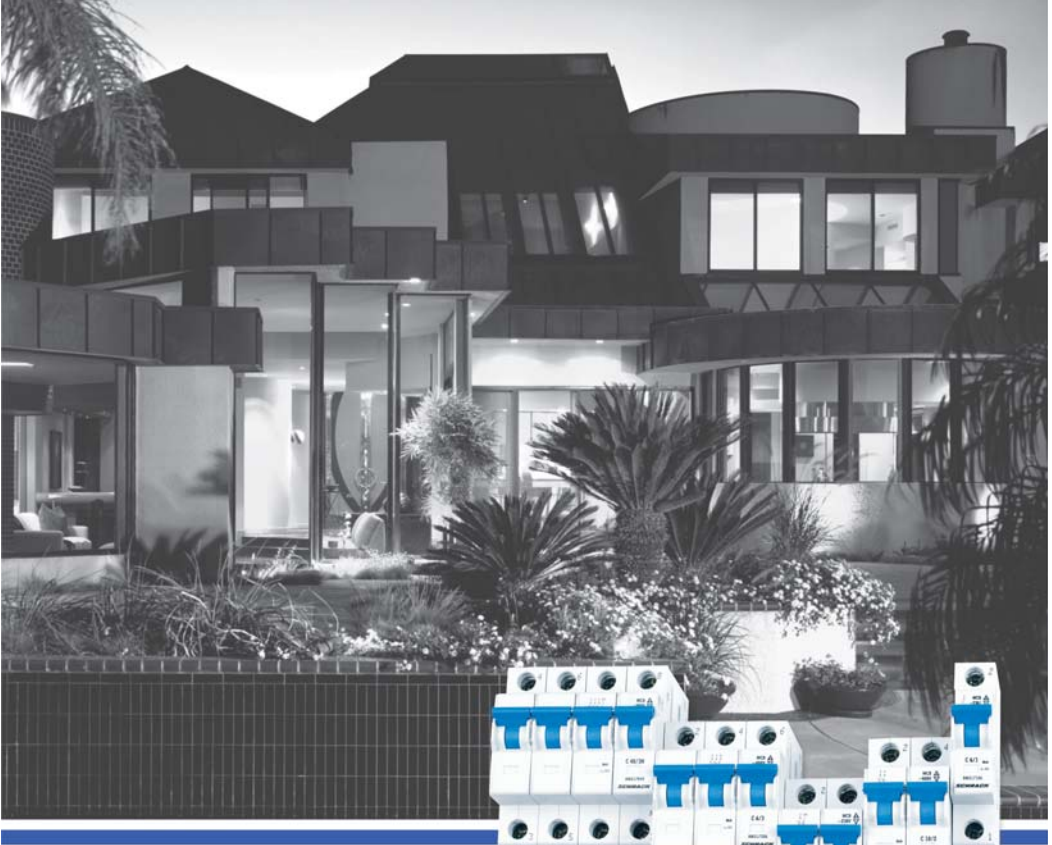


The Schrack Range

Electrical Distribution



- Miniature circuit breakers.
- Earth leakage protection units.
- Switch disconnectors.
- Accessories.
- Moulded case circuit breakers.
- Switch disconnector accessories.
- Motor protection accessories.

SCHRACK
TECHNIK

Miniature Circuit Breakers - 6kA

SANS 556-1 / IEC 60947-2

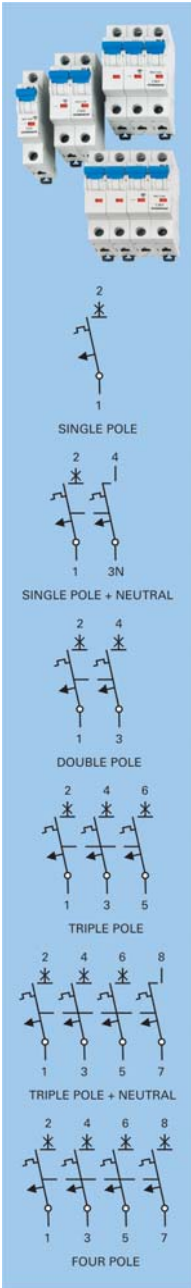
For the control and protection of low voltage installations against overload and short circuits

Technical Data

- Fault level: 6kA at 230/400V, 50Hz
- Tripping characteristic: C Curve – 5 to 10 x I_n
- Rated at 25°C to -50°C
- Isolation function

Terminals

- Double entry points, separate busbar entry, open mouthed terminal and lift clamps
- Cross section: 1 mm² up to 25 mm²



Product Code	Poles	Rating (A)	Box Quantity
Single Pole 6kA C curve			
BM417102	1	2	12
BM417104	1	4	12
BM417106	1	6	12
BM417110	1	10	12
BM417116	1	16	12
BM417120	1	20	12
BM417125	1	25	12
BM417132	1	32	12
BM417140	1	40	12
BM417150	1	50	12
BM417163	1	63	12
BR971800	1	80	12
BR971910	1	100	12
BR971912	1	125	12
Double Pole 6kA C curve			
BM417202	2	2	6
BM417204	2	4	6
BM417206	2	6	6
BM417210	2	10	6
BM417216	2	16	6
BM417220	2	20	6
BM417225	2	25	6
BM417232	2	32	6
BM417240	2	40	6
BM417250	2	50	6
BM417263	2	63	6
BR972800	2	80	6
BR972910	2	100	6
BR972912	2	125	6
Triple Pole 6kA C curve			
BM417302	3	6	4
BM417304	3	4	4
BM417306	3	6	4
BM417310	3	10	4
BM417316	3	16	4
BM417320	3	20	4
BM417325	3	25	4
BM417332	3	32	4
BM417340	3	40	4
BM417350	3	50	4
BM417363	3	63	4
BR973800	3	80	4
BR973910	3	100	4
BR973912	3	125	4

Miniature Circuit Breakers - 6kA continued ...

