

● GENERAL

Fuse are protective device in which the melting or more fusible elements open a circuit and interrupt the current if the current exceeds a set value for a given length of time.

● REFERENCE STANDARD

VDE636, IEC60269, EN60269, DIN 43620

NH(H.R.C) fuses have a breaking capacity of 120kA. Rated voltages are 500V AC, rated current is up to 630A. It makes protection against short circuit, boasting current and opens circuit immediately. “gL/Cg” mark's mean is line protection and this class of fuses are used for protection of cable and conductors. Fuses can operate to 1.6time higher of its rated value and breaking capacity of circuit for a 5In value in 5 seconds. The melting wires (fusible element) of the fuses cartridges are produced in different shape and sizes for various current rated. Over the melting wire small chambers are put together. In case of short-circuit and over load different section with the same diameter melt down and form practical sparks. As a result of the short-circuit current is extinguished and the heat is evenly transferred along the fuse.

The external body of the fuses should be resistant to the high current temperature and pressure caused arcs during the melting of the fuse wire. Therefore for this wire to melt, the current energy should be higher than the wires maximum resistance. During the process of the wire melting along and inside the length of the fuse body, the current continues to flow firstly as liquefied metal and secondly as steamed metal before eventually losing it's energy. And therefore there is an immense increase of heat and pressure during this action on the inside of the fuse body. The fuse body must hold resistance to such actions otherwise will be damaged and lose its purpose. To avoid such circumstance the material used for the fuse body should be made accordingly to the IEC672 standards.

Fuse body are produced to withstand shock temperatures and dynamic stresses.

Fuse contacts are made from copper and silver plated. In time the silver plated becomes dark colored. However, this is not important, because silver sulphur with current heat becomes conductive.

● QUARTZ SAND

Inside of the body is Quartz Sand. This distinctiveness of the sand is that it is high pure, clean and unhumid. Also the sand is tightly contained in the fuse using a vibration method to lock out any air and maintain the sufficiency of sand. During melting of the wire, the sand helps cool down the arc and insulates the distance between the broken fuse wire points for quicker and more efficient energy decrease.

● QUARTZ SAND

According to “gL/Cg” operation class, NH fuses bases which have 60% nominal circuit selective in high short circuit current.

● FUSE BASE

The fuse base contacts are made of electrolytic copper and reinforced with steel segments in addition to its own compression and elasticity characteristic. Grabbing capacity of conducts is higher than other bases or holder. If bases are put together side by side. Phase seperaters which is given as accessory is used for rising of phase isolation. When fuses are placed in their bases, the fuses blade must sit on base exactly. Otherwise incapable contact will cause loss of resistance, temperature and power, failures.

Ref.	Model	Rated Current(A)	For Fuse Link	Case Qty.(Pcs)	Item Code
DFS-160	DFS-160	160	NH00	12	195160

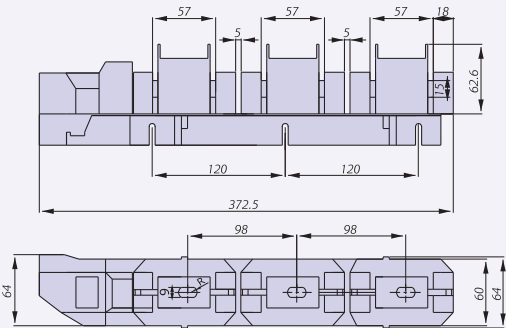


DFS-250~630

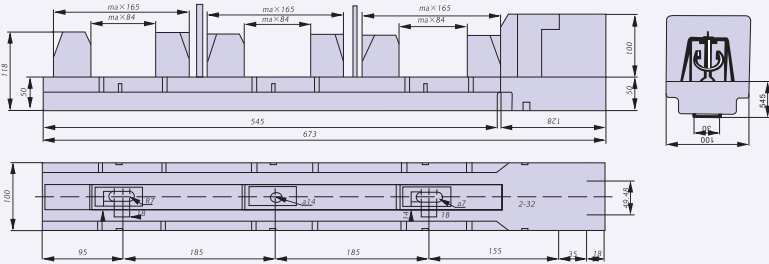


DFS-250	250	NH1	6	195250
DFS-400	400	NH2	6	195400
DFS-630	630	NH3	6	195630

● DIMENSION



DFS-160



DFS-250~630

Ref.	Model	Rated Current(A)	For Fuse Link	Case Qty.(Pcs)	Item Code
TZN-160	TZN-160	160	NH00	12	196160

