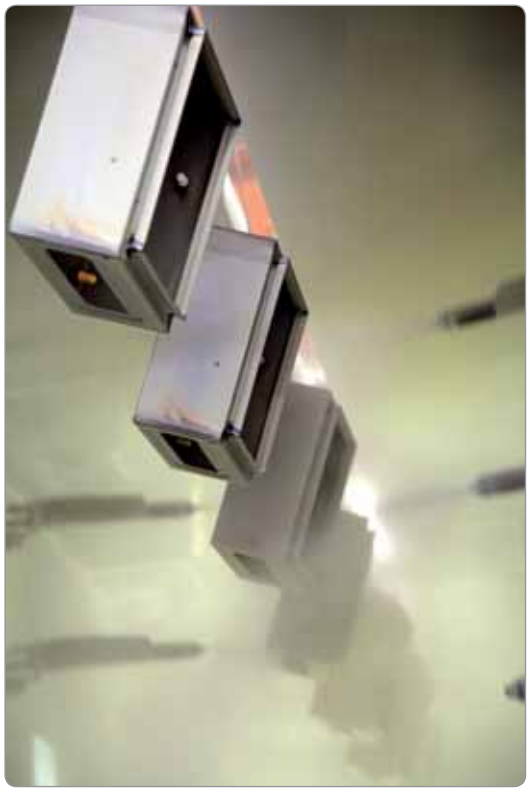
Plastic materials generally used to manufacture our products:
- ABS.
- Polycarbonate.
- PVC (polyvinyl chloride).
- Bayblend® = PC + ABS.
- Polyester.
- Altuglas.
- Polypropylene.
- Polystyrene.
- Polyamide 6 and 12.
- SBS.

The table shows:
- The concentration of the chemical agent in %; sat = saturation.
- The resistance of the material:
  +: Resistant.
  O: Limited resistance.
  –: Not resistant.

Resistance to	ABS	Polycar-bonate	PVC	Bayblend®	Polyester	Altuglas	Polypro-pylene	Poly-styrene	Polyamide 6	Polyamide 12	SBS
Acetone	–	–	–	–	–	O	100 +	–	100 +	+	+
Hydrochloric acid	15 +	10 +	30 +	20 +	30 +	sat +	10 +	O	10 –	10 +	10 +
Citric acid		10 +	sat +	10 +	100 +	sat +	sat +	+	10 O	+	10 +
Lactic acid	80 +	10 +	90 +	10 –	100 +	20 +	90 +	O	50 O 90 –	+ +	sat +
Nitric acid	30 +	10 + 100 –	50 +	10 +	20 + +	10 + 100 –	25/ 50	O	2 O 10 –	–	50 +
Phosphoric acid	85 +	100 +	sat +	+	100 +	10 + 95 –	sat +	O	2 O 10 –	50 +	+
Sulphuric acid	50 +	50 + 100 –	96 +	30 +	70 +	30 +	96 +	O	3 –	10 +	96 +
Alcohol	O	96 +	96 +	–	50 O	50 O	96 +	+	96 O	96 +	+
Pure aniline	O	–	100 –	–	O	–	100 +		100 O	100 O	
Mineral base (hydroxide)		O	10 +	–	100 +	10 +	50 +	O	10 + 50 O	50 O	
Benzene	+	100 –	–	+	–	O	100 O		100 +	+	–
Liquid bromine		100 –	–	–			100 –			100 –	–
Liquid chlorine		–	100 –	–	sat +	–	100 –		100 O	–	50 +
Sea water	+	100 +	100 +	+	100 +	100 +	–	100 +		100 +	sat +
Petrol	+	100 +	100 O	–	100 +	100 O	–	–	100 +	+	–
Ether	–	100 O	100 –	–	100 O	+			100 +	100 +	–
Hexane	O	+	O	O	–		100 +		100 +	100 +	–
Oil and greases	+	100 +	100 +	O	100 +	100 O	100 +	–	+	100 +	–
Aromatic hydrocarbon	O	–	–	–	–	+	–	–	–	+	–
Fuel oil	O	100 O	100 +	–	100 +	100 –	100 +		100 +	100 +	–
Naphthalene			100 O	–	100 +	100 –	100 +		100 +	100 +	
Nitrobenzene	–	–	100 –	–		–	100 O		–	O	–
Phenol	–	–	sat O	–	20 O	–	sat +		–	–	10 O
Mineral salts		+	+	+	+	+	+			+	+
Iodine solution		O	–	+		–			+		
Toluene	–	–	100 –	–	+	O	100 O	–	100 +	100 +	–
Trichloroethylene	–	–	100 –	–	–	–	100 O	–	100 –	100 O	–
Urea		sat +	sat +	+			sat +		10 +	sat +	sat O

