

■ CIRCUIT BREAKER 3 POLE UP TO 160A WITH THERMAL MAGNETIC RELEASE TYPES MC1B-A, MC1N-A, MC1H-A



MC110231

■ SCHRACK INFO

- For system and line protection
- Adjustable overload release I: 0,8 – 1 x I_n (factory setting 0,8 x I_n)
- Adjustable short-circuit release I: 6 – 10 x I_n (factory setting 6 x I_n); except MC.-A40: 8 - 10 x I_n
- Box terminals as standard, screw terminals as accessories
- Breaking capacity 25 / 50 / 100 kA at 415 V 50/60 Hz
- Meets IEC/EN 60947-2
- Rated uninterrupted current = Rated current

RATED CURRENT/ BREAKING CAPACITY	SETTING RANGE		TYPE	ORDER NO.
	OVERLOAD- RELEASE (A)	SHORT CIRCUIT- RELEASE (A)		
3 POLE (BASIC BREAKING CAPACITY) 25 kA				
20 A/25 kA	15...20	fix 350	MC1B-A20	MC120131
25 A/25 kA	20...25	fix 350	MC1B-A25	MC125131
32 A/25 kA	25...32	fix 350	MC1B-A32	MC132131
40 A/25 kA	32...40	320...400	MC1B-A40	MC140131
50 A/25 kA	40...50	300...500	MC1B-A50	MC150131
63 A/25 kA	50...63	380...630	MC1B-A63	MC163131
80 A/25 kA	63...80	480...800	MC1B-A80	MC180131
100 A/25 kA	80...100	600...1000	MC1B-A100	MC110131
125 A/25 kA	100...125	750...1250	MC1B-A125	MC112131
160 A/25 kA	125...160	fix 1280	MC1B-A160	MC116131
3 POLE (NORMAL BREAKING CAPACITY) 50 kA				
20 A/50 kA	15...20	fix 350	MC1N-A20	MC120231
25 A/50 kA	20...25	fix 350	MC1N-A25	MC125231
32 A/50 kA	25...32	fix 350	MC1N-A32	MC132231
40 A/50 kA	32...40	320...400	MC1N-A40	MC140231
50 A/50 kA	40...50	300...500	MC1N-A50	MC150231
63 A/50 kA	50...63	380...630	MC1N-A63	MC163231
80 A/50 kA	63...80	480...800	MC1N-A80	MC180231
100 A/50 kA	80...100	600...1000	MC1N-A100	MC110231
125 A/50 kA	100...125	750...1250	MC1N-A125	MC112231
160 A/50 kA	125...160	fix 1280	MC1N-A160	MC116231
3 POLE (HIGH BREAKING CAPACITY) 100 kA				
20 A/100 kA	15...20	fix 350	MC1H-A20	MC120331
25 A/100 kA	20...25	fix 350	MC1H-A25	MC125331
32 A/100 kA	25...32	fix 350	MC1H-A32	MC132331
40 A/100 kA	32...40	320...400	MC1H-A40	MC140331
50 A/100 kA	40...50	300...500	MC1H-A50	MC150331
63 A/100 kA	50...63	380...630	MC1H-A63	MC163331
80 A/100 kA	63...80	480...800	MC1H-A80	MC180331
100 A/100 kA	80...100	600...1000	MC1H-A100	MC110331
125 A/100 kA	100...125	750...1250	MC1H-A125	MC112331
160 A/100 kA	125...160	fix 1280	MC1H-A160	MC116331

■ CIRCUIT BREAKER 4 POLE UP TO 160A WITH THERMAL MAGNETIC RELEASE TYPES MC1B-4-A, MC1N-4-A, MC1H-4-A



MC110231

■ SCHRACK INFO

- For system and line protection
- 100% overload- and short-circuit protection
- Adjustable overload release I_r: 0,8 – 1 x I_n (factory setting 0,8 x I_n)
- Adjustable short-circuit release I_s: 6 – 10 x I_n (factory setting 6 x I_n); except MC.-A40: 8 - 10 x I_n
- Box terminals as standard, screw terminals as accessories
- Breaking capacity 25 / 50 / 100 kA at 415 V 50/60 Hz
- Specifications to IEC/EN 60947-2
- Rated uninterrupted current = Rated current

