

MCCB & Load Switches MX





















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MCCB MX Size 2



■ MCCB MX Size 3



■ MCCB MX Size 4



■ MCCB MX Size 3



■ MCCB MX Size 4



■ Combination MCCB and RCD



Moulded Case Circuit Breakers MX, Fix Installed

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■ MCCB MX Size 1, 3 Pole, 36kA



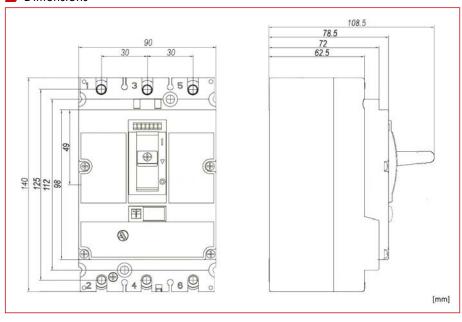
Schrack-Info

- For system and line protection
- Adjustable overload release 0.7 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 36kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 16A to 125A

■ Technical Data

Size type		1
Poles		3
Rated operating current		16 - 125A
Rated operational voltage		≤690VAC
Short circuit switching capacity (400V)		36kA
Release		Thermo-magnetic release - Type A
Rated insulation voltage U _i		1000V
Rated impulse withsand voltage U _{imp}		8kV
	AC 380/400/415V	36kA
Rated ultimate short-circuit breaking capacity I _{cu}	AC 440V	36kA
kalea dilililale siloti-circuit breaking capacity i _{cu}	AC 500V	25kA
	AC 660/690V	6kA
	AC 380/400/415V	36kA
Rated service breaking capacity I _{cs}	AC 440V	36kA
Raied service breaking capacity ics	AC 500V	25kA
	AC 660/690V	6kA
Pollution degree		3
IP Rating		IP20
Min. ambient temperature		-40°C
Max. ambient temperature		70°C
Mechanical durability		15000 operation cycles
Electrical endurance	AC 415V, I _n	8000 operation cycles
Liectrical endurance	AC 690V, I _n	2000 operation cycles
Weight		1.19kg

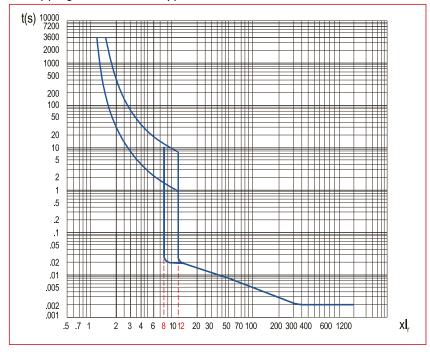
Dimensions





MCCB MX Size 1, 3 Pole, 36kA

Tripping Characteristic: Type A



DESCRIPTION	AVAILABLE	ORDER NO.
16 to 125A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 16A	JUNEAU COM CO	MX116431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 20A	TOOL OW G	MX120431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 25A	TOOL OF S	MX125431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 32A	TOOL OW G	MX132431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 40A	TOOL OF S	MX140431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 50A	DDD Ow G	MX150431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 63A	JUNEAU COM CO	MX163431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 80A	3000 Ow G	MX180431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 100A	1000 00 00 00 00 00 00 00 00 00 00 00 00	MX110431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 125A	1000 00 00 00 00 00 00 00 00 00 00 00 00	MX112431





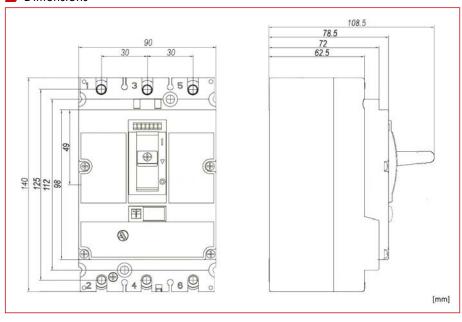
Schrack-Info

- For system and line protection
- Adjustable overload release 0.7 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 16A to 125A

■ Technical Data

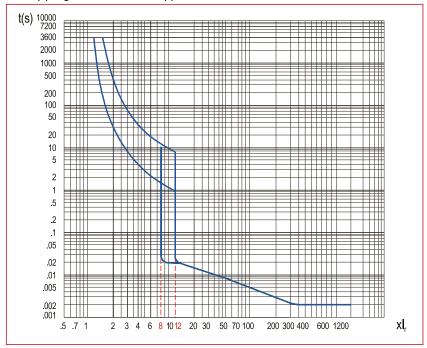
Size type		1	
Poles		3	
Rated operating current		16 - 125A	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		50kA	
Release		Thermo-magnetic release - Type A	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		8kV	
·	AC 380/400/415V	50kA	
Date di chiarata alcani siancia la calcia di caracia di	AC 440V	50kA	
Rated ultimate short-circuit breaking capacity I _{cu}	AC 500V	40kA	
	AC 660/690V	8kA	
	AC 380/400/415V	50kA	
Rated service breaking capacity I _{cs}	AC 440V	50kA	
kaled service breaking capacity I _{cs}	AC 500V	40kA	
	AC 660/690V	8kA	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
Electrical endurance	AC 415V, I _n	8000 operation cycles	
Electrical endurance	AC 690V, I _n	2000 operation cycles	
Weight		1.19kg	

Dimensions





Tripping Characteristic: Type A



DESCRIPTION	AVAILABLE	ORDER NO.
16 to 125A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 16A	BOOL On G	MX116231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 20A	2000 Om @	MX120231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 25A	JOHNS TO	MX125231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 32A	2000 Om @	MX132231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 40A	200 Ow 69	MX140231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 50A	3000 Ow 60	MX150231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 63A	TOOL ON B	MX163231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 80A	3000 Ow 69	MX180231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 100A		MX110231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 125A	1000 Om 00	MX112231



MCCB MX Size 1, 4 Pole, 36kA



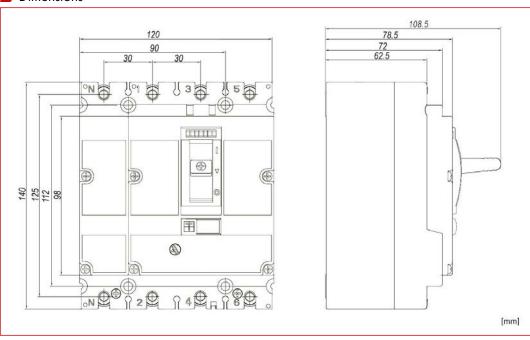
Schrack-Info

- For system and line protection
- Adjustable overload release 0.7 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 36kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 16A to 125A