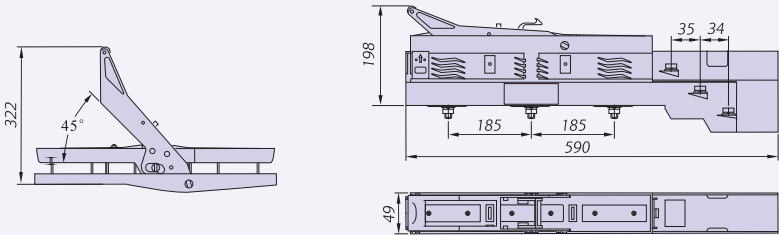


TZN-250~630

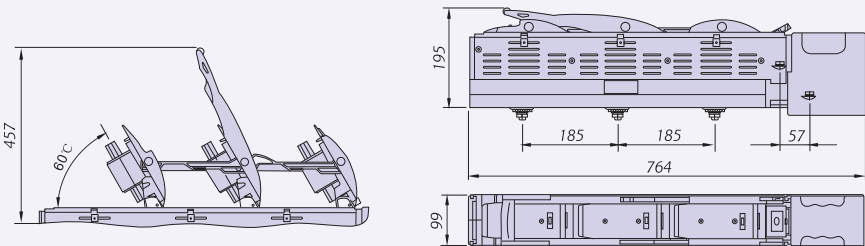


TZN-250	250	NH1	12	196250
TZN-400	400	NH2	12	196400
TZN-630	630	NH3	12	196630

● DIMENSION



TZN-160



TZN-250~630

Ref.	Model	Rated Current(A)	For Fuse Link	Case Qty.(Pcs)	Item Code
EFS-160	EFS-160	160	NH00	18	619160
	EFS-250	250	NH1	4	619250
	EFS-400	400	NH2	4	619400
	EFS-630	630	NH3	2	619630

EFS-160



EFS-250



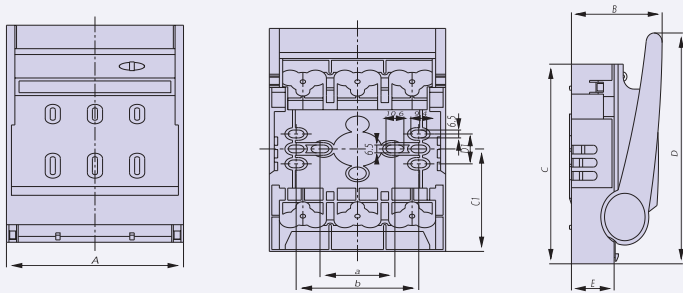
EFS-400



EFS-630



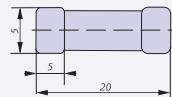
• DIMENSION



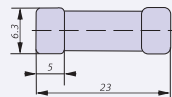
Model	EFS-160	EFS-250	EFS-400	EFS-630
A	105	250	285	328
B	85	184	210	250
C	160	116	129	138
D	185	230	256	315
E	40	66	81	86
a	4.6	115	140	150
b	73	50	50	50
c1	85	26	21	Φ24
d1	24.8	11	11	Φ24

Ref.	Model	Rated Current Range(A)	Rated Voltage (V)	Case Qty.(Pcs)	Item Code
GF-5x20	GF-5x20	0.04~16 *	250	10000	605020
GF-6x32	GF-6x32	0.04~20 *	250	10000	606032
CF-10x25	CF-10x25	0.5~16 *	250	5000	610025
CF-8.5x31 XA	CF-8.5x31 XA	0.5~20 *	500	4800	608531
CF-10x38	CF-10x38	0.5~32 *	380/500	3000	610038
CF-14x51	CF-14x51	2~50 *	380/660	1200	614051
CF-22x58	CF-22x58	10~125 *	380/660	480	622058