SANS 556-1 / IEC 60947-2

For the control and protection of low voltage installations against overload and short circuits

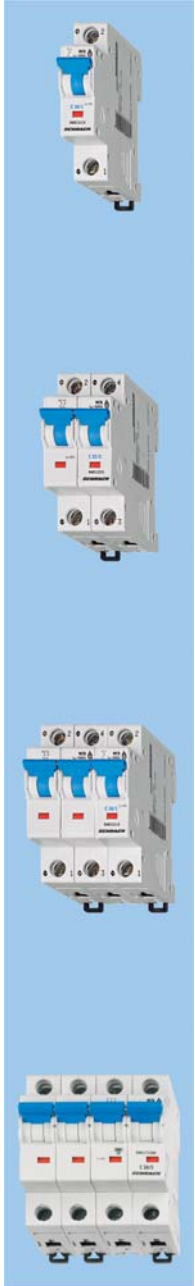
Technical Data

- Fault level: 6kA at 230/400V, 50Hz
- Tripping characteristic: C Curve – 5 to 10 x I_n
- Rated at 25°C to -50°C
- Isolation function

Terminals

- Double entry points, separate busbar entry, open mouthed terminal and lift clamps
- Cross section: 1 mm² up to 25 mm²

Product Code	Poles	Rating (A)	Box Quantity
Single Pole & Neutral 6kA C curve			
BM417602	1 + N	2	6
BM417604	1 + N	4	6
BM417606	1 + N	6	6
BM417610	1 + N	10	6
BM417616	1 + N	16	6
BM417620	1 + N	20	6
BM417625	1 + N	25	6
BM417632	1 + N	32	6
BM417640	1 + N	40	6
BM417650	1 + N	50	6
BM417663	1 + N	63	6
Triple Pole & Neutral 6kA C curve			
BM417802	3 + N	2	3
BM417804	3 + N	4	3
BM417806	3 + N	6	3
BM417810	3 + N	10	3
BM417816	3 + N	16	3
BM417820	3 + N	20	3
BM417825	3 + N	25	3
BM417832	3 + N	32	3
BM417840	3 + N	40	3
BM417850	3 + N	50	3
BM417863	3 + N	63	3
BR974800	4	80	3
BR974910	4	100	3
BR974912	4	125	3
Single Pole 10kA D curve			
BM019106	1	6	6
BM019110	1	10	6
BM019116	1	16	6
BM019120	1	20	6
BM019125	1	25	6
BM019132	1	32	6
BM019140	1	40	6
BM019150	1	50	6
Double Pole 10kA D curve			
BM019206	2	10	3
BM019210	2	10	3
BM019216	2	10	3
BM019220	2	10	3
BM019232	2	10	3
BM019240	2	10	3
BM019250	2	10	3
Triple Pole 10kA D curve			
BM019306	3	10	3
BM019310	3	10	3



Miniature Circuit Breakers - 10kA

SANS 556-1 / IEC/EN 60947-2 & IEC/EN 60898

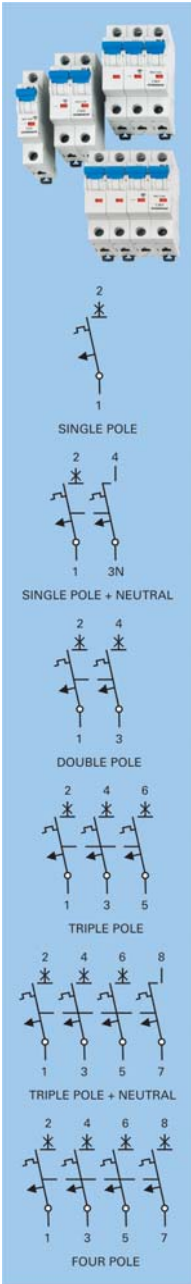
For the control of installations and the protection against overload and short circuits

Technical Data

- Fault level: 10kA at 230/400V, 50/60Hz
- Tripping characteristic: C Curve – 5 to 10 x I_n
- Rated at 40°C - 70°C
- Isolation function
- Degree of protection IP 20

Terminals

- Double entry points, separate busbar entry, open mouthed terminal and lift clamps
- Cross section: 1 mm² up to 25 mm² (except 1P+N)



Product Code	Poles	Rating (A)	Box Quantity
Single Pole 10kA C curve			
BM617102	1	2	12
BM617104	1	4	12
BM617106	1	6	12
BM617110	1	10	12
BM617116	1	16	12
BM617120	1	20	12
BM617125	1	25	12
BM617132	1	32	12
BM617140	1	40	12
BM617150	1	50	12
BM617163	1	63	12
BR971800	1	80	12
BR971910	1	100	12
BR971912	1	125	12
Double Pole 10kA C curve			
BM617202	2	2	6
BM617204	2	4	6
BM617206	2	6	6
BM617210	2	10	6
BM617216	2	16	6
BM617220	2	20	6
BM617225	2	25	6
BM617232	2	32	6
BM617240	2	40	6
BM617250	2	50	6
BM617263	2	63	6
BR972800	2	80	6
BR972910	2	100	6
BR972912	2	125	6
Triple Pole 10kA C curve			
BM617302	3	6	4
BM617304	3	4	4
BM617306	3	6	4
BM617310	3	10	4
BM617316	3	16	4
BM617320	3	20	4
BM617325	3	25	4
BM617332	3	32	4
BM617340	3	40	4
BM617350	3	50	4
BM617363	3	63	4
BR973800	3	80	4
BR973910	3	100	4
BR973912	3	125	4

Miniature Circuit Breakers - 10kA continued ...

SANS 556-1 / IEC/EN 60947-2 & IEC/EN 60898

For the control of installations and the protection against overload and short circuits

Technical Data

- Fault level: 10kA at 230/400V, 50/60Hz
- Tripping characteristic: C Curve – 5 to 10 x I_n
- Rated at 40°C - 70°C
- Isolation function
- Degree of protection IP 20

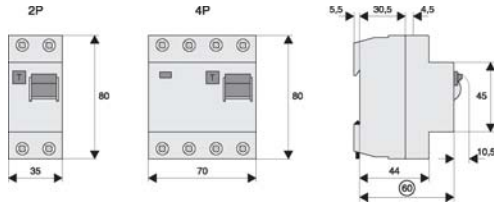
Terminals

- Double entry points, separate busbar entry, open mouthed terminal and lift clamps
- Cross section: 1 mm² up to 25 mm² (except 1P+N)

Product Code	Poles	Rating (A)	Box Quantity
Single Pole & Neutral 10kA C curve			
BM617602	1 + N	2	6
BM617604	1 + N	4	6
BM617606	1 + N	6	6
BM617610	1 + N	10	6
BM617616	1 + N	16	6
BM617620	1 + N	20	6
BM617625	1 + N	25	6
BM617632	1 + N	32	6
BM617640	1 + N	40	6
BM617650	1 + N	50	6
BM617663	1 + N	63	6
Triple Pole & Neutral 10kA C curve			
BM617802	3 + N	2	3
BM617804	3 + N	4	3
BM617806	3 + N	6	3
BM617810	3 + N	10	3
BM617816	3 + N	16	3
BM617820	3 + N	20	3
BM617825	3 + N	25	3
BM617832	3 + N	32	3
BM617840	3 + N	40	3
BM617850	3 + N	50	3
BM617863	3 + N	63	3
BR974800	4	80	3
BR974910	4	100	3
BR974912	4	125	3

Earth Leakage Protection Units - 6kA

Product Code	Poles	Rating (A)	Sensitivity (mA)	Box Quantity
BC602203	1 + N	25	30	6
BC604203	1 + N	40	30	6
BC606203	1 + N	63	30	6
BC606103	3 + N	63	30	3