■ Technical Data

Size type		1	
Poles		4	
Rated operating current (A)		16 - 125A	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		36kA	
Release		Thermo-magnetic release - Type A	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		8kV	
	AC 380/400/415V	36kA	
Rated ultimate short-circuit breaking capacity law	AC 440V	36kA	
kaled dillillate short-circuit breaking capacity icu	AC 500V	25kA	
	AC 660/690V	6kA	
	AC 380/400/415V	36kA	
Rated service breaking capacity I _{cs}	AC 440V	36kA	
raied service breaking capacity ics	AC 500V	25kA	
	AC 660/690V	6kA	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
Electrical endurance operation cycles	AC 415V, I _n	8000 operation cycles	
Liectrical enautance operation cycles	AC 690V, I _n	2000 operation cycles	
Weight		1.55kg	

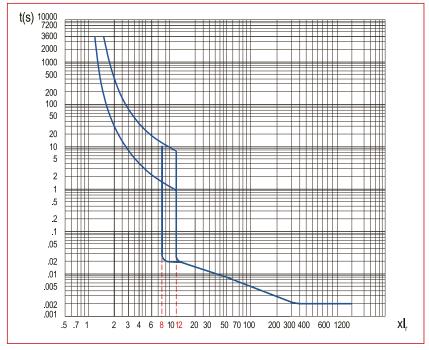
Dimensions





MCCB MX Size 1, 4 Pole, 36kA

Tripping Characteristic: Type A



DESCRIPTION	AVAILABLE	ORDER NO.
16 to 125A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 16A	JOHN OF G	MX116441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 20A	2000	MX120441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 25A	- DEG - Company	MX125441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 32A		MX132441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 40A	JOHN TO THE STATE OF THE STATE	MX140441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 50A	COC	MX150441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 63A	JOHN THE THE PARTY OF THE PARTY	MX163441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 80A	2000	MX180441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 100A	1000 00 00 00 00 00 00 00 00 00 00 00 00	MX110441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 125A	JOHN DE GE	MX112441



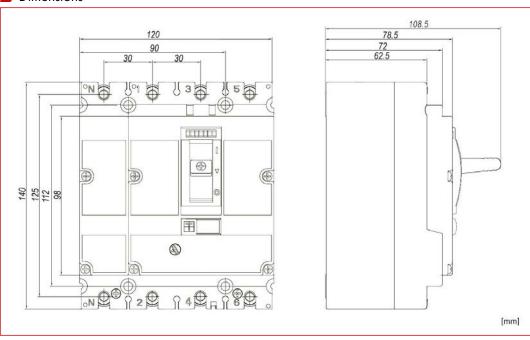
Schrack-Info

- For system and line protection
- Adjustable overload release 0.7 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 16A to 125A

■ Technical Data

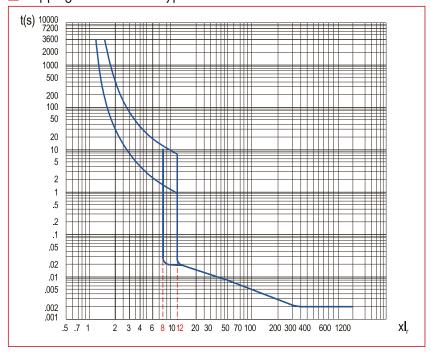
Size type		1	
Poles		4	
Rated operating current		16 - 125A	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		50kA	
Release		Thermomagnetic release - Type A	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		8kV	
·	AC 380/400/415V	50kA	
Data di chiangga ahang akan isan isah na ahijan ang matan l	AC 440V	50kA	
Rated ultimate short-circuit breaking capacity l _{cu}	AC 500V	40kA	
	AC 660/690V	8kA	
	AC 380/400/415V	50kA	
Rated service breaking capacity I _{cs}	AC 440V	50kA	
kalea service breaking capacity i _{cs}	AC 500V	40kA	
	AC 660/690V	8kA	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature	70°C		
Mechanical durability		15000 operation cycles	
Electrical endurance	AC 415V, I _n	8000 operation cycles	
ciecifical enaurance	AC 690V, I _n	2000 operation cycles	
Weight		1.55kg	

Dimensions





Tripping Characteristic: Type A



DESCRIPTION	AVAILABLE	ORDER NO.
16 to 125A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 16A	The Company	MX116241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 20A	COOL Com Cal	MX120241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 25A	The state of the s	MX125241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 32A	2000 Om 20	MX132241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 40A	The state of the s	MX140241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 50A		MX150241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 63A	The state of the s	MX163241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 80A	2000 Om a	MX180241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 100A	The state of the s	MX110241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 125A	1000 Om a	MX112241



Combination MCCB Size 1 and RCD



MX110241F1

Schrack-Info

MX180231F1: Combination MX180231 MCCB (Type A, 3P, 50kA, 80A) and RCD MX180241F1: Combination MX180241 MCCB (Type A, 4P, 50kA, 80A) and RCD MX110231F1: Combination MX110231 MCCB (Type A, 3P, 50kA, 100A) and RCD MX110241F1: Combination MX110241 MCCB (Type A, 4P, 50kA, 100A) and RCD MX112231F1: Combination MX112231 MCCB (Type A, 3P, 50kA, 125A) and RCD MX112241F1: Combination MX112241 MCCB (Type A, 4P, 50kA, 125A) and RCD Residual Current Device:

- Release Type A
- Four-step adjustable rated residual operating current $I_{\Delta n}$ = 30-100-300-1000mA
- Adjustable delay time 0-60-200-500ms

Technical Data: RCD

Rated operating current I _n (40°C)	125	
Size	1	
Poles		3P, 4P
Rated insulation voltage U _i		1000V
Rated impulse withstand voltage U _{imp}		8kV
Rated operational voltage U _e (50/60Hz)		380/440/415VAC, 440VAC
Rated residual operating current $I_{\Delta n}$		0.03-0.1-0.3-1A
Rated residual non-operating current l∆no		0.5I _{Δn} A
Limit non-actuating time		Δt: 0-60-200-500ms*
Breaking time	100-300-500-1000ms	
Rated residual making and breaking capacity $I_{\Delta m}$		0.25I _{cu} kA
Standard		IEC/EN 60947-2
Ambient temperature		-25°C ~ 70°C
Arcing distance		0
Dimension with circuit breaker	Width (3P/4P)	90mm/120mm
	Height	205mm
	Depth	78.5mm
Weight	3P	0.43kg
	4P	0.51kg

Note: *When the residual operating current is set to 0.03A, the limit non-actuating time must be set to 0.