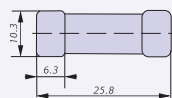
GF-5x20



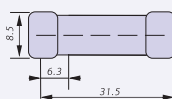
GF-6x32



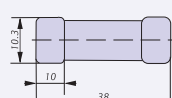
CF-10x25



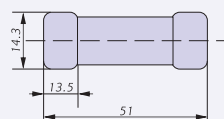
CF-8.5x31 XA



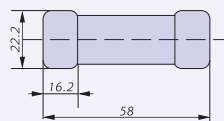
CF-10x38



CF-14x51



CF-22x58

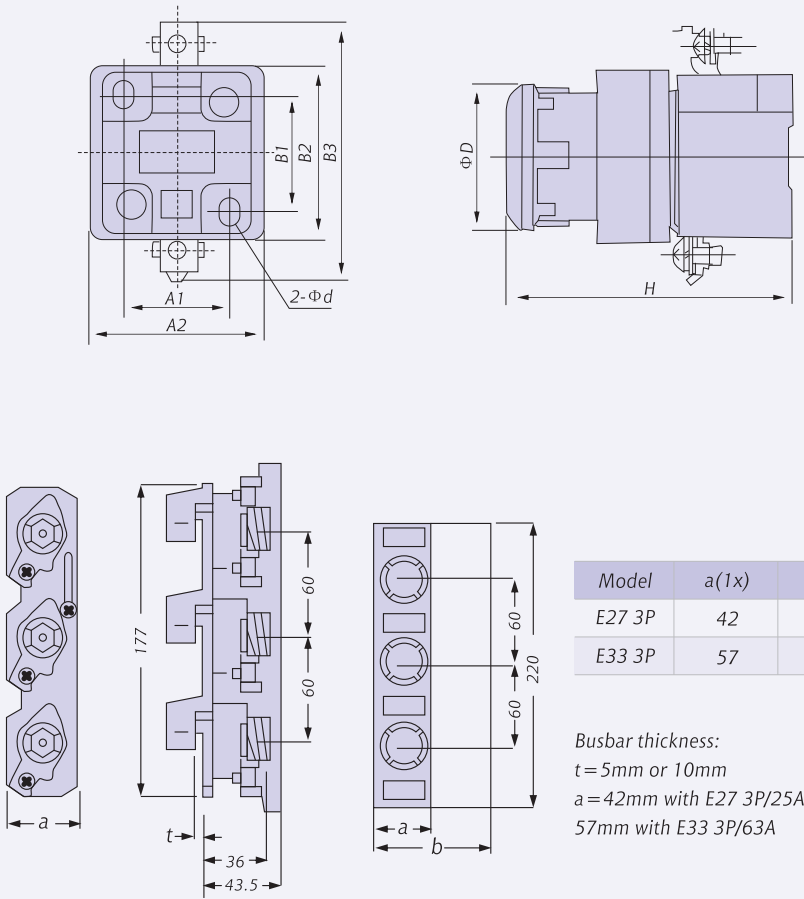


*Please mention the current when ordering.

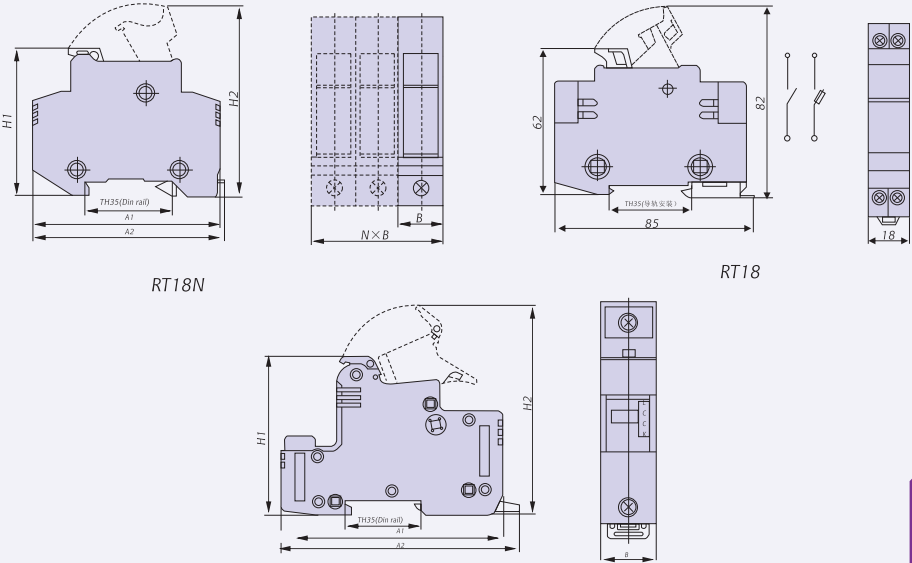
Ref.	Model	Rated Current (A)	For Fuse Holder	Rated Voltage (V)	Case Qty.(Pcs)	Item Code
D01-16A	D01-2A	2	SN-32	380	3000	010002
	D01-3A	3	SN-32	380	3000	010003
	D01-4A	4	SN-32	380	3000	010004
	D01-5A	5	SN-32	380	3000	010005
	D01-6A	6	SN-32	380	3000	010006
	D01-10A	10	SN-32	380	3000	010010
	D01-16A	16	SN-32	380	3000	010016
D02-63A	D02-20A	20	SN-63	380	1600	020020
	D02-25A	25	SN-63	380	1600	020025
	D02-35A	35	SN-63	380	1600	020035
	D02-50A	50	SN-63	380	1600	020050
	D02-63A	63	SN-63	380	1600	020063
D03-80A	D03-80A	80		380	480	030080
	D03-100A	100		380	480	030100
D I -16A	D I -2A	2	E16	500	2000	110002
	D I -4A	4	E16	500	2000	110004
	D I -6A	6	E16	500	2000	110006
	D I -10A	10	E16	500	2000	110010
	D I -16A	16	E16	500	2000	110016
D II -25A	D II -20A	20	E27	500	720	120021
	D II -25A	25	E27	500	720	120026
	D II -32A	32	E27	500	720	120032
	D II -35A	35	E27	500	720	120036
	D II -40A	40	E27	500	720	120041
	D II -50A	50	E27	500	720	120051
	D II -63A	63	E27	500	720	120063
D III -63A	D III -80A	80	E33	500	480	130080
	D III -100A	100	E33	500	480	130100