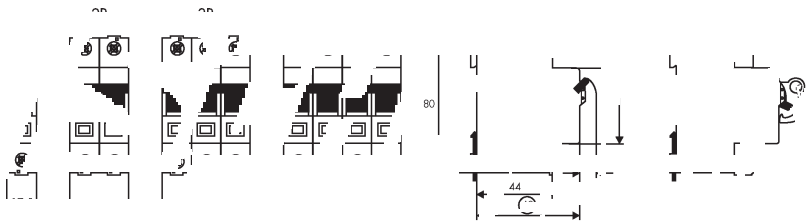
Switch Disconnectors - 6kA

SANS 60947-3 / IEC 60947-3

For the control of installations

- Load-break switch
- Can be used as a main switch with isolating function
- Rated voltage: 240/415 V, 50/60 Hz
- High rated-isolation voltage: $U_i = 690\text{ V}$
- Conductor cross section: 50 mm^2

Product Code	Poles	Rating (A)	Box Quantity
Single Pole 6kA			
BZ900241	1	40	12
BZ900261	1	63	12
BZ900281	1	80	12
BZ900201	1	100	12
BZ900221	1	125	12
Double Pole 6kA			
BZ900242	2	40	6
BZ900262	2	63	6
BZ900282	2	80	6
BZ900202	2	100	6
BZ900222	2	125	6
Triple Pole 6kA			
BZ900243	3	40	4
BZ900263	3	63	4
BZ900283	3	80	4
BZ900203	3	100	4
BZ900223	3	125	4
Triple Pole & Neutral Pole 6kA			
BZ900244	4	40	3
BZ900264	4	63	3
BZ900284	4	80	3
BZ900204	4	100	3
BZ900224	4	125	3



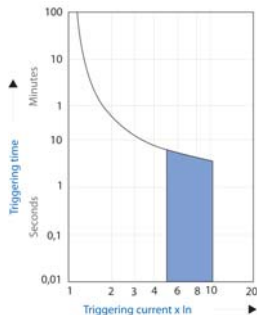
Accessories

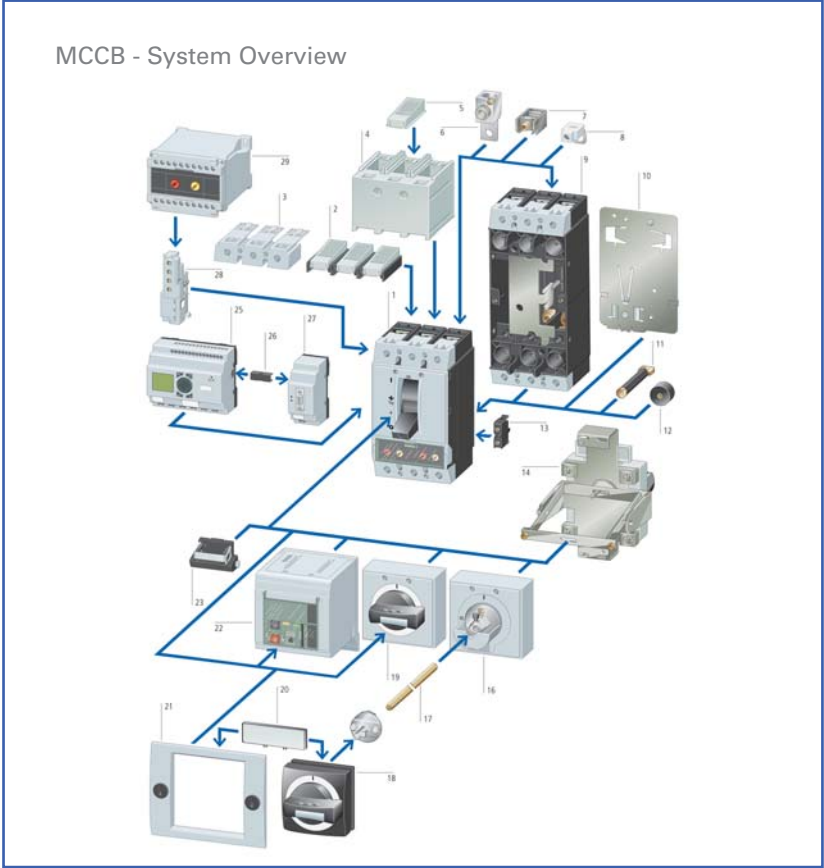
Product Code	Description	Width
BZ326440	Digital timer, 1 module, 1 C/O	17,5
BZ327521	Digital timer, 2 module, 1 C/O	35
BZ327522	Digital timer, 2 module, 2 C/O	35
BZ326448	Mechanical timer, 1 module, 1 N/O, no reserve	17,5
BZ326450	Mechanical timer, 1 module, 1 N/O, 150 hour reserve	17,5
BZ326424	Mechanical timer, surface mount, 1 C/O	72
LQ617230	Impulse relay, 230V, 1 C/O, 16A	17,5
LQ618230	Impulse relay, 230V, 2 C/O, 16A	35
BZ972230	Contactor with manual control, 20A, 2 N/O, 230V AC	17,5
BZ926339	Buzzer 230V	17,5
BZ926338	Bell 230V	17,5
BZ107010	Switch, 16A, 1 N/O	17,5
BZ107020	Switch, 16A, 2 N/O	17,5
BZ107030	Switch, 16A, 1 N/O & 1N/C	17,5
BZ136010	Switch, 32A, 1 N/O	17,5
BZ106380	Switch, 16A, 1 C/O, central position	17,5
BZ106390	Switch, 16A, 2 C/O, central position	17,5
BS900141-P	Busbar open 16mm ² , 1010mm length	-
BK004100	Blank strip, ribbed - 12 modules	-
LSR10	Load shedding relay, 10A threshold, 16A switching capacity	18
ISS10077	Surge Arrester Module 1pole 20KA	-
ISS10071	Surge Arrester Base 1 pole	-
ISS90003	Insulation Body For MODULE CONNECT 3 POLE	-
ISS90004	Insulation Body ForMODULE CONNECT 4 POLE	-
ISS900K3	End Cap for Insulation Body 3 POLE	-
ISS900K4	End Cap for Insulation Body 4 POLE	-
ISS90916	Copper Bar 80A 1Pole for Module Connect	-
ISS909G1	Module Connect L1+N	-
ISS909G2	Module Connect L2+L3	-
BS990130	Copper Bar 1Phase - 80A Insulated	-
MR200	Multirail 2 Meters	-