Derating Factor for Circuit Breaker with RCD

Model		Derating factor
MX1	80A~100A	0.9
	125A	0.8

DESCRIPTION	AVAILABLE	ORDER NO.
Combination MCCB Type A, 4P, 50kA, 100A and RCD up to 1A	3000 00 g	MX110241F1
Combination MCCB Type A, 3P, 50kA, 100A and RCD up to 1A	Junear D	MX110231F1
Combination MCCB Type A, 3P, 50kA, 125A and RCD up to 1A	3000 00 00	MX112231F1
Combination MCCB Type A, 4P, 50kA, 80A and RCD up to 1A	TOOL OF O	MX180241F1
Combination MCCB Type A, 3P, 50kA, 80A and RCD up to 1A	1000 00 00 00 00 00 00 00 00 00 00 00 00	MX180231F1
Combination MCCB Type A, 3P, 50kA, 80A and RCD up to 1A	Streets O	MX112241F1

■ MCCB MX Size 1, Selectivity table

	Upstream					MX1	мссв				
Downstream	In(A)	16	20	25	32	40	50	63	80	100	125
	≤10	0.19kA	0.19kA	0.3kA	0.4kA	0.5kA	0.5kA	0.5kA	0.63kA	0.8kA	1kA
	16			0.3kA	0.4kA	0.5kA	0.5kA	0.5kA	0.63kA	0.8kA	1kA
	20					0.5kA	0.5kA	0.5kA	0.63kA	0.8kA	1kA
	25						0.5kA	0.5kA	0.63kA	0.8kA	1kA
AM MCB	32							0.5kA	0.63kA	0.8kA	1kA
	40								0.63kA	0.8kA	1kA
	50									0.8kA	1kA
	63										1kA
	≤10	0.21kA	0.21 kA	0.33kA	0.42kA	0.54kA	0.54kA	0.54kA	0.65kA	0.83kA	1.1kA
	13			0.33kA	0.42kA	0.54kA	0.54kA	0.54kA	0.65kA	0.83kA	1.1kA
	16			0.33kA	0.42kA	0.54kA	0.54kA	0.54kA	0.65kA	0.83kA	1.1kA
	20					0.54kA	0.54kA	0.54kA	0.65kA	0.83kA	1.1kA
AK RCBO 1+N	25						0.54kA	0.54kA	0.65kA	0.83kA	1.1kA
	32							0.54kA	0.65kA	0.83kA	1.1kA
	40								0.65kA	0.83kA	1.1kA
	50									0.83kA	1.1kA
	63										1.1kA
	≤10	0.25kA	0.25kA	0.35kA	0.42kA	0.55kA	0.55kA	0.55kA	0.66kA	0.85kA	1.3kA
	13			0.35kA	0.42kA	0.55kA	0.55kA	0.55kA	0.66kA	0.85kA	1.3kA
	16			0.35kA	0.42kA	0.55kA	0.55kA	0.55kA	0.66kA	0.85kA	1.3kA
AK RCBO 3+N	20					0.55kA	0.55kA	0.55kA	0.66kA	0.85kA	1.3kA
	25						0.55kA	0.55kA	0.66kA	0.85kA	1.3kA
	32							0.55kA	0.66kA	0.85kA	1.3kA
	40								0.66kA	0.85kA	1.3kA
	≤10	0.21kA	0.21kA	0.33kA	0.42kA	0.54kA	0.55kA	0.55kA	0.65kA	0.83kA	1.1kA
	16			0.33kA	0.42kA	0.54kA	0.55kA	0.55kA	0.65kA	0.83kA	1.1kA
AMxxx5xx MCB	20					0.54kA	0.55kA	0.55kA	0.65kA	0.83kA	1.1kA
1+N/1TE	25						0.55kA	0.55kA	0.65kA	0.83kA	1.1kA
	32							0.55kA	0.65kA	0.83kA	1.1kA
	40								0.65kA	0.83kA	1.1kA
	16					0.4kA	0.5kA	0.5kA	0.63kA	0.8kA	1kA
	20						0.5kA	0.5kA	0.63kA	0.8kA	1kA
MY1 MCCD	25							0.5kA	0.63kA	0.8kA	1kA
MX1 MCCB	32								0.63kA	0.8kA	1kA
	40									0.8kA	1kA
	50										1kA

Notes:



¹⁾ No content, indicating no selectivity.

^{2) 1}kA, indicating local selectivity, the number indicates the maximum fault current to achieve selectivity. For example, selectivity can be achieved below 1 kA, and above 1 kA upper and lower level circuit breakers may act simultaneously.

MCCB MX Size 1 - Accessories







MX 190125



MX 190172



MX190780



MX196730



MX199832



MX 199471



MX190783

Schrack-Info

Wide range of accessories:

- Auxiliary contacts
- Rotary handles, door coupling handles
- Under voltage release units, shunt-trips
- Residual current release units
- Connection accessories
- General accessories

Installation Diagram for Accessories

Alarm contact Shunt trip, alarm contact Auxiliary contact Auxiliary contact, alarm contact Shunt trip Under-voltage release, alarm contact Shunt trip, auxiliary contact, alarm Under-voltage release contact Under-voltage release, auxiliary Shunt trip, auxiliary contact contact, alarm contact Auxiliary contact, under-voltage release 1) Left 2) Right

- -) MX1 cannot be equipped with undervoltage release and shunt release at the same time
- -) MX1 can be equipped with a maximum of 2 auxiliary contacts

- - 3) Handle
 - Shunt trip
 - Under-voltage release
 - Auxiliary contact
 - Alarm contact

■ MCCB MX Size 1 - Accessories

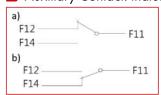
Derating Factor Table for Circuit Breaker with Residual Current Protection Module

Model		Derating factor
MAY I MACCO	16A ~ 63A	1
MX1 MCCB + MX1 RCD	80A ~ 100A	0.9
MIXTROD	125A	0.8

Derating Factor Table for Circuit Breakers with Plug-In and Drive-In socket

Model		Derating factor
MX1	16A ~ 100A	1
IVIX I	125A	0.95

Auxiliary Contact: Indication of Circuit Breaker Status

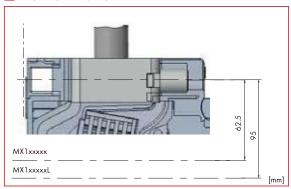


a) Circuit breaker is at breaking statusb) Circuit breaker is at making status

Alarm Contact: Indication of Circuit Breaker Status

- a)
 B12
 B14
 b)
 B12
 B12
 B14
 B14
 B11
- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

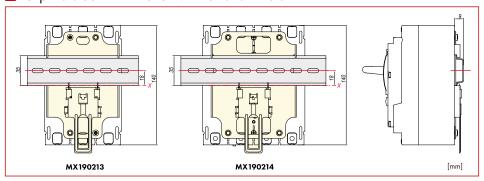
Box Terminal for MX1



Suitable for aluminum and Cu conductors.