Ref.	Model	Rated Current (A)	For Fuse Link	Rated Voltage (V)	Case Qty.(Pcs)	Item Code
E16	E16	25	D I	500	100	162500
E27-3P	E27-1P	25	D II	500	100	272510
	E27-3P	25	D II	500	30	272530
	E27-3PL	25	D II	500	30	272531
E33-3P	E33-1P	63	D III	500	100	336310
	E33-3P	63	D III	500	30	336330
	E33-3PL	63	D III	500	30	336331

● DIMENSION



Ref.	Model	Rated Current (A)	No.of Poles	Rated Voltage(V)	For Fuse Link	Material	Case Qty.(Pcs)	Item Code
RT18-32-1P	RT18-32	32	1P	500V	10x38	Nylon	300	183201
	RT18-32	32	1 + N	500V	10x38	Nylon	150	183204
	RT18-32	32	2P	500V	10x38	Nylon	300	183202
	RT18-32	32	3P	500V	10x38	Nylon	300	183203
	RT18-32	32	3 + N	500V	10x38	Nylon	300	183205
RT18-32X-1P	RT18-32X	32	1P	500V	10x38	Nylon	300	183211
	RT18-32X	32	1 + N	500V	10x38	Nylon	300	183214
	RT18-32X	32	2P	500V	10x38	Nylon	300	183212
	RT18-32X	32	3P	500V	10x38	Nylon	300	183213
	RT18-32X	32	3 + N	500V	10x38	Nylon	300	183215
* X means with indicator.								
RT18N-32-1P	RT18N-32	63	1P	690V	14x51	Nylon	300	283201
	RT18N-32	63	1 + N	690V	14x51	Nylon	300	283204
	RT18N-32	63	2P	690V	14x51	Nylon	300	283202
	RT18N-32	63	3P	690V	14x51	Nylon	300	283203
	RT18N-32	63	3 + N	690V	14x51	Nylon	300	283205
RT18N-32X-2P	RT18N-32X	125	1P	690V	22x58	Nylon	300	283211
	RT18N-32X	125	1 + N	690V	22x58	Nylon	300	283214
	RT18N-32X	125	2P	690V	22x58	Nylon	300	283212
	RT18N-32X	125	3P	690V	22x58	Nylon	300	283213
	RT18N-32X	125	3 + N	690V	22x58	Nylon	300	283215
* X means with indicator.								
RT18N-63N-2P	RT18N-63	125	1P	690V	22x58	Nylon	108	286301
	RT18N-63	125	1 + N	690V	22x58	Nylon	108	286304
	RT18N-63	125	2P	690V	22x58	Nylon	108	286302
	RT18N-63	125	3P	690V	22x58	Nylon	108	286303
	RT18N-63	125	3 + N	690V	22x58	Nylon	108	286305
RT18N-63N-2P	RT18N-63X	125	1P	690V	22x58	Nylon	108	286311
	RT18N-63X	125	1 + N	690V	22x58	Nylon	108	286314
	RT18N-63X	125	2P	690V	22x58	Nylon	108	286312
	RT18N-63X	125	3P	690V	22x58	Nylon	108	286313
	RT18N-63X	125	3 + N	690V	22x58	Nylon	108	286315
* X means with indicator.								
RT18N-125 2P	RT18N-125	125	1P	690V	22x58	Nylon	96	281251
	RT18N-125	125	1 + N	690V	22x58	Nylon	96	281254
	RT18N-125	125	2P	690V	22x58	Nylon	96	281252
	RT18N-125	125	3P	690V	22x58	Nylon	96	281253
	RT18N-125	125	3 + N	690V	22x58	Nylon	96	281255