For other chemical agents, please contact us.
All this information is taken from the best sources and provided for information purposes only, with no commitment on our behalf.

Polyester base coating properties



Product type

Thermosetting polyester resins based powder coating modified by epoxy resins and designed for decoration and to prevent corrosion.
The performance of this coating is superior to conventional epoxy powders in terms of: colour stability, temperature resistance and weather resistance.
Grey RAL 7035; appearance: structured.

Mechanical properties

Test conditions: steel samples with a thickness of 1 mm.
Degreasing using biodegradable surface-active agents.
Film thickness: 60 microns.

Bonding (scratching and adhesive tape)	ISO 2409	Class 1
Ericksen stamping	ISO 1520	≥ 7 mm
Direct impact resistance	ISO 6272	> 1 kg/70 cm
Indirect impact resistance	ISO 6272	> 1 kg/20 cm
Bending around conical mandrel	ISO 6860 - ASTM D 522-88	Maximum cracking of 70 mm, without the paint coming loose

Chemical properties

Tests conducted at ambient temperature on phosphated samples covered with a 150 to 200 micron film:
Film intact.
Film attacked (blistering, yellowing, loss of gloss).

Number of months			2	4	6	8	10	12
Acid	Acetic	20%						
	Sulphuric	30%						
	Nitric	30%						
	Phosphoric	30%						
	Hydrochloric	30%						
	Lactic	10%						
	Citric	10%						
Base	Soda	10%						
	Ammonia	10%						
Water	Distilled water							
	Sea water							
	Tap water							
	Diluted chloride bleach							
Solvents	Petrol							
	Higher alcohols							
	Aliphatics							
	Aromatics							
	Ketones-esters							
	Tri-perchlorethylene							

Physical properties

Temperature resistance: –40 °C and 100 hours at +150 °C (colour: white).
Gloss retention: good.

Resistance to corrosion

Compliance with standard IEC 62208 for outdoor installations: 288 h of humid heat and 336 h of salt mist.

Polyester base coating properties

Nuclear decontamination

Applicable to colours RAL 7035 and AFNOR A550.
Standard NFT 30901. Percentage of decontamination for contamination by fission products or plutonium. Please consult us for further details.

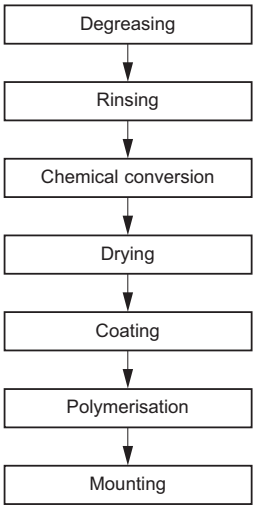
Accelerated aging

Standard IEC 62208: 500h UV according to ISO 4892 (method A) (adherence of the coating with minimum retention of 50% on the grid according to ISO 2409).

Fire behaviour

Class M1 (self-extinguishing material).
Class M0 (for coating on a metal base).