Allows the direct connection of bare conductors.

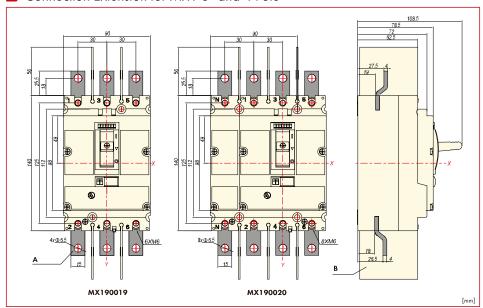
Clip Plate 35mm Din-S for MX1 3- and 4 Pole





MCCB MX Size 1 - Accessories

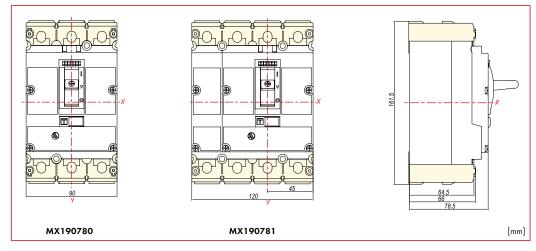
Connection Extension for MX1 3- and 4 Pole



A	Top view
В	Phase separator
Х	Horizontal centre
Y	Vertical centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

■ Terminal Cover Short for MX1 3- and 4 Pole



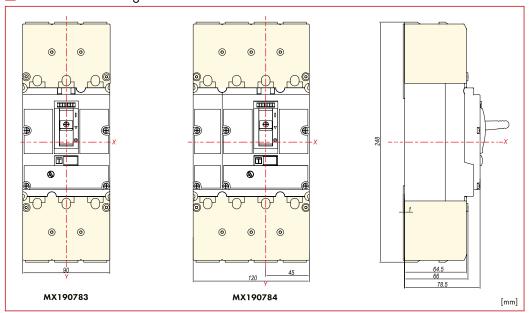
Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.

■ MCCB MX Size 1 - Accessories

■ Terminal Cover Long for MX1 3- and 4 Pole

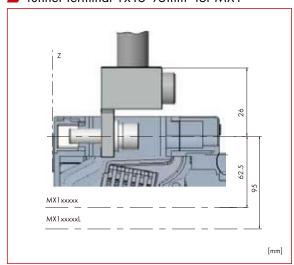


Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.

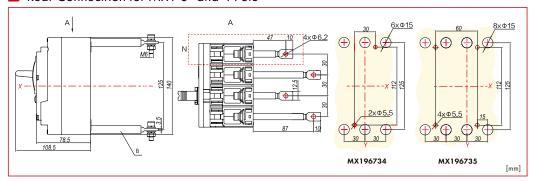
■ Tunnel Terminal 1x16-95mm² for MX1



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors.

Rear Connectrion for MX1 3- and 4 Pole



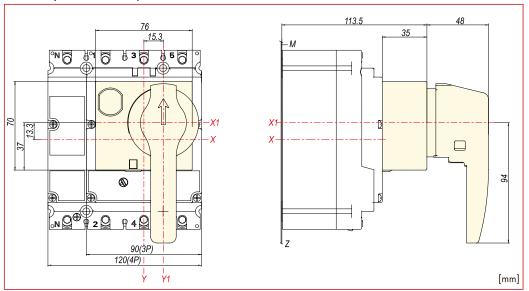
Allows the circuit breaker to b	connected behind	the mounting level.
---------------------------------	------------------	---------------------

A	Top view	
В	Connection extension	
N	Neutral conductor	
Х	X Horizontal centre	
Y	Vertical centre	



MCCB MX Size 1 - Accessories

Rotary Handle Complete, Lockable for MX1



X Horizontal centre Switch	
X1 Horizontal centre rotary handle	
Y Vertical centre Switch	
Y1 Vertical centre rotary handle	

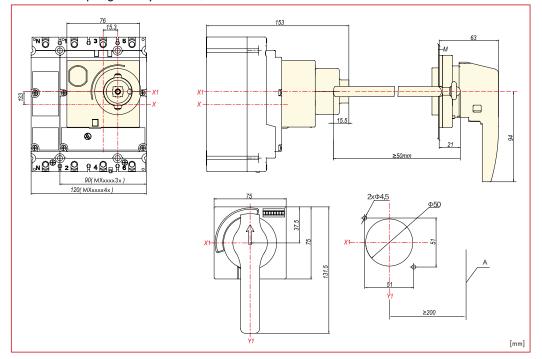
Protection class: IP40

Activating position 0, I and released, in 3 positions

The rotary handle can be locked with a padlock in the OFF state.

Attention: two versions for thermomagnetic or electronic triggers.

■ Door Coupling Rotary Handle, Lockable for MX1



X Horizontal centre switch
X1 Horizontal centre rotary handle
Y Vertical centre switch
Y1 Vertical centre rotary handle

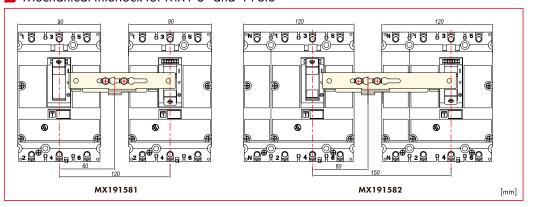
Protection class: IP50

Activation position 0, I and triggered, in 3 positions
The rotary handle can be locked with a padlock in the OFF state.
Attention: two versions for thermomagnetic or electronic triggers
Control cabinet door locked in position "I"



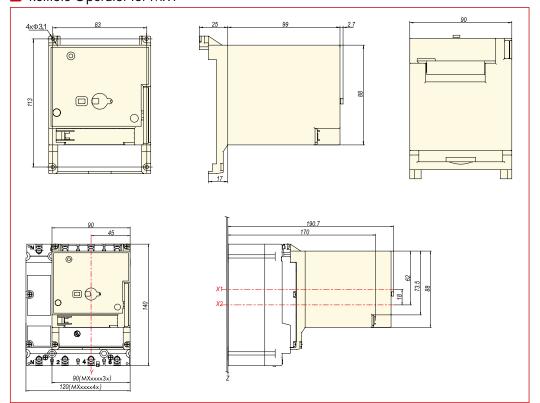
MCCB MX Size 1 - Accessories

■ Mechanical Interlock for MX1 3- and 4 Pole

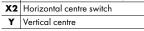


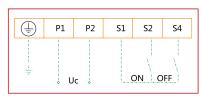
When using this locking device with two circuit breakers of the same size, only one of them can be operated. For manual locking of two circuit breakers.