Effect of Ambient Temperature on Thermal Tripping Behaviour

Ambient Temperature (°C)													
In (A)	-25	-20	-10	0	10	20	30	35	40	45	50	55	60
6	7.3	7.2	7	6.7	6.5	6.3	6	5.9	5.8	5.7	5.6	5.4	5.3
10	12	12	12	11	11	10	10	9.9	9.7	9.5	9.3	9	8.9
16	20	19	19	18	17	17	16	16	15	15	15	14	14
20	24	24	23	22	22	21	20	20	19	19	19	18	18
25	31	30	29	28	27	26	25	25	24	24	23	23	22
32	39	38	37	36	35	33	32	32	31	30	30	29	28
40	49	48	47	45	43	42	40	39	39	38	37	36	35
50	61	60	58	56	54	52	50	49	48	47	46	45	44
63	77	76	73	71	68	66	63	62	61	60	58	57	56

Triggering Characteristic C Curve





- | | |
|--|---|
| 1. MC circuit breaker, MC.-PN, MC.-N Switch disconnect | Trip-indicating auxiliary contact |
| 2. Terminal cover | 16. Rotary operator with shaft support |
| 3. Terminal cover | 17. Extension shaft |
| 4. IPX2 Finger protection for cover | 18. Door coupling rotary handle |
| 5. IPX2 Finger protection for cover | 19. Rotary handle with rotary operator |
| 6. Tunnel terminal for AI cable | 20. Type plate |
| 7. Box terminal | 21. Insulating surround |
| 8. Control circuit terminal | 22. Remote operator |
| 9. Plug-in and withdrawable unit | 23. Toggle-lever interlock device |
| 10. Clip plate | 25. Communication module (DMI) |
| 11. Reverse-side connection | 26. Data plug |
| 12. Spacer | 27. Profibus interface |
| 13. Standard auxiliary contact, | 28. Voltage release or early-make auxiliary contact |
| | 29. Time-delay unit for voltage release |

Technical Information

MC1 = Frame Size 1 MC2 = Frame Size 2 MC3 = Frame Size 3 MC4 = Frame Size 4

MCCB -Switch Disconnectors - FRAME SIZE 1

Product Code	Poles	Frame Size	Rating (A)	Rated shortcircuit making capacity Icm (A)	Rated short-time current (1s current Irms) (A)
2 switch positions: 1, 0; cannot be tripped remotely					
MC163034	3	1	63	2.8	2
MC110034	3	1	100	2.8	2
MC112034	3	1	125	2.8	2
3 switch positions: 1, +, 0; can be tripped remotely with U/A voltage release					
MC163035	3	1	63	2.8	2
MC110035	3	1	100	2.8	2
MC113035	3	1	125	2.8	2
MC116035	3	1	160	2.8	2

MCCB -Switch Disconnectors - FRAME SIZE 2

Product Code	Poles	Frame Size	Rating (A)	Rated shortcircuit making capacity Icm (A)	Rated short-time current (1s current Irms) (A)
2 switch positions: 1, 0; cannot be tripped remotely					
MC216034	3	2	160	5.5	3.5
MC220034	3	2	200	5.5	3.5
MC225034	3	2	250	5.5	3.5
3 switch positions: 1, +, 0; can be tripped remotely with U/A voltage release					
MC216035	3	2	160	5.5	3.5
MC220035	3	2	200	5.5	3.5
MC225035	3	2	250	5.5	3.5

MCCB -Switch Disconnectors - FRAME SIZE 3

Product Code	Poles	Frame Size	Rating (A)	Rated shortcircuit making capacity Icm (A)	Rated short-time current (1s current Irms) (A)
2 switch positions: 1, 0; cannot be tripped remotely					
MC340034	3	3	400	25	12.5
MC363034	3	3	630	25	12.5
3 switch positions: 1, +, 0; can be tripped remotely with U/A voltage release					
MC340035	3	3	400	25	12.5
MC363035	3	3	630	25	12.5

MCCB -Switch Disconnectors - FRAME SIZE 4

Product Code	Poles	Frame Size	Rating (A)	Rated shortcircuit making capacity Icm (A)	Rated short-time current (1s current Irms) (A)
3 switch positions: 1, +, 0; can be tripped remotely with U/A voltage release					
MC480035	3	4	800	53	25
MC410035	3	4	1000	53	25
MC412035	3	4	1250	53	25
MC416035	3	4	1600	53	25





DIMENSIONS MC1
FRAME SIZE 1:
BASIC UNITS



DIMENSIONS MC2
FRAME SIZE 2:
BASIC UNITS

System and Cable Protection Accessories - Frame Size 1

IEC/EN 60947-2

- Adjustable overload release Ir: 0.8 - 1 x I_n (ex-factory: 0.8 x I_n)
- Adjustable short circuit release Ii: 6 - 10 x I_n (ex-factory: 6 x I_n); MC... -A40 8 - 10 x I_n (ex-factory: 8 x I_n)

Lift terminals standard, Screws terminals as accessories

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC120131	3	1	20	16-20	160-200	25
MC125131	3	1	25	20-25	200-250	25
MC132131	3	1	32	25-32	256-320	25
MC140131	3	1	40	32-40	320-400	25
MC150131	3	1	50	40-50	300-500	25
MC163131	3	1	63	50-63	380-630	25
MC180131	3	1	80	63-80	480-800	25
MC110131	3	1	100	80-100	600-1000	25
MC112131	3	1	125	100-125	750-1250	25
MC116131	3	1	160	125-160	960-1600	25
MC120231	3	1	20	16-20	160-200	50
MC125231	3	1	25	20-25	200-250	50
MC132231	3	1	32	25-32	256-320	50
MC140231	3	1	40	32-40	320-400	50
MC150231	3	1	50	40-50	300-500	50
MC163231	3	1	63	50-63	380-630	50
MC180231	3	1	80	63-80	480-800	50
MC110231	3	1	100	80-100	600-1000	50
MC112231	3	1	125	100-125	750-1250	50
MC116231	3	1	160	125-160	960-1600	50

System and Cable Protection Accessories - Frame Size 2

IEC/EN 60947-2

- Adjustable overload release Ir: 0.8 - 1 x I_n (ex-factory: 0.8 x I_n)
- Adjustable short circuit release Ii: 6 - 10 x I_n (ex-factory: 6 x I_n); MC... -A40 8 - 10 x I_n (ex-factory: 8 x I_n)

Screw terminals standard, Lift terminal as accessories

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC212131	3	2	125	100-125	750-1250	25
MC216131	3	2	160	125-160	960-1600	25
MC220131	3	2	200	160-200	1200-2000	25
MC225131	3	2	250	200-250	1500-2500	25
MC212231	3	2	125	100-125	750-1250	50
MC216231	3	2	160	125-160	960-1600	50
MC220231	3	2	200	160-200	1200-2000	50
MC225231	3	2	250	200-250	1500-2500	50
MC240331	3	2	40	32-40	320-400	100
MC250331	3	2	50	40-50	300-500	100
MC263331	3	2	63	50-63	380-630	100
MC280331	3	2	80	63-80	480-800	100
MC210331	3	2	100	80-100	600-1000	100
MC212331	3	2	125	100-125	750-1250	100
MC216331	3	2	160	125-160	960-1600	100
MC220331	3	2	200	160-200	1200-2000	100
MC225331	3	2	250	200-250	1500-2500	100