RATED CURRENT/ BREAKING CAPACITY	SETTING RANGE		TYPE	ORDER NO.
	OVERLOAD- RELEASE (A)	SHORT CIRCUIT- RELEASE (A)		
4 POLE (BASIC BREAKING CAPACITY) 25 kA				
20 A/25 kA	15...20	fix 350	MC1B-4-A20	MC120141
25 A/25 kA	20...25	fix 350	MC1B-4-A25	MC125141
32 A/25 kA	25...32	fix 350	MC1B-4-A32	MC132141
40 A/25 kA	32...40	320...400	MC1B-4-A40	MC140141
50 A/25 kA	40...50	300...500	MC1B-4-A50	MC150141
63 A/25 kA	50...63	380...630	MC1B-4-A63	MC163141
80 A/25 kA	63...80	480...800	MC1B-4-A80	MC180141
100 A/25 kA	80...100	600...1000	MC1B-4-A100	MC110141
125 A/25 kA	100...125	750...1250	MC1B-4-A125	MC112141
160 A/25 kA	125...160	fix 1280	MC1B-4-A160	MC116141
4 POLE (NORMAL BREAKING CAPACITY) 50 kA				
20 A/50 kA	15...20	fix 350	MC1B-4-A20	MC120241
25 A/50 kA	20...25	fix 350	MC1N-4-A25	MC125241
32 A/50 kA	25...32	fix 350	MC1N-4-A32	MC132241
40 A/50 kA	32...40	320...400	MC1N-4-A40	MC140241
50 A/50 kA	40...50	300...500	MC1N-4-A50	MC150241
63 A/50 kA	50...63	380...630	MC1N-4-A63	MC163241
80 A/50 kA	63...80	480...800	MC1N-4-A80	MC180241
100 A/50 kA	80...100	600...1000	MC1N-4-A100	MC110241
125 A/50 kA	100...125	750...1250	MC1N-4-A125	MC112241
160 A/50 kA	125...160	fix 1280	MC1N-4-A160	MC116241
4 POLE (HIGH BREAKING CAPACITY) 100 kA				
20 A/100 kA	15...20	fix 350	MC1H-A20	MC120341
25 A/100 kA	20...25	fix 350	MC1H-A25	MC125341
32 A/100 kA	25...32	fix 350	MC1H-A32	MC132341
40 A/100 kA	32...40	320...400	MC1H-A40	MC140341
50 A/100 kA	40...50	300...500	MC1H-A50	MC150341
63 A/100 kA	50...63	380...630	MC1H-A63	MC163341
80 A/100 kA	63...80	480...800	MC1H-A80	MC180341
100 A/100 kA	80...100	600...1000	MC1H-A100	MC110341
125 A/100 kA	100...125	750...1250	MC1H-A125	MC112341
160 A/100 kA	125...160	fix 1280	MC1H-A160	MC116341

■ MOTOR PROTECTION, 3 POLE UP TO 100A WITH THERMAL MAGNETIC RELEASE, TYPES MC1B-M, MC1N-M



MC110231

■ SCHRACK INFO

- Adjustable overload release I: 0,8 – 1 x I_n (factory setting 0,8 x I_n); with phase sensitivity, tripping class 10 A (2s < T_p ≤ 10s)
- Adjustable short-circuit release I: 8 – 14 x I_n (ex-factory 12 x I_n); except MC1.-M100: 8 – 12,5 x I_n (factory setting 12 x I_n)
- Connection terminals as standard, screw terminals as accessories
- Breaking capacity 25 / 50 kA at 415 V 50/60 Hz
- Meets IEC/EN 60947-4 and IEC/EN 60947-2
- Meet all requirements of utilization category AC3 at 400 VAC

NOMINAL CURRENT/ BREAKING CAPACITY	POWER RATING AC3 kW	CURRENT AC3 A	SETTING RANGE		TYPE	ORDER NO.
			OVERLOAD- RELEASE (A)	SHORT CIRCUIT- RELEASE (A)		
3 POLE (BASIC BREAKING CAPACITY) 25 kA						
40 A/25 kA	18.5	36	32...40	320...560	MC1B-M40	MC140136
50 A/25 kA	22	41	40...50	400...700	MC1B-M50	MC150136
63 A/25 kA	30	55	50...63	504...882	MC1B-M63	MC163136
80 A/25 kA	37	68	63...80	640...1120	MC1B-M80	MC180136
100 A/25 kA	55	99	80...100	800...1250	MC1B-M100	MC110136
3 POLE (NORMAL BREAKING CAPACITY) 50 kA						
40 A/50 kA	18.5	36	32...40	320...560	MC1N-M40	MC140236
50 A/50 kA	22	41	40...50	400...700	MC1N-M50	MC150236
63 A/50 kA	30	55	50...63	504...882	MC1N-M63	MC163236
80 A/50 kA	37	68	63...80	640...1120	MC1N-M80	MC180236
100 A/50 kA	55	99	80...100	800...1250	MC1N-M100	MC110236