Remote Operator for MX1









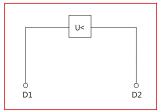
It is suitable for switching on, off and switching on circuit breakers over long distances, as well as for automation applications.

- Protection class: IP40
- Display 0, I and triggered in 3 positions
- Switching between Automatic and Manual Operation
- Automatic switching via electrical control inputs
- Manual switching via key.
- When control voltage is between 85% and 110%, the circuit breaker can be reliably switched on and off.



■ MCCB MX Size 1 - Accessories

Under Voltage Release



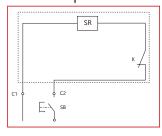
 $Immediate\ triggering\ of\ circuit\ breakers\ or\ switch\ disconnectors\ when\ the\ supply\ voltage\ drops\ below\ 35\%\ -\ 70\%.$

Can be used for EMERGENCY STOP devices.

Installed in the circuit breaker.

If the undervoltage trigger is de-energized, contacting the switch main contacts during switch-on tests is safely prevented.

Shunt Trip



Instantaneous tripping of circuit-breaker or switch-disconnector on voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the shunt release is live, contacting of the breaker main contacts is reliably prevented during closing attempts.

■ MCCB MX Size 1 - Accessories

Segle Lever Locking Device for MXI A pole Segle Lever Locking Device for MXI A pole Segle Lever Locking Segle Segle MXI A pole Segle Segl	MICCD MIX SIZE 1 - Accessories		
gugle Lever Lacking Device far MX1 3 pole Jip Flate 35mm DIN-S for MX1 4 pole AM190213 AM190214 AM190215 AM190216 AM190216 AM190216 AM190216 AM190216 AM190216 AM190216 AM190216 AM190216 AM190217 AM190219 AM190229 AM1902	DESCRIPTION	AVAILABLE	ORDER NO.
Tilip Piate 3 Shmm DIN-S for MX1 4 pole MX190213 Tilip Piate 3 Shmm DIN-S for MX1 A pole MX190214 Connecting Technic, Accessories ox Terminal for MX1 2.5-75mm², 1 piace MX190015 Connection extension 3 pole for MX1, 6 piaces MX190016 Connection extension 3 pole for MX1, 8 piaces MX190020 MX190731 MX190731 MX190732 MX190732 MX190732 MX190733 MX190733 MX190734 MX190734 MX190734 MX190735 MX190735 MX190873 MX190873 MX190873 MX190873 MX190873 MX190873 MX190873 MX190877 MX1908873 MX190888 MX190888	General Accessories		
Clip Piote 35mm DIN-S for MX1 4 pole Connecting Technic, Accessories Connection extension 3 pole for MX1, piece Connection extension 3 pole for MX1, pieces Connection extension 4 pole for MX1, pieces Connection extension 4 pole for MX1, pieces Connection extension 4 pole for MX1 Connection 4 pole for MX1	Toggle Lever Locking Device for MX1		MX 190199
Connecting Technic, Accessories ox Terminal For MXT 12.5-75mm², I piece ox Terminal For MXT 12.5-75mm², I piece Oxmection extension 3 pole for MXT, 8 pieces Oxmection extension 3 pole for MXT (A pieces) Oxmection extension 3 pole for MXT (A pieces) Oxmection extension 4 pole for MXT (A pieces) Oxmerminal Cover short 3 pole for MXT (A pieces) Oxmerminal Cover short 4 pole for MXT (A pieces) Oxmerminal Cover short 4 pole for MXT (A pieces) Oxmerminal Cover short 4 pole for MXT (A pieces) Oxmerminal Cover long 4 pole for MXT (A pieces) Oxmerminal Cover long 6 pole for MXT (A pieces) Oxer Connection, 4 pole for MXT (A pieces) Oxer For MXT 4 pole (A pieces) Oxer For MXT 4 pole (A pieces) Oxer For MXT 4 pole (A pieces) Oxer Coupling Rates (A	Clip Plate 35mm DIN-S for MX1 3 pole		MX190213
ox Terminal for MX1 2.5-75mm², 1 piace MX190015 connection extension 3 pole for MX1, 6 pieces MX190020 connection extension 4 pole for MX1, 8 pieces MX190020 connection extension 4 pole for MX1 MX190781 connection cover short 4 pole for MX1 MX190782 connection cover short 4 pole for MX1 MX190783 connection cover long 3 pole for MX1 MX190783 connection cover long 3 pole for MX1 MX190783 connection cover long 4 pole for MX1 MX190783 connection to the for MX1 MX190783 cover long 4 pole for MX1 MX190783 cover connection, 3 pole for MX1 MX190734 cover for MX1 3 pole MX190734 cover for MX1 3 pole MX190735 cover for MX1 4 pole MX190736 cover for MX1 4 pole MX190872 colete for MX1 4 pole MX190873 MX190873 MX190870 totary Handles, Door Coupling Handles, Accessories colory Handles complete, lockable for MX1 MX190125 totary Handles complete, lockable for MX1 MX190125 totary Handles complete, lockable for MX1 MX190125 totary Handles complete, lockable for MX1 MX190126 max190128 max190128 max190129 max1901	Clip Plate 35mm DIN-S for MX1 4 pole		MX 190214
Connection extension 3 pole for MX1, 8 pieces MX190019 Connection extension 4 pole for MX1, 8 pieces MX190020 Extension Cover short 3 pole for MX1 MX190780 Extension Cover short 3 pole for MX1 MX190781 Extension Cover long 3 pole for MX1 MX190783 Extension Cover long 3 pole for MX1 MX190783 Extension Cover long 3 pole for MX1 MX190780 Extension Cover long 4 pole for MX1 MX190780 Extension Cover long 5 pole for MX1 MX190730 Extension Cover long 6 pole for MX1 MX190730 Extension Cover long 6 pole for MX1 MX190730 Extension Cover long 6 pole for MX1 MX190730 MX190731 Extension Cover long 6 pole for MX1 MX190732 Extension Cover long 6 pole for MX1 MX190873 MX190873 MX190873 MX190873 MX190870 Extension Complete, lockable for MX1 MX190870 Extension Complete, lockable, for MX1 MX190125 Extension Coupling Ratary Handle, lockable, for MX1 MX190125 Extension Coupling Ratary Handle, lockable, for MX1 MX190125 Extension Coupling Ratary Handle, lockable, for MX1 MX190126 Extension Coupling Ratary Handle, lockable, for MX1 MX190126 Extension Interlock for MX1 4 pole MX190128 Inder Voltage Release Units, Shunt-trips and Accessories Inder Voltage Release 110VAC for MX1 MX190421 Inder Voltage Release 24VDC for MX1 MX190431 Inder Voltage Release 24VDC for MX1 MX190438 Inder Voltage Release 22VDC for MX1 MX190438 Inder Voltage Release 22VDC for MX1 MX190438 Inder Voltage Release 24VDC for MX1 MX190438 Inder Voltage Re	Connecting Technic, Accessories		
Connection extension 4 pole for MX1, 8 piaces MX190020 AMX190781 AMX190781 AMX190783 AMX190783 AMX190783 AMX190783 AMX190783 AMX190784 AMX190783 AMX190784 AMX190783 AMX190784 AMX190784 AMX190783 AMX190784 AMX190734 AMX190734 AMX190734 AMX190735 AMX190734 AMX190735 AMX190735 AMX190877 AMX190878 AMX190888 AMX19088	Box Terminal for MX1 2.5-75mm², 1 piece		MX 190015