System and Cable Protection Accessories - Frame Size 2

IEC 60947-2

- RMS value measurement and "thermal memory"
- Adjustable overload release Ir: 0.5 - 1 x I_n (ex-factory: 0.8 x I_n)
- Adjustable time delay setting to overcome current peaks tr: 2 - 20 s with 6 x Ir as well as infinity (without overload release) (ex-factory: 10s)
- Adjustable delayed short circuit release I_{sd}: 2 - 10 x Ir (ex-factory: 6 x Ir); MC3... -4-VE630: 1,5 - 7 x Ir (ex-factory: 6 x Ir)
- Adjustable delay time t_{sd}: Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms (ex-factory: 0)
- Adjustable non-delayed short-circuit release I_i: 2 - 12 x I_n (ex-factory: 12 x I_n)
MC2... VE250/400: 2 - 11 x I_n (ex-factory: 6 x I_n) Switchable i²t- constant function (ex-factory: OFF) for MC3/MC4

Lift terminals standard, Screws terminals as accessories

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC210233	3	2	100	50-100	200-1200	50
MC216233	3	2	160	80-160	320-1920	50
MC225233	3	2	250	125-250	500-3000	50
MC210333	3	2	100	50-100	200-1200	100
MC216333	3	2	160	80-160	320-1920	100
MC225333	3	2	250	125-250	500-3000	100

System and Cable Protection Accessories - Frame Size 3 & 4

IEC/EN 60947-2

- RMS value measurement and "thermal memory"
- Adjustable overload release Ir: 0.5 - 1 x I_n (ex-factory: 0.8 x I_n)
- Adjustable short circuit release I_i: 2 - 12 x I_n (ex-factory: 6 x I_n); MC... -A40 8 - 10 x I_n (ex-factory: 8 x I_n)
- at MC3... -AE250/400: 2 - 11 x I_n (ex-factory: 6 x I_n)

Screw terminals standard, Lift terminal as accessories for MC2/MC3

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
Frame Size 3						
MC325232	3	3	250	125-250	500-2750	50
MC340232	3	3	400	200-400	800-4400	50
MC363232	3	3	630	315-630	1260-5040	50
MC325332	3	3	250	125-250	500-2750	100
MC340332	3	3	400	200-400	800-4400	100
MC363332	3	3	630	315-630	1260-5040	100
Frame Size 4						
MC463232	3	4	630	315-630	1260-7560	50
MC480232	3	4	800	400-800	1600-9600	50
MC410232	3	4	1000	500-1000	2000-12000	50
MC412232	3	4	1250	630-1250	2500-15000	50
MC416232	3	4	1600	800-1600	3200-19200	50
MC463332	3	4	630	315-630	1260-7560	100
MC480332	3	4	800	400-800	1600-9600	100
MC410332	3	4	1000	500-1000	2000-12000	100
MC412332	3	4	1250	630-1250	2500-15000	100
MC416332	3	4	1600	800-1600	3200-19200	100



DIMENSIONS MC
FRAME SIZE 2:
BASIC UNITS



DIMENSIONS MC
FRAME SIZE 3:
BASIC UNITS



DIMENSIONS MC1
FRAME SIZE 1:
BASIC UNITS



DIMENSIONS MC2
FRAME SIZE 2:
BASIC UNITS

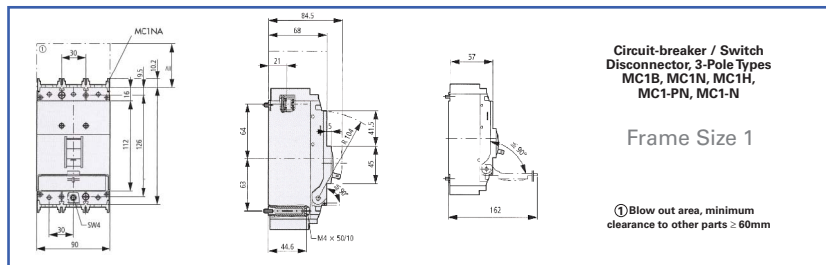
Motor Protection Accessories - Frame Size 1

IEC/EN 60947-4 and IEC/EN 60947-2

- Adjustable overload release Ir: 0.8 - 1 x In (ex-factory: 0.8 x In)
MC1... : with single phasing sensitivity class 10
- Adjustable short circuit release Ii: 8 - 14 x In (ex-factory: 12 x In)
MC1... -M100, MC2... -M200: 8 - 12,25 x In (ex-factory: 12 x In)

Lift terminals standard, Screw terminal as accessories

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC140136	3	1	40	32-40	320-560	25
MC150136	3	1	50	40-50	400-700	25
MC163136	3	1	63	50-63	504-882	25
MC180136	3	1	80	63-80	640-1120	25
MC110136	3	1	100	80-100	800-1250	25
MC140236	3	1	40	32-40	320-560	50
MC150236	3	1	50	40-50	400-700	50
MC163236	3	1	63	50-63	504-882	50
MC180236	3	1	80	63-80	640-1120	50
MC110236	3	1	100	80-100	800-1250	50



Motor Protection Accessories - Frame Size 2

IEC/EN 60947-4 and IEC/EN 60947-2

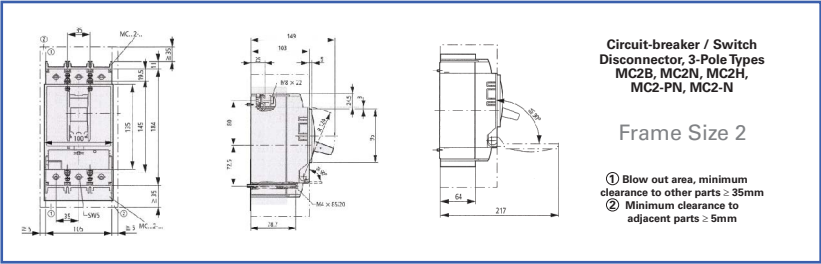
- Adjustable overload release Ir: 0.8 - 1 x In (ex-factory: 0.8 x In)
MC1... : with single phasing sensitivity class 10
- Adjustable short circuit release Ii: 8 - 14 x In (ex-factory: 12 x In)
MC1... -M100, MC2... -M200: 8 - 12,25 x In (ex-factory: 12 x In)

Screw terminals standard, Lift terminal as accessories

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC212136	3	2	125	100-125	1000-1750	25
MC216136	3	2	160	125-160	1280-2240	25
MC220136	3	2	200	160-200	1600-2500	25
MC212236	3	2	125	100-125	1000-1750	50
MC216236	3	2	160	125-160	1280-2240	50
MC220236	3	2	200	160-200	1600-2500	50

Motor Protection Accessories - Frame Size 2 continued ...