SWITCH DISCONNECTOR UP TO 160A TYPES MC1-PN, MC1-PN-4, MC1-N, MC1-N-4



MC110231

SCHRACK INFO

- Rated uninterrupted current up to 160A
- Switch disconnecter type MC1-PN two switch positions, 0/I, cannot be tripped remotely
- Switch disconnecter type MC1-N, with Trip setting "0"; "+"; "I", can be tripped remotely with undervoltage/shunt release, trip-indicating auxiliary contacts possible
- Box terminals as standard, screw terminals as accessories
- Main switch characteristics including positive drive according to IEC/EN 60204 & VDE 0113
- Isolating characteristics to IEC/EN 60947-3 and VDE 0660
Protection against accidental contact to VDE 0160 Part 100
- Specifications to IEC/EN 60947-2
- Rated uninterrupted current = Rated current
- Rated short-circuit breaking capacity values: I_{cm} 2,8kA
- Rated short-time withstand current: I_{cw} 2kA

RATED CURRENT/ BREAKING CAPACITY	MAX. BACK-UP FUSE (gL) FOR SWITCH DISCONNECTOR (AgL)	TYPE	ORDER NO.
3 POLE CANNOT BE TRIPPED REMOTELY			
63 A	125 A	MC1-PN-63	MC163034
100 A	125 A	MC1-PN-100	MC110034
125 A	125 A	MC1-PN-125	MC112034
160 A	160 A	MC1-PN-160	MC116034
4 POLE CANNOT BE TRIPPED REMOTELY			
63 A	125 A	MC1-PN-4-63	MC163044
100 A	125 A	MC1-PN-4-100	MC110044
125 A	125 A	MC1-PN-4-125	MC112044
160 A	160 A	MC1-PN-4-160	MC116044
3 POLE CAN BE TRIPPED REMOTELY			
63 A	125 A	MC1-N-63	MC163035
100 A	125 A	MC1-N-100	MC110035
125 A	125 A	MC1-N-125	MC112035
160 A	160 A	MC1-N-160	MC116035
4 POLE CAN BE TRIPPED REMOTELY			
63 A	125 A	MC1-N-4-63	MC163045
100 A	125 A	MC1-N-4-100	MC110045
125 A	125 A	MC1-N-4-125	MC112045
160 A	160 A	MC1-N-4-160	MC116045

RESIDUAL-CURRENT (RCD) RELEASE TYPES MC1-N-XFI.R, MC1-N-4-XFI.R, MC1-N-XFI.U, MC1-N-4-XFI.U







MC194608

SCHRACK INFO

- Suitable for use in three- and single-phase systems
- Pulse current sensitive accord. to core-balance principle
- For 3- and 4-pole circuit breaker and switch disconnectors MC1, MC1-N, not for MC1-PN
- Dependant on mains power $U_e = 200 - 415 \text{ V } 50/60 \text{ Hz}$
- Meets IEC/EN 60947-2
- Bottom mounting up to 100 A, from right up to 125 A
- Complete unit

TECHNICAL DATA

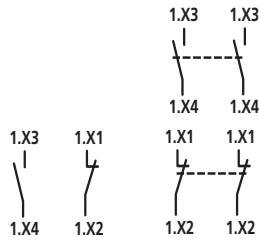
- At $I_{\Delta n} = 0,03 \text{ A}$: Time delay t_v permanently set to 10 ms.
- Alarm message $> 30 \% I_{dn}$ via yellow LED.
- Trip-indicating auxiliary contacts can be fitted by user (max. 2 auxiliary contacts):
N/O: Order No: MM216376, N/C: Order No: MM216378 (see page 13) are reset via a reset toggle lever.
- When using the trip-indicating auxiliary contacts in the FI module, the N/C contact works as an N/O contact and the N/O contact as an N/C.
- Not for use in XCS insulated enclosures.
- Type MC1-XFI...U cannot be combined with shunt or undervoltage releases and an early-make auxiliary contact.
- Rated short-circuit breaking capacity values are determined by installed MC1 or when using a switch disconnector MC1-N by the back-up fuse to be used.

FOR TYPE	RATED FAULT CURRENT ($I_{\Delta n}$)	TIME-DELAY (ms)	TYPE	ORDER NO.
3 POLE INSTALLED FROM RIGHT UP TO 125A 				
MC1 / MC1-N	0.03	10	MC1-XFI30R	MC194603
MC1 / MC1-N	0.3	10	MC1-XFI300R	MC194604
MC1 / MC1-N	0.03-0.1-0.3-0.5-1-3	10, 60, 150, 300, 450	MC1-XFIR	MC194605
4 POLE INSTALLED FROM RIGHT UP TO 125A 				
MC1-4 / MC1-N-4	0.03	10	MC1-4-XFI30R	MC194606
MC1-4 / MC1-N-4	0.3	10	MC1-4-XFI300R	MC194607
MC1-4 / MC1-N-4	0.03-0.1-0.3-0.5-1-3	10, 60, 150, 300, 450	MC1-4-XFIR	MC194608
3 POLE BOTTOM MOUNTING UP TO 100A 				
MC1 / MC1-N	0.03	10	MC1-XFI30U	MC194609
MC1 / MC1-N	0.3	10	MC1-XFI300U	MC194610
MC1 / MC1-N	0.03-0.1-0.3-0.5-1-3	10, 60, 150, 300, 450	MC1-XFIU	MC194611
4 POLE BOTTOM MOUNTING UP TO 100A 				
MC1-4 / MC1-N-4	0.03	10	MC1-4-XFI30U	MC194612
MC1-4 / MC1-N-4	0.3	10	MC1-4-XFI300U	MC194613
MC1-4 / MC1-N-4	0.03-0.1-0.3-0.5-1-3	10, 60, 150, 300, 450	MC1-4-XFIU	MC194614