Ref.	Model	Rated Current (A)	No.Of Poles	Rated Voltage (V)	For Fuse Link	Material	Case Qty.(Pcs)	Item Code
RT18-32X-1P	RT18-32	32	1P	500V	10x38	Resin	300	483201
	RT18-32	32	1 + N	500V	10x38	Resin	300	483204
	RT18-32	32	2P	500V	10x38	Resin	300	483202
	RT18-32	32	3P	500V	10x38	Resin	300	483203
	RT18-32	32	3 + N	500V	10x38	Resin	300	483205
RT18N-63-1P	RT18-32X	32	1P	500V	10x38	Resin	300	483211
	RT18-32X	32	1 + N	500V	10x38	Resin	300	483214
	RT18-32X	32	2P	500V	10x38	Resin	300	483212
	RT18-32X	32	3P	500V	10x38	Resin	300	483213
	RT18-32X	32	3 + N	500V	10x38	Resin	300	483215
Note: X meaning with indicator								
RT18N-63X	RT18N-63	63	1P	690V	14x51	Resin	108	586301
	RT18N-63	63	1 + N	690V	14x51	Resin	108	586304
	RT18N-63	63	2P	690V	14x51	Resin	108	586302
	RT18N-63	63	3P	690V	14x51	Resin	108	586303
	RT18N-63	63	3 + N	690V	14x51	Resin	108	586305
RT18N-63X	RT18N-63X	63	1P	690V	14x51	Resin	108	586311
	RT18N-63X	63	1 + N	690V	14x51	Resin	108	586314
	RT18N-63X	63	2P	690V	14x51	Resin	108	586312
	RT18N-63X	63	3P	690V	14x51	Resin	108	586313
	RT18N-63X	63	3 + N	690V	14x51	Resin	108	586315
Note: X meaning with indicator								
● DIMENSION								
								

Ref.	Model	Rated Current (A)	No.Of Poles	Rated Voltage(V)	For Fuse Link	Case Qty.(Pcs)	Item Code
SN-32 1P	SN-32	32	1P	500V	D1	200	243201
	SN-32	32	1+N	500V	D1	200	243204
	SN-32	32	2P	500V	D1	200	243202
	SN-32	32	3P	500V	D1	200	243203
	SN-32	32	3+N	500V	D1	200	243205



SN-63 2P

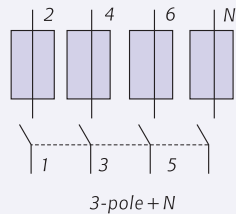
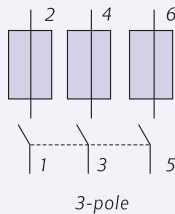
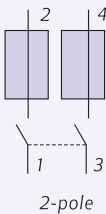
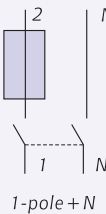
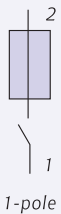
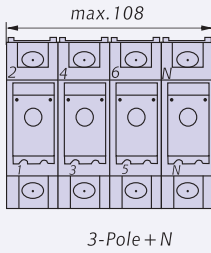
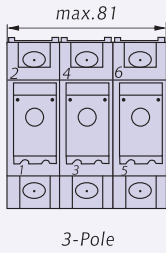
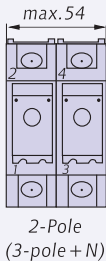
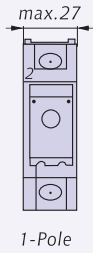
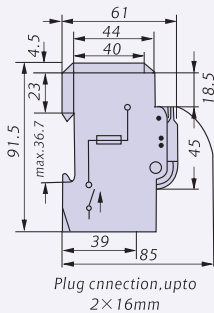