eminal Cover short 3 pole for MX1 MX190780 eminal Cover short 4 pole for MX1 MX190781 eminal Cover long 3 pole for MX1 MX190783 eminal Cover long 4 pole for MX1 MX190784 unreal Terminal LX16-95mm² for MX1, 1 piece MX196730 ear Connection, 3 pole for MX1 MX196734 ear Connection, 4 pole for MX1 MX196735 ear Connection, 4 pole for MX1 MX196736 mX196873 cocket for MX1 3 pole MX196873 cocket for MX1 4 pole MX196870 cotary Handles, Door Coupling Handles, Accessories cotary Handles, Door Coupling Handles, Accessories cotary Handles complete, lockable for MX1 MX190870 Acchanical Interlock for MX1 3 pole MX190870 Acchanical Interlock for MX1 3 pole MX190870 Acchanical Interlock for MX1 3 pole MX190870 MX190870 Acchanical Interlock for MX1 4 pole MX190870 MX190880 MX19080 MX	Connection extension 3 pole for MX1, 6 pieces		MX 190019
eminal Cover short 4 pole for MX1 MX190781 MX190783 MX190784 MX190784 MX190784 MX190784 MX190784 MX190784 MX190784 MX190784 MX190730 ear Connection, 3 pole for MX1 MX196730 ear Connection, 4 pole for MX1 MX196730 MX196871 MX196872 cocket for MX1 3 pole Cocket for MX1 4 pole Cocket for MX1 3 pole Cocket for MX1 4 pole Cocket for MX1 4 pole Cocket for MX1 4 pole MX196873 MX196870 MX196870 MX196870 MX196870 MX190873 MX190873 MX190870 MX190870	Connection extension 4 pole for MX1, 8 pieces		MX190020
eminal Cover long 3 pole for MX1 Eminal Cover long 4 pole for MX1 AX190783 Eminal Cover long 4 pole for MX1 AX190730 Eminal 1x16-95mm² for MX1, 1 piece MX196734 Ear Connection, 4 pole for MX1 MX196735 AX196871 AX196872 AX196872 AX196873 AX196873 AX196873 AX196873 AX196872 AX196870 AX190125 ABCADIAL Handles on AX1 AX190125 ABCADIAL Handles on AX19 AX190125 ABCADIAL Handles on AX19 AX190125 ABCADIAL Handles on AX19 AX190126 ABCADIAL Handles on AX19 AX190128 ABCADIAL Handles on AX19 AX190128 ABCADIAL Handles on AX19 AX190129 ABCADIAL Handles on AX19 AX190482 ABCADIAL Handles on AX19 AX199462 AX199462 AX199471 AX199471 AX199473 AX199473 AX199489 AX199888 AX1	Terminal Cover short 3 pole for MX1		MX190780
Aminor Cover long 4 pole for MX1 piece MX196730 Aminor Cover long 4 pole for MX1 piece MX196730 Aminor Connection, 3 pole for MX1 MX196735 Aminor Cover long 4 pole for MX1 MX196873 Aminor Cover long 4 pole for MX1 MX196870 Aminor Cover long 4 pole for MX1 MX196870 Aminor Cover long 5 pole for MX1 MX190125 Aminor Cover long 6 pole for MX1 MX190125 Aminor Cover long 6 pole for MX1 MX190125 Aminor Cover fo	Terminal Cover short 4 pole for MX1		MX 190781
unnel Terminal 1x16-95mm² for MX1, 1 piece ear Connection, 3 pole for MX1 ear Connection, 4 pole for MX1 ear Connection, 4 pole for MX1 ocket for MX1 3 pole ocket for MX1 3 pole ocket for MX1 4 pole ocket for MX1 4 pole ocket for MX1 3 pole ocket for MX1 3 pole ocket for MX1 3 pole ocket for MX1 4 pole ocket for MX1 4 pole ocket for MX1 3 pole ocket for MX1 4 pole ocket for MX1 5 pole ocket for MX1 6 pole ocket for MX1	Terminal Cover long 3 pole for MX1	1000 Ow 9	MX190783
ear Connection, 3 pole for MX1 ear Connection, 4 pole for MX1 mX196373 ocket for MX1 3 pole mX196872 ocket for MX1 4 pole mX196873 ocket for MX1 4 pole mX196870 ocket for MX1 4 pole mX196870 octery Handles, Door Coupling Handles, Accessories otary Handles, Door Coupling Handles, Accessories otary Handles, Door Coupling Handles, Accessories otary Handles, Door Coupling Ratery Handle, lockable, for MX1 mX190172 Acceptable, Include Complete, lockable, for MX1 mX190172 Acceptable, Include Couplete, Include Couplete	Terminal Cover long 4 pole for MX1	1000 Ow 0	MX190784
ear Connection, 4 pole for MX1 3 pole MX196871 ocket for MX1 4 pole MX196872 dety release for socket MX1 MX196873 MX196873 MX196873 MX196873 MX196873 MX196873 MX196870 MX190870 Totary Handles, Door Coupling Handles, Accessories otary Handle complete, lockable for MX1 MX190125 Totary Handle complete, lockable for MX1 MX190172 Mechanical Interlock for MX1 3 pole MX191581 MX191582 Machanical Interlock for MX1 4 pole MX191582 Inder Voltage Release Units, Shunt-trips and Accessories Inder Voltage Release 110VAC for MX1 MX199462 Inder Voltage Release 220-240VAC for MX1 MX199473 Inder Voltage Release 380-415VAC for MX1 MX199473 Inder Voltage Release 220VDC for MX1 MX199481 Inder Voltage Release 220VDC for MX1 MX199481 Inder Voltage Release 220VDC for MX1 MX199480 MX191607 MX199736 MX199736 MX199736 MX199736 MX199736 MX199736 MX199837 emote Operator 24VDC for MX1 MX199833 MX199833 MX199833 MX199833 MX199833 MX199833 MX199831 MX199833 MX199831 MX199831	Funnel Terminal 1x16-95mm² for MX1, 1 piece	1000 Ow 9	MX 196730
ocket for MX1 3 pole ocket for MX1 4 pole offety release for socket MX1 AX196872 offety release for socket MX1 AX196873 hase separator plates MX1 AX196870 NX196870 NX196870 NX196870 NX196870 NX196870 NX196870 NX190125 Octorry Handles, Door Coupling Handles, Accessories orange of Coupling Rotary Handle, lockable for MX1 AX190125 Acchanical Interlock for MX1 3 pole AX191581 Acchanical Interlock for MX1 3 pole AX191582 Inder Voltage Release Units, Shunt-trips and Accessories Inder Voltage Release 110VAC for MX1 AX199462 Inder Voltage Release 220-240VAC for MX1 AX199471 Inder Voltage Release 380-415VAC for MX1 AX199481 Inder Voltage Release 220VDC for MX1 AX199489 Hunt trip 110VAC for MX1 AX199489 Hunt trip 110VAC for MX1 AX199489 Hunt trip 220-240VAC for MX1 AX199776 Hunt trip 220-240VAC for MX1 AX199736 Hunt trip 220VDC for MX1 AX199736 Hunt trip 220VDC for MX1 AX199838 emote Operator 110VAC/110-120VDC for MX1 AX199838 emote Operator 380-415VAC for MX1 AX199838 AXX199833 AXXIIIary Contacts AXX199831 AXX199833 AXXIIIary Contacts AXX199411	Rear Connection, 3 pole for MX1	DOD ON GO	MX196734
acket for MX1 4 pole aftery release for socket MX1 AX196872 aftery release for socket MX1 AX196870 AX190125 AX190426 AX190426 AX190427 AX190427 AX190471 AX190471 AX190471 AX190489 AX190154 AX190837 AX190837 AX190838 AX190838 AXIII AX190838 AXIII AX190838 AXIII AXIII AX190838 AXIII AX	Rear Connection, 4 pole for MX1	DER ON GE	MX196735