STANDARD AUXILIARY CONTACT / TRIP-INDICATING AUXILIARY CONTACT TYPE M22



MM216378



SCHRACK INFO

- Switches with the main contacts, used for indicating and interlocking tasks
- General trip indication “+” with trip due to voltage release, overload release or short-circuit-release

TECHNICAL DATA

Breaking capacity: AC15: 4 A / 230 VAC
DC13: 3 A / 24 VDC
DC13: 0,3 A / 220 VDC

TIPS & TRICKS

The trip-indicating auxiliary contacts is the same contact as the standard auxiliary contact. It derives its function from its place of installation where it is installed (alarm contact on left).

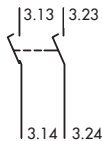
Maximum component installation with auxillary contacts: 1 x Standard auxiliary contact (HIN) M22-K.
1 x Trip-indicating contact (HIA) M22-CK.

DESCRIPTION	TYPE	ORDER NO.
1 NO contact with screw terminals	M22-K10	MM216376
1 NC contact with screw terminals	M22-K01	MM216378
2 NO contacts with cage clamp terminals	M22-CK20	MM107898
2 NC contacts with cage clamp terminals	M22-CK02	MM107899
1 NO + 1 NC contact with cage clamp terminals	M22-CK11	MM107940

EARLY-MAKE AUXILIARY CONTACT TYPE MC1-XHIVL



MC199432



SCHRACK INFO

For interlock- and load-shedding circuits as well as for early make of undervoltage release in main switch/Emergency stop applications.

TECHNICAL DATA

- Early-make during switch on and off (manual switch): approx. 20 ms
- Not in connection with undervoltage release
MC1-XU... or shunt release MC1-XA...
- Breaking capacity: AC15: 4 A / 230 VAC
DC13: 3 A / 24 VDC
DC13: 0,3 A / 220 VDC

TIPS & TRICKS

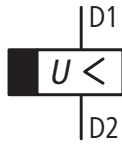
Maximum component installation with auxillary contacts: 1 x early-make auxiliary contact

DESCRIPTION	TYPE	ORDER NO.
Early-make auxiliary contact, 2 NO incl. 3 m cable	MC1-XHIVL	MC199432

UNDervoltage RELEASE TYPES MC1-XUL



MC199471



SCHRACK INFO

- Non-delayed breaking of circuit breaker MC/ switch disconnector MC-N when the control voltage drops below 35 % -70% Us.
- For use in Emergency stop devices in connection with EMERGENCY STOP button
- Installed in breaker
- Without auxiliary contact

TIPS & TRICKS

When the undervoltage release is de-energized, accidental contact with the main contacts of the switch is safely prevented during attempts to switch on. Undervoltage release cannot be installed simultaneously with an shunt release or early-make auxiliary contact MC1-XHIV.

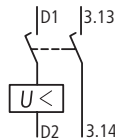
VOLTAGE	VERSION	TYPE	ORDER NO.
24 VAC	incl. 3m cable	MC1-XUL24AC	MC199462
24 VDC	incl. 3m cable	MC1-XUL24DC	MC199481
208-240 V AC	incl. 3m cable	MC1-XUL208-240AC	MC199471
380-440 V AC	incl. 3m cable	MC1-XUL380-440AC	MC199473

Other voltage variants available upon request.

UNDervoltage RELEASE WITH TWO EARLY-MAKE AUXILIARY CONTACTS TYPES MC1-XUHIVL



MC199565



SCHRACK INFO

- With 2 early-make auxiliary contacts
- For early-make of the undervoltage release in main switch applications and for interlock- and load-shedding circuits
- Installed in breaker
- Other voltages and connection versions available on request

TIPS & TRICKS

When the undervoltage release is de-energized, accidental contact with the main contacts of the switch is safely prevented during attempts to switch on. Early-make of auxiliary contacts during switch on and off (20ms). Undervoltage releases cannot be installed simultaneously with shunt releases or early-make auxiliary contact, type MC1-XHIV.