SN-63 3P



SN-63	63	1P	690V	D2	180	246301
SN-63	63	1+N	690V	D2	180	246304
SN-63	63	2P	690V	D2	180	246302
SN-63	63	3P	690V	D2	180	246303
SN-63	63	3+N	690V	D2	180	246305

● DIMENSION



● SELECTION OF CUTOUT FUSE

FS cut out fuse are made of high grade phenolic moulding power having high mechanical and dielectric strength. The body possessor has non-hygroscopic and non-tracking qualities. Terminal contracts are of tinned brass with phosphor bronze back up compression spring capable of providing flawless service even after years of use. It has features like all components are interlocked. Sealing provision to avoid unauthorised access. Common body from 15amps to 100amps. Terminal are suitable for aluminium/copper conductors upto 35sq.mm loop in and loop out cabling contacts available. FS insulated service cutouts conform to BS 1361.1986 standard SR H fuses conform to BS1361.1986.

Ref.	Model	Rated Current(A)	Rated Voltage(V)	For Fuse Link	Case Qty.(Pcs)	Item Code
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FS60/80



FS100



FS60/80	80	690	22x58	100	910680
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FS100	100	690	30x58	100	911000
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RG32



RG63



RG100

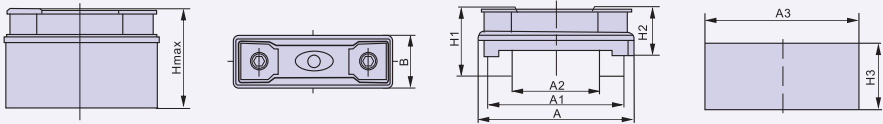


● SELECTION OF RG,FS FUSE HOLDER

RG Series Fuse Holders are formed with the fuse supporter (fuse base) and the fuse carrier(handle). They are designed for working at a rated voltage up to 660VAC, 50/60Hz, the rated thermal current is up to 100A. The products comply with IEC269 standard. They are widely used for protection against overload and short circuit in power distribution systems, and can also be used for power main disconnecting.

Model	Dimention(mm)									Item Code
	A	A1	A2	A3	B	H	H1	H2	H2	
RG32	68	57	38	68	26	49	35	19	33	187032
RG63	105.5	92	60	104.5	35	67	46	32	43.7	187063
RG100	129	114	72	129	50	94	75	405	62	187100

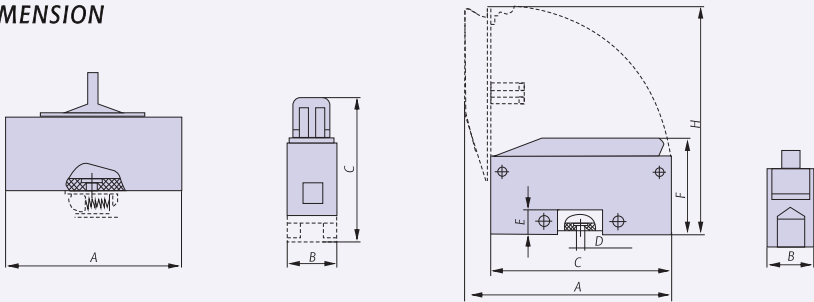
● DIMENSION



Ref.	Model	Rated Current (A)	Rated Voltage(V)	For Fuse Link	Case Qty.(Pcs)	Item Code
RT14-20	RT14-20	20	500	10x38	300	114020
	RT14-32	32	500	14x51	200	114032
	RT14-63	63	500	22x58	200	114063



• DIMENSION

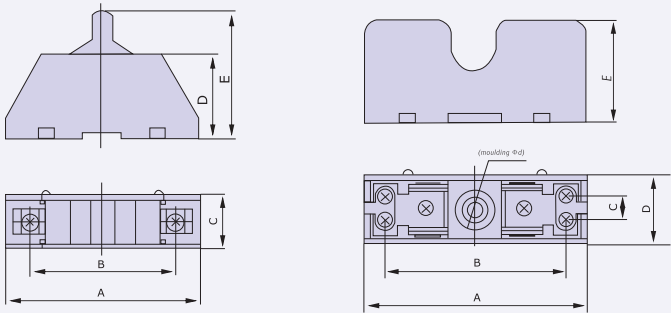


Model	Dimensions(mm)						
	A	B	C	D	E	F	H
RT14-20	69	20	47	-	-	-	-
RT14-32	185	27.5	105	27	3.5	57	145
RT14-63	195	34	125	26	3.5	65	160