detry release for socket MX1 MX196870 Axtotary Handles, Door Coupling Handles, Accessories attraction of the properties of the properti	Socket for MX1 3 pole	DDD Ow go	MX196871
hase separator plates MX1 Lotary Handles, Door Coupling Handles, Accessories otary Handle complete, lockable for MX1 Acceptancial Interlock for MX1 apole Acceptancial Interlock for MX1 acceptancial Interlock	Socket for MX1 4 pole	ORD On Go	MX196872
Actorary Handles, Door Coupling Handles, Accessories otary Handle complete, lockable for MX1 According Retary Handle, lockable, for MX1 Apole According Retary Handle, lockable, for MX1 Apole According Retary Handles, Door MX1 Apo	Safety release for socket MX1	THE STATE OF THE S	MX196873
otary Handle complete, lockable for MX1 Proor Coupling Rotary Handle, lockable, for MX1 Ackedanical Interlock for MX1 3 pole Ackedanical Interlock for MX1 4 pole Ackedanical Interlock for MX1	Phase separator plates MX1	1000 Om 60	MX196870
Acchanical Interlock for MX1 3 pole Acchanical Interlock for MX1 4 pole Acchanical Interlock for MX1 A pole Acchanical	Rotary Handles, Door Coupling Handles, Accessories		
Acchanical Interlock for MX1 a pole Acchanical Interlock for MX1 4 pole Acchanical Interlock for MX1	Rotary Handle complete, lockable for MX1	OCO OCO	MX190125
Acchanical Interlock for MX1 4 pole Accessories Inder Voltage Release Units, Shunt-trips and Accessories Inder Voltage Release 110VAC for MX1 Inder Voltage Release 220-240VAC for MX1 Inder Voltage Release 280-240VAC for MX1 Inder Voltage Release 24VDC for MX1 Inder Voltage Release 24VDC for MX1 Inder Voltage Release 220VDC for	Door Coupling Rotary Handle, lockable, for MX1	The Transfer of the Transfer o	MX 190172
Inder Voltage Release Units, Shunt-trips and Accessories Inder Voltage Release 110VAC for MX1 Inder Voltage Release 220-240VAC for MX1 Inder Voltage Release 380-415VAC for MX1 Inder Voltage Release 24VDC for MX1 Inder Voltage Release 220VDC for MX1 Inder	Mechanical Interlock for MX1 3 pole	THE THE PARTY OF T	MX191581
Inder Voltage Release Units, Shunt-trips and Accessories Inder Voltage Release 110VAC for MX1 Inder Voltage Release 220-240VAC for MX1 Inder Voltage Release 380-415VAC for MX1 Inder Voltage Release 24VDC for MX1 Inder Voltage Release 220VDC for MX1 Inder	Mechanical Interlock for MX1 4 pole	DER ON GE	MX191582
Inder Voltage Release 220-240VAC for MX1 Inder Voltage Release 380-415VAC for MX1 Inder Voltage Release 24VDC for MX1 Inder Voltage Release 220VDC for MX1 Inder Voltage Release 220	Jnder Voltage Release Units, Shunt-trips and Accessories		
Inder Voltage Release 380-415VAC for MX1 Inder Voltage Release 24VDC for MX1 Inder Voltage Release 22VDC for MX1 Inder Voltage Release 24VDC for MX1 Inder	Under Voltage Release 110VAC for MX1	DDD Ow Go	MX199462
Inder Voltage Release 24VDC for MX1 Inder Voltage Release 220VDC for	Under Voltage Release 220-240VAC for MX1	1000 Om (8-	MX 199471
Inder Voltage Release 220VDC for MX1 hunt trip 110VAC for MX1 hunt trip 220-240VAC for MX1 hunt trip 380-415VAC for MX1 hunt trip 24VDC for MX1 hunt trip 220VDC for MX1 mx199736 hunt trip 220VDC for MX1 mx199736 hunt trip 220VDC for MX1 mx199736 hunt trip 220VDC for MX1 mx199837 emote Operator 24VDC for MX1 mx199838 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 mx199833 huxiliary Contacts mx199831	Under Voltage Release 380-415VAC for MX1	DDD Ow go	MX199473
hunt trip 110VAC for MX1 hunt trip 220-240VAC for MX1 hunt trip 380-415VAC for MX1 hunt trip 24VDC for MX1 hunt trip 220VDC for MX1 mx199736 hunt trip 220VDC for MX1 mx199742 emote Operator 24VDC for MX1 emote Operator 110VAC/110-120VDC for MX1 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 mx199833 Auxiliary Contacts mx199831	Under Voltage Release 24VDC for MX1	1000 Om (a)	MX199481
hunt trip 220-240VAC for MX1 hunt trip 380-415VAC for MX1 hunt trip 24VDC for MX1 hunt trip 220VDC for MX1 hunt trip 24VDC for MX1	Under Voltage Release 220VDC for MX1	THE THE PARTY OF T	MX199489
hunt trip 220-240VAC for MX1 hunt trip 380-415VAC for MX1 hunt trip 24VDC for MX1 hunt trip 220VDC for MX1 hunt trip 24VDC for MX1	Shunt trip 110VAC for MX1	TOOL OF GE	MX199567
hunt trip 380-415VAC for MX1 hunt trip 24VDC for MX1 hunt trip 220VDC for MX1 emote Operator 24VDC for MX1 emote Operator 110VAC/110-120VDC for MX1 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 mX199838 emote Operator 380-415VAC for MX1 mX199832 Auxiliary Contacts MX199411	Shunt trip 220-240VAC for MX1	THE THE PARTY OF T	MX190154
hunt trip 220VDC for MX1 emote Operator 24VDC for MX1 emote Operator 110VAC/110-120VDC for MX1 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 Auxiliary Contacts MX199833 MX199833	Shunt trip 380-415VAC for MX1		MX191607
hunt trip 220VDC for MX1 emote Operator 24VDC for MX1 emote Operator 110VAC/110-120VDC for MX1 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 Auxiliary Contacts MX199833 MX199833 MX199833	Shunt trip 24VDC for MX1	Treas	MX199736
emote Operator 24VDC for MX1 emote Operator 110VAC/110-120VDC for MX1 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 Auxiliary Contacts MX199837 MX199838 MX199838 MX199831 MX199831	Shunt trip 220VDC for MX1		MX199742
emote Operator 110VAC/110-120VDC for MX1 emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 MX199832 Auxiliary Contacts MX199831	Remote Operator 24VDC for MX1		MX199837
emote Operator 220-240VAC/220VDC for MX1 emote Operator 380-415VAC for MX1 MX199833 Auxiliary Contacts Auxiliary contact 1 CO MX199411	Remote Operator 110VAC/110-120VDC for MX1		MX199838
emote Operator 380-415VAC for MX1 MX199833 Auxiliary Contacts MX199411	Remote Operator 220-240VAC/220VDC for MX1		MX199832
Auxiliary Contacts Auxiliary contact 1 CO MX199411	Remote Operator 380-415VAC for MX1		MX199833
	Auxiliary Contacts		
	Auxiliary contact 1 CO	COU OF G	MX199411
	Alarm contact 1 CO		MX 199511