VOLTAGE	VERSION	TYPE	ORDER NO.
208 - 240 VAC	incl. 3m cable	MC1-XUHIVL230V	MC199565
380 - 440 VAC	incl. 3m cable	MC1-XUHIVL400VAC	MC199567

Other voltage variants available upon request.

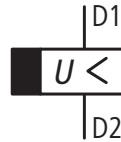
UNDERVOLTAGE RELEASE, OFF-DELAY TYPES MC-UVU, MC-XUVL



MC199471



MC496189



SCHRACK INFO

- Voltage drops less than 0,07–16s do not cause MC circuit breakers or N switch disconnectors to trip.

TECHNICAL DATA

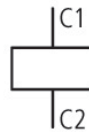
- Time-delay adjustable between 70 ms – 4 s
- With additional external capacitor:
30.000 μ F \geq 35 V to 8 s
90.000 μ F \geq 35 V to 16 s
- Special release MC1-XUVL is required.
- Cannot be installed at same time with early-make auxiliary contact MC1-XHIV... or shunt release MC1-XA....
- Time-delay device for separate mounting (Fixing: DIN rail or screws).
- For other operating voltages, please use a control transformer.

DESCRIPTION	TYPE	ORDER NO.
Time-delay unit	MC-UVU	MC190154
Special undervoltage release for time-delay unit MC1	MC1-XUVL	MC191607

SHUNT RELEASE TYPE MC1-XAL



MC199744



SCHRACK INFO

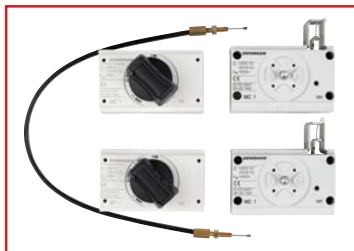
- Without auxiliary contact
- Switches are tripped by a voltage pulse or by the application of uninterrupted voltage

TECHNICAL DATA

When the shunt release is energized, accidental contact with the main contacts of the switch is safely prevented during attempts to switch on. Shunt release cannot be installed simultaneously with undervoltage releases or early-make auxiliary contact MC1-XHIV.

VOLTAGE	VERSION	TYPE	ORDER NO.
24 VAC/DC	incl. 3m cable	MC1-XAL24AC/DC	MC199736
110 VAC/DC	incl. 3m cable	MC1-XAL110AC/DC	MC199742
208 - 250 VAC/DC	incl. 3m cable	MC1-XAL230AC/DC	MC199744

MECHANICAL INTERLOCK FOR (DOOR COUPLING-) ROTARY HANDLES FOR MC1



MC191581

SCHRACK INFO

Rotary handle on switch or door coupling rotary handle additionally required.

Cannot be combined with remote operator or door frame.

At least 2 interlocking modules are required to construct a mechanical interlocking circuit. See Page 142 for possible combinations and variations of interlocking circuits. Bowden cable to be ordered separately.

DESCRIPTION	TYPE	ORDER NO.
Mechanical interlock	MC1-XMV	MC191581
Bowden cable 225 mm	MC-XBZ225	MC191585
Bowden cable 600 mm	MC-XBZ600	MC191586
Bowden cable 1000 mm	MC-XBZ1000	MC191587

ROTARY HANDLE DIRECTLY ON SWITCH FOR MC1



MC290127



MC390129

SCHRACK INFO

- Complete with rotary drive
- Can also be combined with door frame

TECHNICAL DATA

Available in the following versions:

Type MC.-XDV

Lockable in the "0" position (up to three padlocks), black/grey

Type MC.-XDVR

Lockable in the "0" position (up to three padlocks), Emergency stop red/yellow

Type MC.-XDTV

Lockable in the "0" position on handle, modification also available in "1" position, black/grey

Type MC.-XDTVR

Lockable in "0" position, Emergency Stop red/yellow

Version comes with door interlock:

- Door frame supplied with door interlock
- Rotary handle can be rotated 90° for horizontally-mounted switches
- In the ON position, can be defeated from the outside using a 1 mm pin
- Cannot be defeated in the locked OFF and ON positions
- Door can be opened in OFF
- Can only be switched on when door closed

DESCRIPTION	TYPE	ORDER NO.
Lockable rotary handle for MC1, black/grey	MC1-XDV	MC190125
Lockable rotary handle for MC1, Emergency stop red/yellow	MC1-XDVR	MC190135
Rotary handle for MC1 with door interlock, lockable, black/grey	MC1-XDTV	MC190131
Rotary handle for MC1 with door interlock, lockable, Emergency stop red/yellow	MC1-XDTVR	MC190142

MAIN-SWITCH-SET FOR MC1

SCHRACK INFO

Set includes:

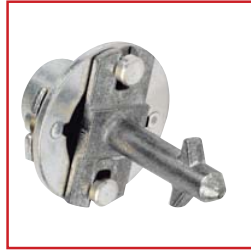
- Door coupling rotary handle (page 17)
- Extension shaft -XV4 (page 17)
- Frontside warning plate
- Sticker with warning symbol "lightning"

DESCRIPTION	TYPE	ORDER NO.
Main-switch-set for MC1 with door interlock, black/grey	MC1-XHB	MC196626
Main-switch-set for MC1 with door interlock, Emergency stop red/yellow	MC1-XHBR	MC196632

DOOR COUPLING ROTARY HANDLE FOR MC1



MC190160



MC190160



MC190160

SCHRACK INFO

- Complete unit including rotary drive and coupling parts
- Degree of Protection IP66
- Rotary handle can be rotated 90° for horizontally-mounted switches
- Cannot be defeated in the locked OFF and ON positions
- Can be modified when in the unlocked ON position, can be defeated from the outside with a screwdriver
- Door can be opened in OFF
- External warning plate/designation plate can be clipped on

NOTES

- Order extension shaft separately!

TECHNICAL DATA

Available in the following versions:

Type MC.-XTVD

Lockable in the "0" position on handle with up to three padlocks, with door interlock, black/grey

Type MC.-XTVDV

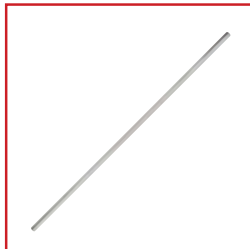
Lockable in the "0" position on handle and switch, with up to three padlocks, with door interlock, black/grey

Type MC.-XTVDVR

Lockable in the "0" position on handle and switch with up to three padlocks, with door interlock, Emergency stop red/yellow

DESCRIPTION	TYPE	ORDER NO.
Door coupling rotary handle for MC1 with door interlock, lockable, black/grey	MC1-XTVD	MC190166
Door coupling rotary handle for MC1 with door interlock, lockable, "0", "1", black/grey	MC1-XTVDV	MC190172
Door coupling rotary handle for MC1 with door interlock, lockable, Emergency stop red/yellow	MC1-XTVDVR	MC190178

EXTENSION SHAFT FOR MC1



MC190191

SCHRACK INFO

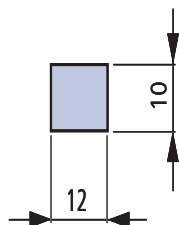
- For maximum cabinet depths of 400 or 600 mm
- Can be cut to required length

DESCRIPTION	CABINET DEPTH	TYPE	ORDER NO.
Extension shaft for MC1 max. 400 mm	max. 400 mm	MC1/2-XV4	MC191232
Extension shaft for MC1 max. 600 mm	max. 600 mm	MC1/2-XV6	MC190191

BOX TERMINALS FOR MC1



MC292240



SCHRACK INFO

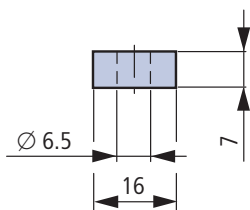
- Standard connection for all MC1, MC1-PN and MC1-N switches
- Conversion kit for switches with screw connection
- Contains parts for one switch side
- Installed inside the switch housing
- Use cover plate MC1-XKSA
- Terminal capacities:
CU conductors 1 x 10–70 mm²
CU cables 2 x 6–25 mm²

DESCRIPTION	TYPE	ORDER NO.
Box terminal up to 160 A (contains 3 pcs.) for MC1	MC1-160-XKC	MC190015
Box terminal up to 160 A (includes 4 pcs.) for MC1-4	MC1-160-4-XKC	MC197075

SCREW CONNECTION FOR MC1



MC190019



SCHRACK INFO

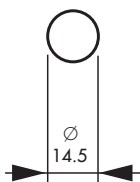
- Contains parts for one switch side located at top or bottom 3- or 4 pole switches
- Installed outside switch housing
- Cover plate MC1-XKSA included
- Terminal capacities:
CU conductors 1 x 10–70 mm², 2 x 6–25 mm²
AL cable lugs 1 x 10–35 mm², 2 x 10–35 mm²

DESCRIPTION	TYPE	ORDER NO.
Screw connection 3 pcs. for MC1	MC1-XKS	MC190019
Screw connection 4 pcs. for MC1-4	MC1-4-XKS	MC196725

TUNNEL TERMINAL FOR MC1



MC196730



SCHRACK INFO

- Contains parts for one switch side, top or bottom
- With terminal for control circuit for 1 x 0,75–2,5 mm², 2 x 0,75–1,5 mm² Cu conductor
- Installed outside switch housing
- Maximum specified cross-section can only be connected stranded and without end sleeve.
- Cover plate MC1(-4)-XKSA must be installed (supplied).
- Terminal capacities: Cu cable, Al cable 95 mm²