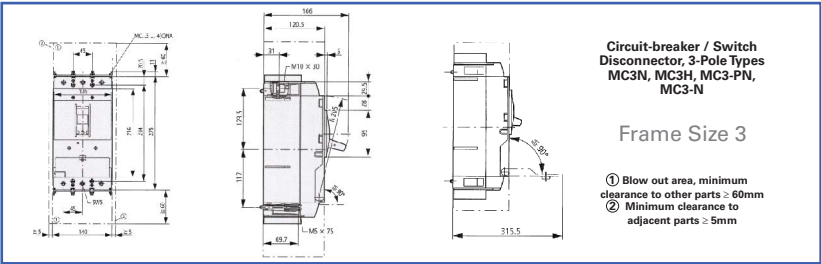
Screw terminals standard, Lift terminal as accessories						
Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC290237	3	2	90	45-90	180-1260	50
MC214237	3	2	140	70-140	280-1960	50
MC222237	3	2	220	110-220	440-3080	50
MC290337	3	2	90	45-90	180-1260	100
MC214337	3	2	140	70-140	280-1960	100
MC222337	3	2	220	110-220	440-3080	100



Motor Protection Accessories - Frame Size 3

IEC 60947-2 and IEC/EN 60947-4						
• RMS value measurement and "thermal memory"						
• Adjustable overload release I_r :				0.5 - 1 x I_n (ex-factory: 0.8 x I_n)		
• Adjustable time delay setting to overcome current peaks t_r :				2 - 20 s with 6 x I_r as well as infinity (without overload release) (ex-factory: 10s)		
• Phase-failure sensitivity						
Adjustable short-circuit release I_i :				2 - 14 x I_r (ex-factory: 12 x I_r) (ex-factory: OFF) for MC3/MC4		

Lift terminals standard, Screws terminals as accessories						Frame Size 2
Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC322237	3	3	220	110-220	440-3080	50
MC335237	3	3	350	175-350	700-4900	50
MC322337	3	3	220	110-220	440-3080	100
MC335337	3	3	350	175-350	700-4900	100



DIMENSIONS MC
FRAME SIZE 3:
BASIC UNITS



DIMENSIONS MC
FRAME SIZE 4:
BASIC UNITS

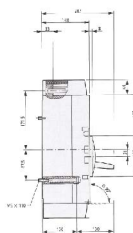
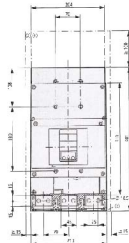
Motor Protection Accessories - Frame Size 4

IEC 60947-2 and IEC/EN 60947-4

- RMS value measurement and "thermal memory"
- Adjustable overload release Ir: 0.5 - 1 x I_n (ex-factory: 0.8 x I_n)
- Adjustable time delay setting to overcome current peaks tr: 2 - 20 s with 6 x I_r as well as infinity (without overload release) (ex-factory: 10s)
- Phase-failure sensitivity
- Adjustable short-circuit release Ii: 2 - 14 x I_r (ex-factory: 12 x I_r) (ex-factory: OFF) for MC3/MC4

Lift terminals standard, Screws terminals as accessories

Product Code	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC455237	3	4	550	275-550	1100-7700	50
MC487237	3	4	875	438-875	1750-12250	50
MC414237	3	4	1400	700-1400	2800-19600	50
MC455337	3	4	550	275-550	1100-7700	100
MC487337	3	4	875	438-875	1750-12250	100
MC414337	3	4	1400	700-1400	2800-19600	100



Circuit-breaker / Switch
Disconnecter, 3-Pole Types
MC4N, MC4H, MC4-N

Frame Size 4

- ① Blow out area, minimum clearance to other parts ≥ 100mm to 690 V, ≥ 200mm to 1000 V
- ② Minimum clearance to adjacent parts ≥ 5mm

Switch Disconnecter Accessories for Auxiliary Contacts

Product Code	Description
Standard auxiliary contact	
MM216376	No contact block front MTG with screw terminals
MM216378	No contact block front MTG with screw terminals
Early make auxiliary contact	
MC199432	Early-make auxiliary contact MC1 with screw terminals
MC299430	Early-make auxiliary contact MC2/3 with screw terminals
MC496172	Early-make auxiliary contact MC4 with screw terminals
Trip indicating auxiliary contact	
MM216376	No contact block front MTG with screw terminals
MM216378	No contact block front MTG with screw terminals

Switch Disconnector Accessories for Under Voltage Release

Undervoltage release		
Product Code	Description	
Frame Size 1 - MC1		
MC199462	Under Voltage release with screw terminals	24VAC
MC199468	Under Voltage release with screw terminals	110-130VAC
MC199471	Under Voltage release with screw terminals	208-240VAC
MC199473	Under Voltage release with screw terminals	380-440VAC
MC199481	Under Voltage release with screw terminals	24VDC
MC199489	Under Voltage release with screw terminals	220-250VDC
Frame Size 2/3 - MC2/3		
MC299491	Under Voltage release with screw terminals	24VAC
MC299497	Under Voltage release with screw terminals	110-130VAC
MC299499	Under Voltage release with screw terminals	208-240VAC
MC299501	Under Voltage release with screw terminals	380-440VAC
MC299509	Under Voltage release with screw terminals	24VDC
MC299517	Under Voltage release with screw terminals	220-250VDC
Frame Size 4 - MC4		
MC496189	Under Voltage release with screw terminals	24VAC
MC496192	Under Voltage release with screw terminals	110-130VAC
MC496193	Under Voltage release with screw terminals	208-240VAC
MC496194	Under Voltage release with screw terminals	380-440VAC
MC496204	Under Voltage release with screw terminals	24VDC
MC496208	Under Voltage release with screw terminals	220-250VDC

Switch Disconnector Accessories for Under Voltage Release

Undervoltage release			
Product Code	Description		
MC199565	Under voltage release + early-maker	230VAC	MC1
MC199567	Under voltage release + early-maker	400VAC	MC1
MC299591	Under voltage release + early-maker	208-240AC	MC2
MC299594	Under voltage release + early-maker	380-440AC	MC2
MC496221	Under voltage release + early-maker	208-240VAC	MC4
MC496222	Under voltage release + early-maker	380-440VAC	MC4

Switch Disconnector Accessories for Shunt Trip

Shunt trip with screw terminals		
Product Code	Description	
Frame Size 1 - MC1		
MC199736	Shunt Release	24AC/DC
MC199742	Shunt Release	115AC/DC
MC199744	Shunt Release	230AC/DC
MC199792	Shunt Release	+VHI 24AC/DC
MC199800	Shunt Release	+VHI 230AC/DC
Frame Size 2/3 - MC2/3		
MC299754	Shunt Release	24AC/DC
MC299760	Shunt Release	110-130AC/DC
MC299763	Shunt Release	208-250AC/DC
MC299810	Shunt Release	+VHI 24AC/DC
MC299818	Shunt Release	+VHI 230AC/DC





Switch Disconnecter Accessories for Shunt Trip continued ...