Manufacturing process



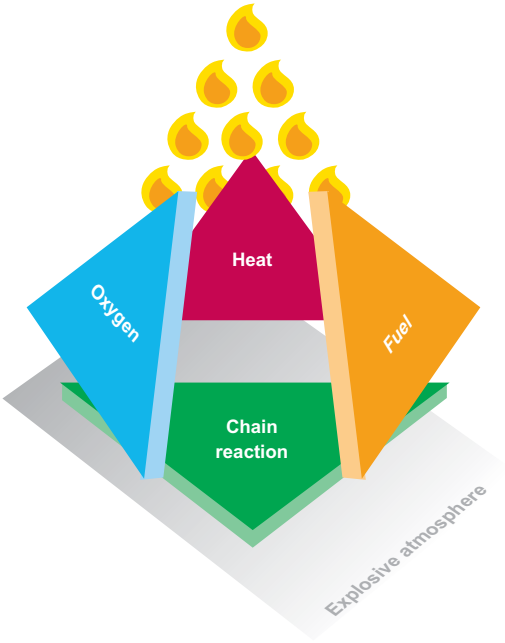
Potentially explosive atmospheres: important information

Product directive 94/9/CE: defines the manufacturers' obligations.

Personal protection directive 99/92/CE: defines the users' obligations.

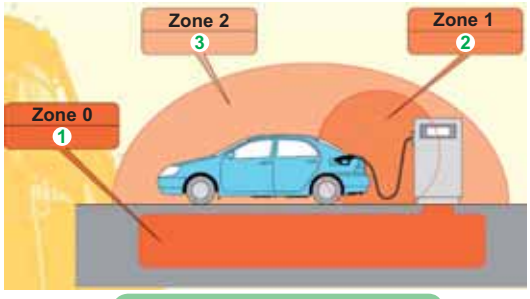
What is ATEX?

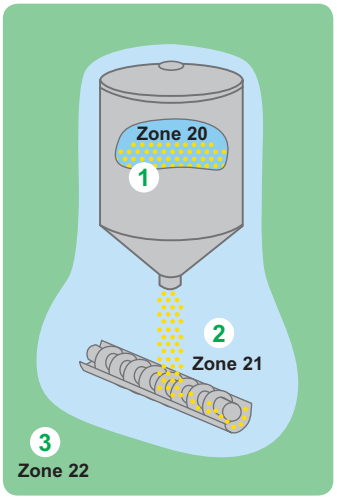
- It is a term commonly used to describe potentially EXplosive ATmospheres and standards for protection systems and equipment.
- Two European directives, ATEX 99/92/CE and ATEX 94/9/CE, and international standards IEC 60079 and IEC 61241, harmonized with EN European standards, apply to this field.



How is a potentially explosive atmosphere defined according to ATEX?

- An potentially explosive atmosphere is defined as a mix of flammable substances in the form of gas, vapour, dust (cloud or deposit) which, in air and under normal atmospheric conditions, can completely or partially catch fire in the form of an explosion when exposed to a source of ignition.





Classification of an explosive atmosphere

- They are classified into groups and zones according to directive 99/92/CE and IEC standards as follows:

Destination	Categories/presence of potentially explosive atmosphere	Hazardous zones	Atmosphere
Group I Mines	**M1 and M2**	**Gas and dust (G & D)**	
Group II surface Industries	1 Permanent or frequent	**Zone 0:** gas and vapour	G
		Zone 20: mist and dust	D
	2 Occasional	**Zone 1:** gas and vapour	G
		Zone 21: mist and dust	D
	3 Rare	**Zone 2:** gas and vapour	G
		Zone 22: mist and dust	D