TECHNICAL DATA

- For Cu- And Al cables
- Includes cover plate
- Stranded round conductor / stranded sector-shaped conductor
- Use with flexible and ultra-flexible conductor end sleeves

DESCRIPTION	TYPE	ORDER NO.
Tunnel terminal 95 mm ² , 3 pole for MC1	MC1-XKA	MC196730
Tunnel terminal 95 mm ² , 4 pole for MC1-4	MC1-4-XKA	MC196731

REAR CONNECTION FOR MC1



MC196734

SCHRACK INFO

- Contains parts for one switch side located at top or bottom 3- or 4 pole switches
- Terminal capacities:
Cu cable lug 1 x 10–70 mm², 2 x 6–25 mm²
Al cable lug 1 x 10–35 mm², 2 x 10–35 mm²

DESCRIPTION	TYPE	ORDER NO.
Rear connection, 3 pole for MC1	MC1-XKR	MC196734
Rear connection, 4 pole for MC1-4	MC1-4-XKR	MC196737

CONTROL CIRCUIT TERMINAL FOR MC1



MC196739

SCHRACK INFO

- Contains parts for two terminals located at top or bottom for 3/ 4 pole switches
- Included with tunnel terminal
- Terminal capacities:
Screw connection 1 x 0,75 – 2,5 mm², 2 x 0,75 – 1,5 mm²

DESCRIPTION	TYPE	ORDER NO.
Control circuit terminal for box terminal MC1	MC-XSTK	MC196739
Control circuit terminal for screw connection MC1	MC1-XSTS	MC190150

TERMINAL COVER FOR MC1



MC290038

SCHRACK INFO

- Protection against accidental contact when using cable lugs, rails or Tunnel terminals
- Contains parts for one switch side located at top or bottom 3- or 4 pole switches
- Degree of protection IP4X front, side and rear, IP1X on the connection side when using insulated conductor material
- Cover plate included with tunnel terminals

DESCRIPTION	TYPE	ORDER NO.
Terminal cover, 3 pole for MC1	MC1-XKSA	MC190021
Terminal cover, 4 pole for MC1-4	MC1-4-XKSA	MC196741

CONNECTION COVER, KNOCKOUT FOR BOX TERMINAL MC1



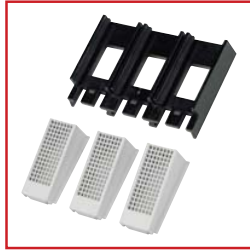
MC196781

SCHRACK INFO

- Connection cover, knockout

DESCRIPTION	TYPE	ORDER NO.
Terminal cover, 3 pole for MC1	MC1-XKSFA	MC190780
Terminal cover, 4-pol. for MC1-4	MC1-4-XKSFA	MC196781

IP2X FINGER PROTECTION FOR DIRECT-MOUNTED MC1 SWITCHES



MC196744



MC196748

SCHRACK INFO

- Increases protection against accidental contact to IP2X
- Protection when reaching into the cable connection area when cables are connected
- MC1-XIPA and MC1-4-XIPA only in combination with cover plate
- Contains parts for one switch side, top or bottom

DESCRIPTION	TYPE	ORDER NO.
FOR BOX TERMINAL		
Finger protection, 3 pole for MC1	MC1-XIPK	MC196744
Finger protection, 4 pole for MC1	MC1-4-XIPK	MC196745
FOR TERMINAL COVER		
Finger protection, 3 pole for MC1	MC1-XIPA	MC196748
Finger protection, 4 pole for MC1	MC1-4-XIPA	MC196749

INSULATED ENCLOSURE XCI



MC191522

SCHRACK INFO

- Only for switches with box terminals for direct cable connection
- With door coupling rotary handle
- Complete unit includes all necessary functional parts
- Degree of protection IP65
- MC1-XCI23 housing with flanges
- MC1-XCI43 are fitted with gland plates

TECHNICAL DATA

Enclosure suitable for installation of circuit-breakers and switch-disconnectors for separate mounting with top and bottom cable entry. Including fixing straps for wall mounting. Short circuit protection at 415 V 50/60 Hz to 10 kA. Not in combination with remote operator, plug-in- or withdrawable unit. Additional insulated terminals for 4 or 5 pole must be ordered separately.

Available in the following versions:

Standard, black/grey

Lockable in the "0" position at handle with up to 3 padlocks. Additionally with cover interlock.