Shunt trip with screw terminals

Product Code	Description
Frame Size 4 - MC4	
MC496447	Shunt Release 24VAC/DC
MC496450	Shunt Release 110-130AC/DC
MC496451	Shunt Release 208-250AC/DC
MC496471	Shunt Release +VHI 24VAC/DC
MC496475	Shunt Release +VHI 230VAC/DC



Switch disconnecter Accessories for Switch Assembly Kits

Main switch assembly kits

Product Code	Description
MC196626	Main switch assembly kit 3 Pole MC1
MC296627	Main switch assembly kit 3 Pole MC2
MC396628	Main switch assembly kit 3 Pole MC3
MC491779	Main switch assembly kit 3 Pole MC4
MC196632	Main switch assembly kit 3 Pole MC1
MC296633	Main switch assembly kit 3 Pole MC2
MC396634	Main switch assembly kit 3 Pole MC3
MC491842	Main switch assembly kit 3 Pole MC4

Switch disconnecter Accessories for Rotary Handles

Main switch assembly kits

Product Code	Description
MC190116	Rotary handle MC1
MC290121	Rotary handle MC2
MC390123	Rotary handle MC3
MC496606	Rotary handle MC4
MC190125	Rotary handle lockable MC1
MC290127	Rotary handle lockable MC2
MC390129	Rotary handle lockable MC3
MC496608	Rotary handle lockable MC4
MC190135	Rotary handle R/Y lockable MC1
MC290137	Rotary handle R/Y lockable MC2
MC390140	Rotary handle R/Y lockable MC3
MC496610	Rotary handle R/Y lockable MC4

Switch Disconnecter Accessories for Door Interlocking Rotary Handles

Product Code	Description
Standard, black/grey	
MC190131	Rotary handle lockable MC1
MC290133	Rotary handle lockable MC2
Red/yellow for Emergency Stop	
MC190142	Rotary handle R/Y lockable MC1
MC290144	Rotary handle R/Y lockable MC2



Switch Disconnecter Accessories for Door Interlocking Rotary Handles continued ...

Product Code	Description
Door interlocking rotary handles - Standard black/grey	
MC190160	Door coupling rotary handle MC1
MC290162	Door coupling rotary handle MC2
MC390164	Door coupling rotary handle MC3
MC496612	Door coupling rotary handle MC4
MC190166	Door coupling rotary handle lockable MC1
MC290168	Door coupling rotary handle lockable MC2
MC390170	Door coupling rotary handle lockable MC3
MC496614	Door coupling rotary handle lockable MC4
MC190172	Door coupling rotary MC1
MC290174	Door coupling rotary MC2
MC390176	Door coupling rotary MC3
MC496616	Door coupling rotary handle lockable MC4
Red/yellow for Emergency Stop	
MC190178	Door coupling rotary R/Y MC1
MC290180	Door coupling rotary R/Y MC2
MC390182	Door coupling rotary R/Y MC3
MC496618	Door coupling rotary handle lockable R/Y MC4

Switch disconnector Accessories for Shafts, Toggle Lever and Frames

Extension shafts	
Product Code	Description
MC191232	Extension shaft 400mm MC1/2
MC391234	Extension shaft 400mm MC3/4
MC190191	Extension shaft MC1/2
MC390193	Extension shaft MC3/4
Toggle lever locking device	
MC190199	Locking device MC1
MC290201	Locking device MC2
Insulating frame	
MC190195	Insulating surround MC21
MC290197	Insulating surround MC22

Switch Disconnecter Accessories for Spacers and Clip Plates

Extension shafts	
Product Code	Description
Spacers	
MC190203	Spacer MC1/2
MC390211	Spacer MC3
Clip plates	
MC190213	Clip plate MC1
MC290215	Clip plate 75mm MC2



Switch Disconnector Accessories for Remote and Motorised Operators

Standard, black/grey

Product Code	Description
MC299832	Remote operator 208-240AC MC2
MC399850	Remote operator 208-240AC MC3
MC496685	Remote operator 208-240AC MC4
MC296677	Cover 4 Pole remote operator MC2
MC396678	Cover 4 Pole remote operator MC3

Switch Disconnector Accessories for Terminals - Frame Size 1

Product Code	Description
Box terminals	
MC190015	Box terminal 3 Pole
MC197075	Box terminal 4 Pole
Screw connections	
MC190019	Screw terminal 3 Pole
MC196725	Screw terminal 4 Pole
Tunnel terminals	
MC196730	Tunnel terminal 3 Pole 95mm ²
MC196731	Tunnel terminal 4 Pole 95mm ² mc1
Rear connections	
MC196734	Rear connection 3 Pole
MC196737	Rear connection 4 Pole
Control circuit terminal	
MC196739	Control circuit terminal MC1-4
MC190150	Control circuit terminal MC1
Terminal covers	
MC190021	Cover front screw terminal 3 Pole
MC196741	Cover front screw terminal 4 Pole
IP2X finger protection	
MC196744	IP2X Finger protection
MC196745	IP2X Finger protection terminal 4 Pole
MC196748	IP2X Finger protection Cover 3 Pole
MC196749	IP2X Finger protection Cover 4 Pole

Switch Disconnector Accessories for Terminals - Frame Size 2

Product Code	Description
Control circuit terminal	
MC292240	Box terminal 3 pcs 160A
MC292244	Box terminal 3 pcs 250A
MC296755	Box terminal 4 pcs 160A
MC296756	Box terminal 4 pcs 250A
Screw connections	
MC290030	Schraubanschluss 3 Pole
MC296750	Schraubanschluss 4 Pole
Tunnel terminals	
MC291457	Tunnel terminal 3 Pole 185mm ²
MC291458	Tunnel terminal 4 Pole 185mm ²

Switch Disconnector Accessories for Terminals - Frame Size 2 continued...

