

Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 160A

Rated current 160A, Short circuit switching capacity (400V) 50kA, Size type 2, Tripping Unit Digital electronic release - Type EM, Poles 3



Schrack-Info

Standard electronic type release for power distribution EM

EM release has four-stage protection of overload, short circuit short-time delay, short circuit instantaneous protection and earth fault, with real-time current display, protection parameter information display, fault information display and parameter setting function.

- Over-load long-time delay protection
Setting current $I_r = I_n \times 0.4 \sim 1.0$, Stepping 1 A
Tripping time T_r (s): 3~18, 1 s, Accuracy $\pm 10\%$
- Short circuit short-time delay protection
Setting current $I_{sd} = I_r \times 1.5 \sim 10$, Stepping 1 A, OFF, Accuracy $\pm 15\%$
Tripping time T_{sd} (s): 0.1-0.2-0.3-0.4, Accuracy $\pm 20\%$ or $\pm 40\text{ms}$ (higher value will be selected)
- Short circuit instantaneous protection
Setting current $I_i = I_n \times 1.5 \sim 12$, Stepping 1 A, OFF, Accuracy $\pm 15\%$
Max. tripping time (ms): 60
- Earth fault protection
Setting current $I_g = I_n \times 0.4-0.5-0.6-0.7-0.8-0.9-1.0$, OFF, Accuracy $\pm 15\%$
Tripping time (s): 0.1-0.2-0.3-0.4, Accuracy $\pm 15\%$

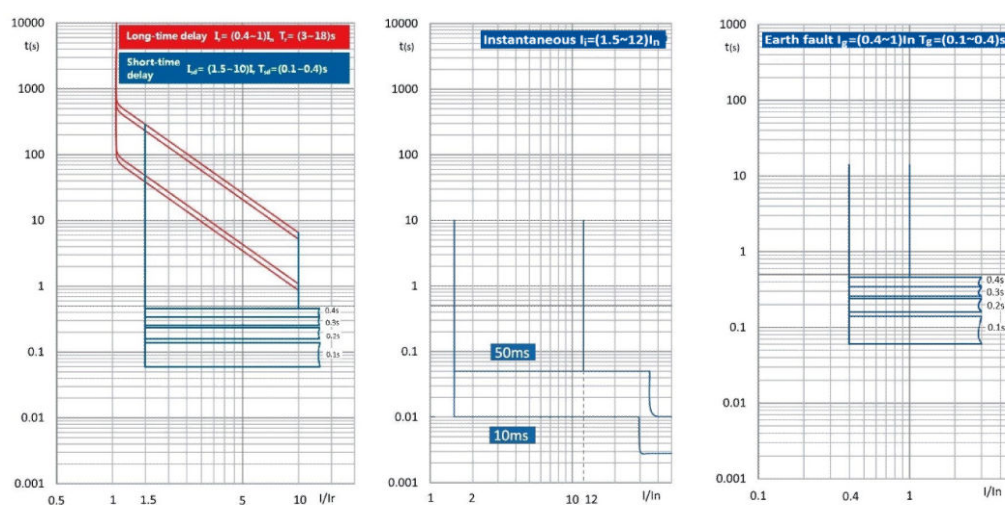
Technical Data

Net width (mm)	105,00
Net height (mm)	157,00
Net weight (kg)	1,85
EAN	9004840893489
Power loss (W)	30,60
Min. ambient temperature (°C)	-40
Max. ambient temperature (°C)	70
Device category	circuit breaker
Standard	EN 60947-2
Rated current (A)	160
Rated voltage	< 690VAC
Short circuit switching capacity (400V) (kA)	50
Size type	2
Tripping Unit	Digital electronic release - Type EM
Poles	3
Pollution degree	3
IP Rating	IP40
Mechanical durability	15000 operation cycles
Rated insulation voltage [Ui] (V)	1000
Rated impulse withstand voltage [Uimp] (V)	8000
Rated ultimate short-circuit breaking capacity Icu (kA)	50
Rated service breaking capacity Ics (kA)	50
AC 380/400/415V	50kA (Icu) / 50kA (Ics)
AC 440V	50kA (Icu) / 50kA (Ics)
AC 500V	40kA (Icu) / 40kA (Ics)
AC 660/690V	8kA (Icu) / 8kA (Ics)
Electrical endurance (Operation cycle)	
AC 415V, In	6000
AC 690V, In	1500