Equipment for potentially explosive atmospheres

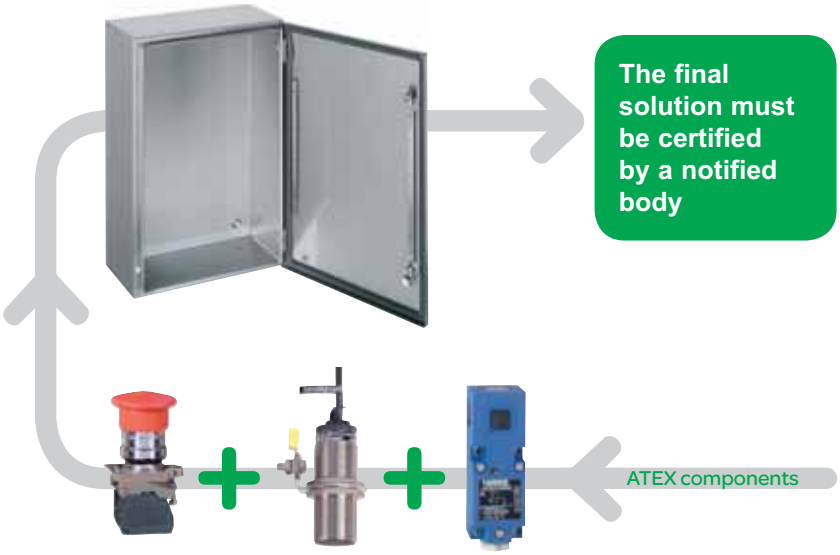
- Since 1st July 2003, European directive ATEX 94/9/CE has made it compulsory to use certified electric or non-electric equipment when it must be installed in zones with explosive atmospheres (gas or dust).
- Certification must be provided by a body which is notified according to the same directive.
- The body notifies its assessment of the quality of the production and certifies that the product complies with the health and safety demands defined in the directive and the international standards.
- The certificate shows the category of the product by marking, and thus the zone and atmosphere in which it can be used.
- The standards define the following types of protection for electric equipment:

Electrical equipment				
CENELEC	**IEC**	**Gas: symbol of the types of protection**	**CENELEC/IEC**	**Powder: symbol of the types of protection**
EN 60079-0	IEC 60079-0	General rules	IEC/EN 61241-0	General rules
EN 50015	IEC 60079-6	**0**-oil immersion	IEC/EN 61241-1	**tD**-protection by enclosures
EN 50016	IEC 60079-2	**p**-pressurised enclosures	IEC/EN 61241-4	**pD**-protection by pressurisation
EN 50017	IEC 60079-5	**q**-powder filling	IEC/EN 61241-11	**iD**-protection by intrinsic safety
EN 60079-1	IEC 60079-1	**d**-flameproof enclosures	IEC/EN 61241-18	**mD**-protection by encapsulation
EN 60079-7	IEC 60079-7	**e**-increased safety		
EN 50020	IEC 60079-11	**i**-intrinsic safety		
EN 60079-15	IEC 60079-15	**n**-type of protection “n”		

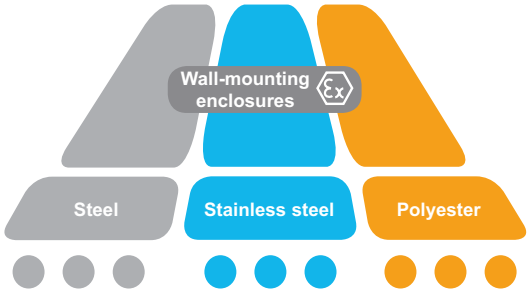
Degree of protection

In hazardous areas, equipment is required to offer a minimum degree of protection of IP 54, but it can be tested or certified with a higher degree of protection.

- Enclosures are certified as components. They will be assembled with other ATEX electrical, pneumatic and hydraulic components, among others to form a final solution which, in turn, must be ATEX-certified and subject to a declaration of conformity.



Fields of application of Schneider Electric ATEX enclosures



Three types of enclosures

- All the wall-mounting enclosures presented in this brochure comply with standards for protection against the increased risk of explosion in atmospheres charged with gas (G) and/or dust (D).
- The Schneider offer, designed to be used in group II, is classified as category 2.