For Emergency stop, red/yellow

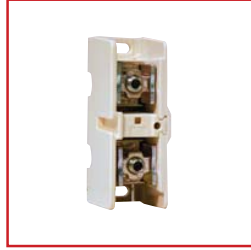
Lockable on handle and switch lockable with up to 3 padlocks in the "0" position on handle. Additionally with cover interlock and lockable at switch in the "0" position.

DESCRIPTION	MAX. RATED UNINTERRUPTED CURRENT	TYPE	ORDER NO.
STANDARD, BLACK/GREY			
Insulated enclosure for MC1, 3 pole	≤ 63 A	MC1-XCI23-TVD	MC191522
Insulated enclosure for MC1-4, 3-pole or 4 pole	≤ 125 A	MC1-XCI43	MC191523
Insulated enclosure for MC1-4, 3-pole or 4 pole	≤ 160 A	MC1-XCI43/2-TVD	MC194645
FOR EMERGENCY STOP, RED/YELLOW			
Insulated enclosure for MC1, 3 pole	≤ 63 A	MC1-XCI23-R	MC191527
Insulated enclosure for MC1-4, 3- or 4-pole	≤ 125 A	MC1-XCI43-R	MC191528
Insulated enclosure for MC1-4, 3- or 4 pole	≤ 160 A	MC1-XCI43/2-R	MC194646

ADDITIONAL INSULATED TERMINALS FOR MC1



MC198573



MC192336

SCHRACK INFO

- For looping through the neutral and earth conductor
- 1 pole

DESCRIPTION	TERMINAL CAPACITY	TYPE	ORDER NO.
Additional insulated terminal 32 A	Fine-wired 1 x (1,5-6 mm ²)	K10/1	MC193827
Additional insulated terminals 63 A	Fine-wired 1 x (6-16 mm ²), stranded 1 x (16-25 mm ²)	K25/1	MC196200
Additional insulated terminals 100 A	Fine-wired 1 x (10-35 mm ²), stranded 1 x (16-50 mm ²)	K50/1	MC198573
Additional insulated terminal 160 A	Stranded 1 x (16-95 mm ²)	K95/1N/BR	MC192336

DEVICE ADAPTERS FOR CIRCUIT-BREAKERS AND SWITCH-DISCONNECTORS FOR 60 mm BUSBAR SYSTEM, MC1



MC195700 – SIDE VIEW



MC195700 – FRONT VIEW

SCHRACK INFO

- For mounting on flat copper rails 12 x 5 mm bis 30 x 10 mm
- Double T and triple T profile
- Snaps onto the voltage-free busbar
- Rated operational voltage U_e: 690 V

TECHNICAL DATA

MC 1 up to 160 A:

- For switches with standard box terminal connection
- Connected to system via terminal strips above
- Can be used in connection with IP2X finger protection to increase accidental-contact protection against accidental contact on outgoing side

DESCRIPTION	TYPE	ORDER NO.
60 mm busbar adapter 160 A for MC1, 3-pole	32570	MC195700
60 mm busbar adapter 160 A for MC1, 4-pole		upon request

PHASE SEPARATOR PLATES FOR MC1



MC1-XKP

DESCRIPTION	TYPE	ORDER NO.
Phase separator plates for MC1, 3-pole	MC1-XKP	MC196609
Phase separator plates for MC1, 4-pole	MC1-4-XKP	MC196870

DOOR SEALING FRAME FOR MC1



MC190195

SCHRACK INFO

- For toggle levers, rotary handles with rotary- and remote operators
- Degree of protection IP40
- For rectangular cut-out on doors and enclosures with material thicknesses of 1,5 – 5 mm
- External warning plate/designation plate can be clipped on

DESCRIPTION	TYPE	ORDER NO.
Door sealing frame for MC1	MC1-XBR	MC190195

TOGGLE LEVER LOCKING DEVICE FOR MC1



MC190199

SCHRACK INFO

- Off position lockable with up to 3 padlocks (hasp thickness 4 – 8 mm)
- Cannot be combined with Insulating surround

DESCRIPTION	TYPE	ORDER NO.
Toggle lever locking device for MC1	MC1-XKAV	MC190199

SPACER FOR MC1



MC190203

SCHRACK INFO

- Enables fast and low-priced adjustment of various frame sizes with/without rotary handle or remote operator at identical front depth
- Grid depth 17,5 mm, thread M4
- Each set contains 4 x spacers
- Maximum component installation 4 pcs. per fastening screw
- 2 fastening screws included for each circuit breaker MC1

DESCRIPTION	TYPE	ORDER NO.
Spacer for MC1	MC1/2-XAB	MC190203

CLIP PLATE FOR MC1



MC190213

SCHRACK INFO

- Enables snap fit of circuit breakers / switch disconnectors to DIN rail (35 mm top-hat rail)

DESCRIPTION	TYPE	ORDER NO.
Clip plate for MC1	MC1-XC35	MC190213