Dimensions



Tripping characteristic curves



Article Table

DESCRIPTION	COPPER WEIGHT (kg/km)	Order No.
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 160A		
Rated current 160A, Short circuit switching capacity (400V) 50kA, Size type 2, Tripping Unit		MX216233
Digital electronic release - Type EM, Poles 3		
Optional Accessories		
Toggle Lever Locking Device for MX2		MX290199
No lock included in the scope of delivery.		
Clip Plate 35mm DIN-S for MX2 3 pole		
Size type 2, Poles 3		MX290213
Communication module Modbus-RTU 24VDC 1.5m		MX290000
Communication module Modbus-RTU 230VAC 1.5m		MX290001
Box Terminal for MX2 10-120mm ² , 1 piece		
Size type 2, Al/Cu		MX290015

Article Table

DESCRIPTION	COPPER WEIGHT (kg/km)	Order No.
Optional Accessories		
Connection extension 3 pole for MX2, 6 pieces Poles 3, 6 pieces included per item, for 3-pole MX2 (for top and bottom)		MX290019
Terminal Cover short 3 pole for MX2 Poles 3, for top and bottom		MX290780
Terminal Cover long 3 pole for MX2 Poles 3, for top and bottom		MX290783
Tunnel Terminal 1x35-240mm ² for MX2, 1 piece, max. 200A Size type 2, Al/Cu, current max. 200A, not maintenance-free for Aluminum, attend to connection conditions!! No use in PV applications/frequency inverters permitted!		MX296730
Tunnel Terminal 2x35-120mm ² for MX2, 1 piece, max. 200A Size type 2, Al/Cu, control connection: M4, current max. 200A, not maintenance-free for Aluminum, attend to connection conditions!! No use in PV applications/frequency inverters permitted!		MX296731
Tunnel Terminal 6x10-35mm ² for MX2, 1 piece, max. 200A Size type 2, Al/Cu, control connection: M4, current max. 200A, not maintenance-free for Aluminum, attend to connection conditions!! No use in PV applications/frequency inverters permitted!		MX296732
Rear Connection, 3P for MX2, for both connection sides Size type 2		MX296734
Socket for MX2 3 pole Size type 2, Poles 3		MX296871
Safety release for socket MX2 for thermal release Size type 2		MX296873
Safety release for socket MX2 for electronic release Size type 2		MX296874
Phase separator plates MX2 Size type 2		MX296870
Rotary handle complete, lockable for MX2, thermal release		MX290125
Rotary handle complete, lockable for MX2, electronic release		MX290126
Door Coupling Rotary Handle, for MX2 for thermal release Size type 2, Axle length 50cm		MX290172
Door Coupling Rotary Handle, for MX2 for electronic release Size type 2, Axle length 50cm		MX290173
Mechanical Interlock for MX2 3 pole Size type 2, Poles 3		MX291581
Under Voltage Release 110VAC for MX2, MX3 Size type 2,3		MX299462

Article Table

DESCRIPTION	COPPER WEIGHT (kg/km)	Order No.
Optional Accessories		
Under Voltage Release 220-240VAC for MX2, MX3 Size type 2,3		MX299471
Under Voltage Release 380-415VAC for MX2, MX3 Size type 2,3		MX299473
Under Voltage Release 24VDC for MX2, MX3 Size type 2,3		MX299481
Under Voltage Release 220VDC for MX2, MX3 Size type 2,3		MX299489
Shunt trip 110VAC for MX2, MX3		MX299567
Shunt trip 220-240VAC for MX2, MX3		MX290154
Shunt trip 380-415VAC for MX2, MX3		MX291607
Shunt trip 24VDC for MX2, MX3		MX299736
Shunt trip 220VDC for MX2, MX3		MX299742
Remote Operator 24VDC for MX2 Size type 2		MX299837
Remote Operator 110VAC/110-120VDC for MX2 Size type 2		MX299838
Remote Operator 220-240VAC/220VDC for MX2 Size type 2		MX299832
Remote Operator 380-415VAC for MX2 Size type 2		MX299833
RCD für MX2 3 pole Type A 50-200mA-0.5-2A		MX294609
Auxiliary contact 1 CO		MX199411
Alarm contact 1 CO		MX199511
Universal Adapter 250A outgoing conn. top	383	SI321680
RCD for MX2 3 pole, 0.03 - 2A, Type A Size type 2, Tripping Unit Residual Current Circuit Device - RCCD with setting range 0.03A - 0.05A - 0.1A - 0.2A - 0.3A - 0.5A - 1A - 2A, Poles 3		MX294611