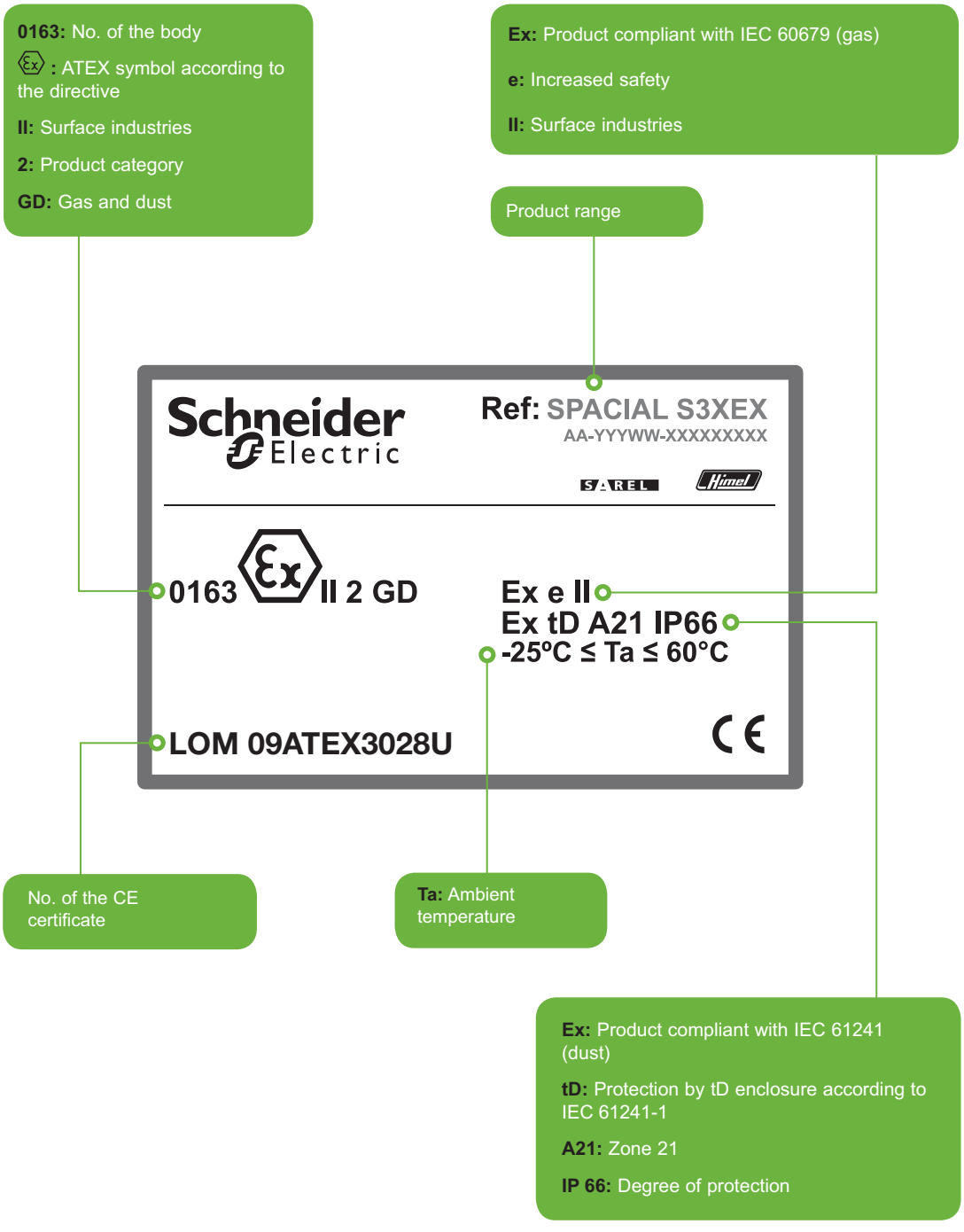
Zone of application of Schneider ATEX wall-mounting enclosures