Product Code	Description
Rear connections	
MC296765	Rear connection 3 Pole
MC296768	Rear Connection 4 Pole
Control circuit terminal	
MC196739	Control Circuit Terminal MC1-4
MC290156	Control circuit terminal
Terminal covers	
MC290038	Cover Front Screw Terminal 3 Pole
MC296770	Cover Front Screw Terminal 4 Pole
IP2X finger protection	
MC296773	IP2X Finger protection terminal 3 Pole
MC296774	IP2X Finger protect terminal 4 Pole
MC296777	IP2X Finger protection terminal 3 Pole
MC296778	IP2X Finger protect terminal 4 Pole
Cable lugs	
MC299775	Cable lug 95mm ²
MC299776	Cable lug 120mm ²
MC299777	Cable lug 150mm ²
MC290032	Cable lug 185mm ²

Switch Disconnector Accessories for Terminals - Frame Size 3

Product Code	Description
Control circuit terminal	
MC390042	Box terminal 3 pcs 160A
MC396783	Box terminal 4 pcs 160A
Tunnel terminals	
MC391459	Terminal 3 Pole 1 x 185mm ²
MC391460	Terminal 4 Pole 1 x 185mm ²
MC391462	Terminal 4 Pole 2 x 240mm ²
Rear connections	
MC396792	Rear connection 3 Pole
MC396795	Rear Connection 4 Pole
Control circuit terminal	
MC196739	Control Circuit Terminal MC1-4
MC396797	Control circuit terminal
Terminal covers	
MC390045	Cover Front Screw Terminal 3 Pole
MC396801	Cover Front Screw Terminal 3 Pole
IP2X finger protection	
MC396804	IP2X Finger protection terminal 3 Pole
MC396805	IP2X Finger protect terminal 4 Pole
MC396808	IP2X Finger protection terminal 3 Pole
MC396809	IP2X Finger protect terminal 4 Pole
Cable lugs	
MC390040	Cable lug 185mm ²
MC390041	Cable lug 240mm ²

Switch Disconnecter Accessories for Terminals - Frame Size 4

Product Code	Description
Module plates	
MC496814	Module plate 1 Hole 3 Pole
MC496820	Module plate 2 Hole 3 Pole
MC496815	Module plate 1 Hole 4 Pole
MC496821	Module plate 2 Hole 4 Pole
Connection width extensions	
MC496826	Connection width extension 3 Pole
MC496827	Connection width extension 4 Pole
Rear connections	
MC396792	Rear connection 3 Pole
MC396795	Rear connection 4 Pole
Flat cable terminal	
MC496829	Flat cable terminal 3 Pole
MC496831	Flat cable terminal 4 Pole
Control circuit terminal	
MC496836	Tunnel terminal 3 Pole 4 x 240mm ²
MC496837	Tunnel terminal 4 Pole 4 x 240mm ²
Terminal covers	
MC496842	Rear connection 3 Pole
MC496843	Rear connection 3 Pole
IP2X finger protection	
MC396797	Control circuit terminal SCR
Cable lugs	
MC496846	Cover 3 Pole
MC496847	Cover 3 Pole

Switch Disconnecter Accessories for plug-in / Withdrawable Units

Product Code	Description
Plug-in adaptor elements	
MC296697	Plug-in connection 3 Pole MC2
MC296698	Plug-in connection 4 Pole MC2
Socket	
MC296699	Socket base 3 Pole MC2
MC296700	Socket base 4 Pole MC2
Removeable module	
MC296701	Plugs 3 Pole MC2
MC296702	Plugs 4 Pole MC2
Auxiliary circuit plug-in	
MC396707	Withdrawable unit 3 Pole MC3
MC396708	Withdrawable unit 4 Pole MC3
MC496709	Withdrawable unit 3 Pole MC4
MC496710	Withdrawable unit 4 Pole MC4
Socket base	
MC396711	socket base 3 Pole MC3
MC396712	socket base 4 Pole MC3
MC496713	socket base 3 Pole MC4
MC496714	socket base 4 Pole MC4
Withdrawable unit	
MC396715	Withdrawable carrier 3 Pole MC3
MC396716	Withdrawable carrier 4 Pole MC3
MC496717	Withdrawable carrier 3 Pole MC4
MC496718	Withdrawable carrier 4 Pole MC4

System and cable, selective and generator protection

IEC 60947-2

- RMS value measurement and "thermal memory"
- Adjustable overload release Ir: 0.5 - 1 x In (ex-factory: 0.8 x In)
- Adjustable time delay setting to overcome current peaks tr: 2 - 20 s with 6 x Ir as well as infinity (without overload release) (ex-factory: 10s)
2 - 10 x Ir (ex-factory: 6 x Ir); MC3... -4-VE630: 1,5 - 7 x Ir (ex-factory: 6 x Ir)
- Adjustable delayed short circuit release I_{sd}: Steps: 0, 20, 60, 100, 200, 300, 500, 750, 1000 ms (ex-factory: 0)
- Adjustable delay time t_{sd}: 2 - 12 x In (ex-factory: 12 x In) / MC2 fixed 12 x In / MC3...-VE250/400: 2-11 x In (ex-factory: 6 x In) / MC3...-VE630: 2 - 8 x In (ex-factory: 6 x In) / Switchable i²t- constant function (ex-factory: OFF) MC3/MC4
- Adjustable non-delayed short-circuit release Ii:

Screw terminals standard, Lift terminals as accessories

PRODUCT CODE	Poles	Frame Size	Rated uninterrupted current (A)	Adjustable overload release (A)	Adjustable shortcircuit release (A)	kA @ 415V
MC325233	3	3	250	125-250	500-3000	50
MC340233	3	3	400	200-400	800-4800	50
MC363233	3	3	630	315-630	1260-7560	50
MC325333	3	3	250	125-250	500-3000	100
MC340333	3	3	400	200-400	800-4800	100
MC363333	3	3	630	315-630	1260-7560	100
MC463233	3	4	630	315-630	1260-7560	50
MC480233	3	4	800	400-800	1600-9600	50
MC410233	3	4	1000	500-1000	2000-12000	50
MC412233	3	4	1250	625-1250	2500-15000	50
MC416233	3	4	1600	800-1600	3200-19200	50
MC463333	3	4	630	315-630	1260-7560	100
MC480333	3	4	800	400-800	1600-9600	100
MC410333	3	4	1000	500-1000	2000-12000	100
MC412333	3	4	1250	625-1250	2500-15000	100
MC416333	3	4	1600	800-1600	3200-19200	100



Miscellaneous Accessories

Residual current release 4 pole	
PRODUCT CODE	Description
MC296719	RCD release 30MA
MC296720	RCD release 0,1-3A
Earth fault release 3 / 4 pole	
MC390756	Earth fault releases 3 Pole MC3
MC390757	Earth fault releases 4 Pole MC3
MC496721	Earth fault releases 3 Pole MC4
MC496722	Earth fault releases 4 Pole MC4
Data Management Interface (DMI module)	
260217	DMI module
Expansion unit – Networking	
270333	Expansion unit
Diagnostic and parameter setting software	
265631	Software diagnostic
Telescopic adaptor	
MM226161	Telescopic adaptor
Spare connection cables	
260755	Cable connection MC-DMI
260216	Cable connection MC-PC
260147	Cable connection PC-DMI
MCCB trip testing unit	
210525	Test unit MCCB