Ref.	Model	Rated Voltage(V)	For Fuse Link	Rated Current (A)	Case Qty.(Pcs)	Item Code
RT19-16/25	RT19-16	500	8.5x31.5	16	300	119016
	RT19-25	500	10x38	25	200	119025
	RT19-40	500	14x51	40	200	119040
	RT19-125	500	22x58	125	100	119100

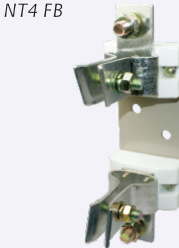


• DIMENSION



Model	Dimensions(mm)				
	A	B	C	D	E
RT19-16	71	56	18	32	47
RT19-25	80	62	22.5	35	56
RT19-40	90	74	10	28	37
RT19-125	108	92	18	35	50

Ref.	Model	Rated Current (A)	Material	For Fuse Link	Rated Voltage (V)	Case Qty.(Pcs)	Item Code
NT00 FB	NT00 FB	160	Resin	NT00C NH00	690	120	616218
	NT00 FB	160	Cramic	NT00C NH00	690	120	616203



NT0 FB	160	Resin	NT0	690	54	016218
NT0 FB	160	Cramic	NT0	690	54	016203

NT1 FB	250	Resin	NT1 NH1	690	30	116218
NT1 FB	250	Cramic	NT1 NH1	690	30	116203

NT2 FB	400	Resin	NT2 NH2	690	24	216208
NT2 FB	400	Cramic	NT2 NH2	690	24	216203

NT3 FB	630	Resin	NT3 NH3	690	21	316218
NT3 FB	630	Cramic	NT3 NH3	690	21	316203

NT4 FB	1250	Resin	NT2 NH2	690	8	416218
NT4 FB	1250	Cramic	NT2 NH2	690	8	416203

Ref.	Model	Rated Current(A)	Rated Voltage(V)	Breaking Capacity(KA)	Case Qty.(Pcs)	Item Code
NH00C	NH00C-4A	4	500	120	200	510004
	NH00C-6A	6	500	120	200	510006
	NH00C-10A	10	500	120	200	510010
	NH00C-16A	16	500	120	200	510016
	NH00C-20A	20	500	120	200	510020
	NH00C-25A	25	500	120	200	510025
	NH00C-32A	32	500	120	200	510032
	NH00C-36A	36	500	120	200	510036
	NH00C-40A	40	500	120	200	510040
	NH00C-50A	50	500	120	200	510050
	NH00C-63A	63	500	120	200	510063
	NH00C-80A	80	500	120	200	510080
	NH00C-100A	100	500	120	200	510100
NH00	NH00-6A	6	500/660	120	108	610006
	NH00-10A	10	500/660	120	108	610010
	NH00-16A	16	500/660	120	108	610016
	NH00-20A	20	500/660	120	108	610020
	NH00-25A	25	500/660	120	108	610026
	NH00-32A	32	500/660	120	108	610032
	NH00-36A	36	500/660	120	108	610036
	NH00-40A	40	500/660	120	108	610040
	NH00-50A	50	500/660	120	108	610050
	NH00-63A	63	500/660	120	108	610063
	NH00-80A	80	500/660	120	108	610080
	NH00-100A	100	500/660	120	108	610100
	NH00-125A	125	500/660	120	108	610125
	NH00-160A	160	500/660	120	108	610186