Destination	Categories/presence of potentially explosive atmosphere	Hazardous zones	Atmosphere
Group I Mines	**M1 and M2**	**Gas and dust (G & D)**	
Group II Surface industries	1 Permanent or frequent	**Zone 0:** gas and vapour	G
		Zone 20: mist and dust	D
	2 Occasional	**Zone 1:** gas and vapour	G
		Zone 21: mist and dust	D
	3 Rare	**Zone 2:** gas and vapour	G
		Zone 22: mist and dust	D

- Category 2 products can be used as category 3.
- Our products are qualified for increased safety “e” (Ex e) but not for explosion-proof safety “d” (Ex d).
- The wall-mounting enclosures have the following marks:
  Ex II 2 GD Ex e II Ex tD A21 IP 66 according to directive 94/9/CE and standards EN 60079-0 (2004), EN 60079-7 (2006), EN 61241-0 (2005) and EN 61241-1 (2004).
- The wall-mounting enclosures offer a degree of protection IP 66 according to EN 60529, exceeding the recommendations of the ATEX directive.
- Certification of our production sites and inspection procedures guarantees observance and consistency of the quality level.

Description of the marking label affixed to ATEX certified wall-mounting enclosures

Download our ATEX certificates from our site.



Electromagnetic compatibility

General

The increasing presence of electromagnetic interference in industrial environments, together with the use of equipment susceptible to such interference requires the use of suitably protected enclosures.
In order to suppress electromagnetic interference, S3HF enclosures, due to the type of sheet metal and special gaskets used, fulfil two functions:
- Provision of adequate screening, with the effectiveness of a Faraday cage.
- Ability to provide effective protection of sensitive equipment by using galvanised sheet metal chassis, and by following recommended installation procedures.

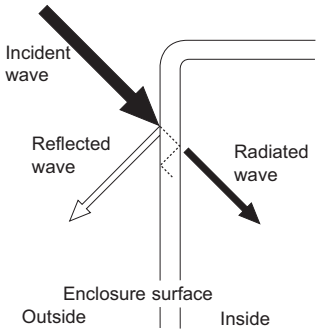
Electromagnetic interference

Electromagnetic disruptions comprises an electrical field E generated by a differing potentials, and a magnetic field M, caused by current circulation, which combine to form electromagnetic field.
The electromagnetic interference or "noise" is a disruptive electrical signal which affects the useful signal and it likely to cause a malfunction.
Interference can be carried through the conductors or emitted through the environment.

Main sources of electrical interference and equipment sensitive to it

- Programmable controllers.
- Electronic circuits or boards.
- Regulators.
- Input signal cables (detectors, sensors, measurement probes).
- Analogue signal cables.

Main sources of electrical interference	
Material	**Frequency range**
Motors	10 kHz...100 MHz
Transformers/rectifiers	10 kHz...100 MHz
Inductive load switching	50 kHz...10 MHz
Spot welders	10 kHz...50 MHz
Fluorescent lamps	100 kHz...3 MHz
Relays, contactors	10 kHz...200 MHz
Switching power sources	10 kHz...30 MHz
Computers (internal clock)	50 kHz...200 MHz
Variable speed drives	10 kHz...100 MHz
Induction furnaces	0...10 kHz
Power cables, etc.	0...10 kHz



Attenuation level of EMC fields

The waves of electrical or magnetic fields are reflected when they meet the sheet metal of the enclosure.
The effective rate of the screening or dampening "a" of the incident wave is measured in decibels (dB) using the following formulae:

$a = 20 \log \frac{E_0}{E_1}$ (dB) for electrical fields,

$a = 20 \log \frac{H_0}{H_1}$ (dB) for magnetic fields,

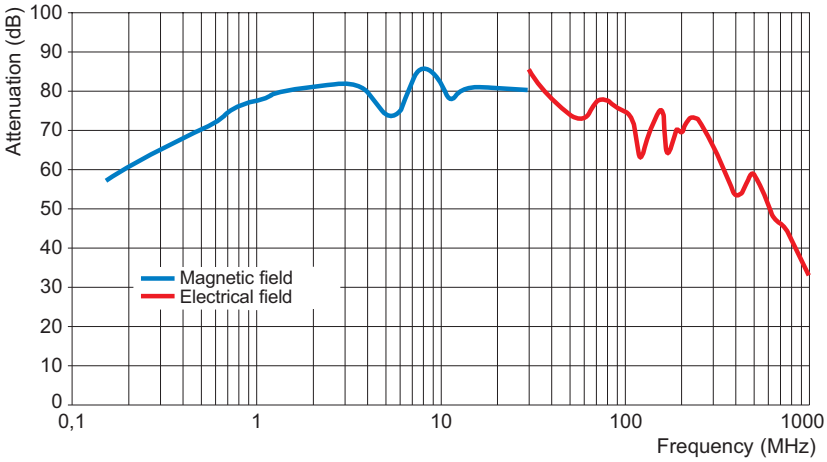
E0 and E1 are the current values of the electrical field, before entering and after entering the enclosure respectively.

H0 and H1 are the magnetic field values.

Electromagnetic compatibility

Example of attenuation level of S3HF enclosures

The presence of 55% aluminium on the surface of the sheet metal ensures good reflection of electromagnetic waves.
The graphic next to these lines shows the attenuation curves (dB) according to the frequency (MHz).



Installation

According to the type of interference generated by the devices:
- Low frequencies, "conducted interference" (up to 30 MHz).
- High frequencies, "radiated interference" (higher than 1 MHz).

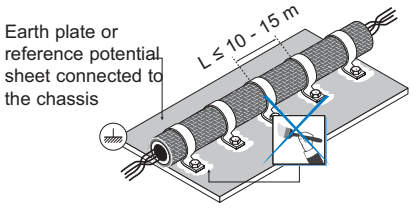
the rules to be taken into account relate to the choice of components that provide the most economical solution to complete the installation.

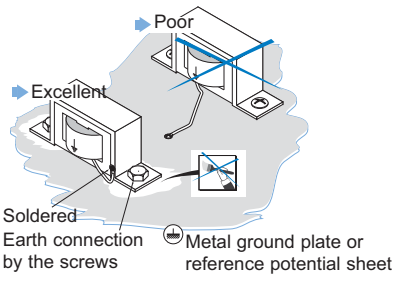
Low-frequency interference

- Importance of the protection systems:
  – Filters, overvoltage suppressor, isolating transformer for the power supply.
  – Cable length.

High-frequency interference

- Importance of the installation method:
  – Earth connections, cable length and section.
  – Cable selection and rules, cable runs, connections.
  – Enclosures and installation.





Specifics

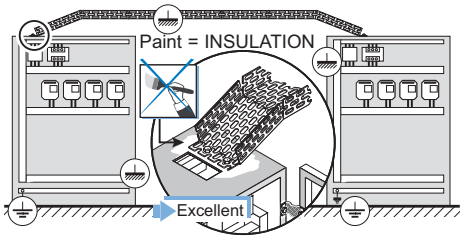
Screen connections

It is recommended to earth screens at both ends. In addition, it is advisable to increase the number of intermediate earth connections.
If the screen is only earthed at one end, there can be a considerable difference in potential between the two ends. In addition, this screen will be ineffective against external high-frequency interference.

Transformers

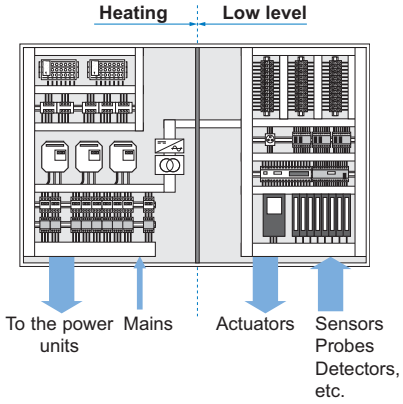
The transformer chassis must be mounted, metal to metal, on the reference potential plate, that is, on a plain chassis supporting the equipment.

Electromagnetic compatibility



Cable runs

The metal ducts and conduits, when correctly connected, provide an extremely effective second screen for the cables.
Cable ends must be screwed to the metal enclosures in order to provide an effective connection.



Enclosures

The interfering and sensitive components, cables etc. should be installed in separate enclosures or located at some distance from each other.

Note: For further information, consult your local sales office or our educational leaflet entitled "Electromagnetic compatibility".

Classification of electrical equipment enclosures according to NEMA and UL

NEMA and UL are standardisation bodies, commonly recognised in North America, which have issued classifications of enclosures according to the protection offered in various environments.
These classifications are similar.
The 1st table below summarises this classification, which does not include potentially explosive areas. The detailed recommendations of this classification are given on the next page.
The 2nd table indicates the classification of our enclosures.
These classifications appear in our UL certifications (see Certification technical annex on page **9/2**).
Certification according to the UL classification guarantees the corresponding NEMA classification by equivalence.

Environment and protection	Classification												
	1	2	3	3R	3S	4	4X	5	6	6P	12	12K	13
Indoor use	●	●	●	●	●	●	●	●	●	●	●	●	●
Outdoor use			●	●	●	●	●		●	●			
Incidental contact with the equipment	●	●	●	●	●	●	●	●	●	●	●	●	●
Dirt	●	●	●	●	●	●	●	●	●	●	●	●	●
Drips and gentle splashes of non-corrosive liquids		●	●	●	●	●	●	●	●	●	●	●	●
Rain, frost(*) and snow			●	●	●	●	●		●	●			
Frost (**)					●								
Dust, fibres and particles in suspension			●		●	●	●		●	●	●	●	●
Built-up dust, fibres and particles in suspension			●		●	●	●	●	●	●	●	●	●
Clouds of dust			●		●	●	●		●	●			
Splashes and jets of water						●	●		●	●			
Gentle splashes and leaks of oil or non-corrosive coolants											●	●	●
Drips, splashing and spraying of oil or non-corrosive coolants													●
Corrosive agents							●			●			
Occasional temporary immersion									●	●			
Occasional prolonged immersion										●			

(*) The operation of the external mechanisms is not required when the enclosure is covered with frost.
(**) The operation of the external mechanisms is required when the enclosure is covered with frost.

Enclosures		Type of protection (1)												
		1	2	3	3R	3S	4	4X	5	6	6P	12	12K	13
Steel wall-mounting enclosures	S3D	●	●	● (*)	● (*)		● (*)	● (*)				● (**)	● (**)	● (**)
	CRN	●	● (*)	● (*)	● (*)		● (*)		● (*)			●		●
Stainless-steel wall-mounting enclosures	S3X	●	● (*)	● (*)	● (*)		● (*)	● (*)	● (*)			●	● (**)	● (*)
Steel floor-standing enclosures	SM	●	● (*)	● (*)	● (*)		● (*)		● (*)			●	●	● (*)
Steel suitable enclosures	SF	●										●	●	
Stainless-steel floor-standing enclosures	SMX	●	● (*)	● (*)	● (*)		● (*)	● (*)	● (*)			●	●	● (*)
Stainless-steel suitable enclosures	SFX	●										●	●	
Thermoplastic boxes	TBS/TBP	●		●		●	●	●						
Polyester modular boxes	PLS	●	●	●	●	●	●	●				●		●
Polyester wall-mounting enclosures	PLM	●	●	●	●	●	●	●				●		●
Polyester floor-standing enclosures	PLA	●	●	● (*)	● (*)		● (*)	● (*)	● (*)			●		●

(*) 1 door.
(**) 2 doors.

Components		Type of protection (1)												
		1	2	3	3R	3S	4	4X	5	6	6P	12	12K	13
Ventilation system	CV											●	●	
Thermal regulation system	CC											●	●	

(1) In some ranges the classification depends on the model and version. The detailed protection types are indicated in the UL certifications.

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