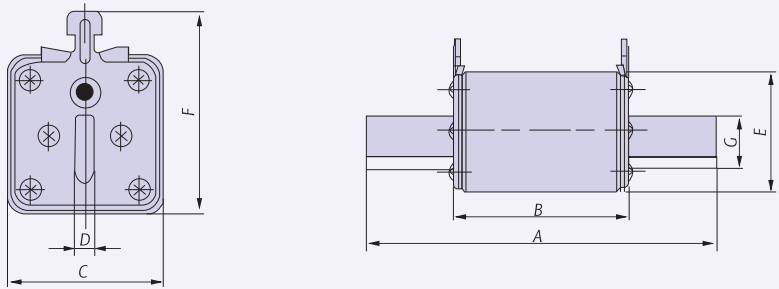
Ref.	Model	Rated Current (A)	Rated Voltage (V)	Breaking Capacity(KA)	Case Qty.(Pcs)	Item Code
NH1	NH1-80A	80	500/660	120	48	810080
	NH1-100A	100	500/660	120	48	810100
	NH1-125A	125	500/660	120	48	810125
	NH1-160A	160	500/660	120	48	810160
	NH1-200A	200	500/660	120	48	810200
	NH1-225A	225	500/660	120	48	810225
	NH1-250A	250	500/660	120	48	810250
NH2	NH2-125A	125	500/660	120	36	220126
	NH2-160A	160	500/660	120	36	220160
	NH2-200A	200	500/660	120	36	220202
	NH2-224A	224	500/660	120	36	220224
	NH2-250A	250	500/660	120	36	220250
	NH2-300A	300	500/660	120	36	220300
	NH2-315A	315	500/660	120	36	220315
	NH2-355A	355	500/660	120	36	220355
	NH2-400A	400	500/660	120	36	220400
NH3	NH3-315A	315	500/660	120	24	320315
	NH3-355A	355	500/660	120	24	320355
	NH3-400A	400	500/660	120	24	320400
	NH3-425A	425	500/660	120	24	320524
	NH3-500A	500	500/660	120	24	320500
	NH3-630A	630	500/660	120	24	320630



Ref.	Model	For Fuse Link	Rated Voltage(V)	Case Qty.(Pcs)	Item Code
NTB3		NH00C~NH3	1000	50	163000
NTB4		NT00C~NT4	1000	50	164000



● DIMENSION



Model	Dimention(mm)						
	A	B	C	D	E	F	G
NH00C	78	54	21	6	40	53	15
NH00	78	54	30	6	48	61	15
NH0	125	67	30	6	48	61	15
NH1	135	72	47	6	47	61	20
NH2	150	74	58	6	58	71	25
NH3	150	74	71	6	71	83	32

Ref.	Model	Rated Current (A)	Material	For Fuse Link	Rated Voltage (V)	Case Qty.(Pcs)	Item Code
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NH00 FB



NH00 FB	160	Resin	NT0	690	120	616218
NH00 FB	160	Cramic	NT0	690	120	616204

NH0 FB



NH0 FB	250	Resin	NT1 NH1	690	54	026218
NH0 FB	250	Cramic	NT1 NH1	690	54	016203

NH1 FB



NH1 FB	400	Resin	NT2 NH2	690	30	118218
NH1 FB	400	Cramic	NT2 NH2	690	30	118203

Ref.	Model	Rated Current (A)	Material	For Fuse Link	Rated Voltage (V)	Case Qty.(Pcs)	Item Code
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NH2 FB



NH2 FB	400	Resin	NT2 NH2	690	24	226208
NH2 FB	400	Cramic	NT2 NH2	690	24	226208

NH3 FB



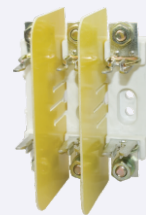
NH3 FB	400	Resin	NT3 NH3	690	21	326203
NH3 FB	400	Cramic	NT3 NH3	690	21	326218

NH00-3P FB



NH00-3P FB	400	Resin	NT3 NH3	690	36	636219
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NH00-3P-1 FB



NH00-3P-1 FB	400	Resin	NT3 NH3	690	36	646218
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● SELECTION OF A/C DISCONNECT

The purpose of A/C disconnect is offer a visiable sulation to prevent un-authorized person from hurting by A/C (air conditioning) system circuit when house owner left their house for a certain period, they will lock the A/C disconnect when leaving. and they are installed out-door. NEMA 3R rain-proof.

Ref.	Model	Rated Current(A)	Rated Voltage(V)	Phase	No. of Fuses	No. of Wires	Case Qty.(Pcs)	Approval	Item code
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SDB-60NF



SDB-60NF	60	240	1P	None	2Wires	12	cULus	196016
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SDB-60F



SDB-60F	60	240	1P	2	2Wires	12	cULus	196006
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SDB-30F



SDB-30F	30	240	1P	2	2Wires	12	cULus	193006
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TDB-60NF



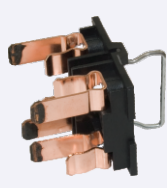
TDB-60NF	60	240	1P	None	2Wires	12	cULus	206016
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SDB-60NF
Model fuse holder



SDB-60F
Model fuse holder



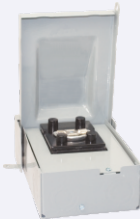
SDB-30F
Model fuse holder



TDB-60NF
Model fuse holder



SDB-60NF



SDB-60F



SDB-30F



TDB-60NF