MX212431

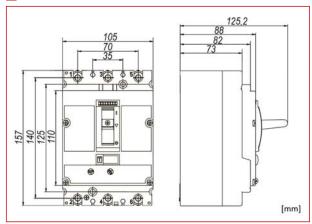
Schrack-Info

- For system, line protection and motor protection
- Adjustable overload release
 - ° with electronic release unit/motor protection: 0.4 1 x In
 - \circ with thermomagnetic release unit: 0.7 1 x ln
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 36kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 32A to 250A

■ Technical Data

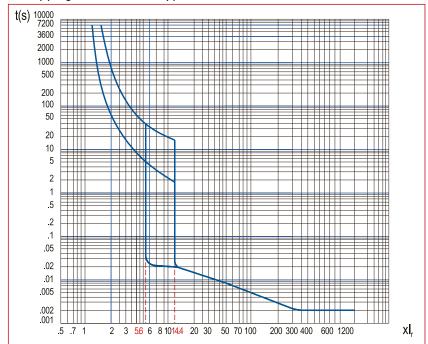
Size type		2
Poles		3
Rated operating current		125 - 250A (Type A); 32 - 250A (Type EN, EM,ENM)
Rated operational voltage		≤690VAC
Short circuit switching capacity (400V)		36kA
Release		Thermomagnetic release - Type A
		Electronic release - Type EN
		Digital electronic release - Type EM
		Electronic release for motor protection - Type ENM
Rated insulation voltage U _i		1000V
Rated impulse withsand voltage U _{imp}		8kV
	AC 380/400/415V	36kA
Rated ultimate short-circuit breaking capacity I _{CI}	AC 440V	36kA
kated ultimate short-circuit breaking capacity I _{cu}	AC 500V	25kA
	AC 660/690V	6kA
	AC 380/400/415V	36kA
Rated service breaking capacity I _{cs}	AC 440V	36kA
rated service breaking capacity i _{cs}	AC 500V	25kA
	AC 660/690V	6kA
Rated short-time withstand current I _{cw} (1s)		1kA (32A,63A); 2kA (100A,160A) 3kA (250A)
Pollution degree		3
IP Rating		IP20
Min. ambient temperature		-40°C
Max. ambient temperature	70°C	
Mechanical durability		15000 operation cycles
The state of the s	AC 415V, I _n	6000 operation cycles
Electrical endurance	AC 690V, I _n	1500 operation cycles
Weight		1.85kg (Type A) 2kg (Type EN, EM, ENM)

Dimensions

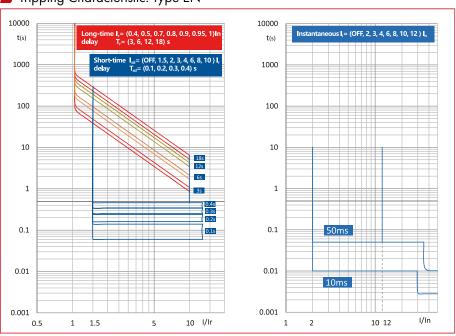




■ Tripping Characteristic: Type A

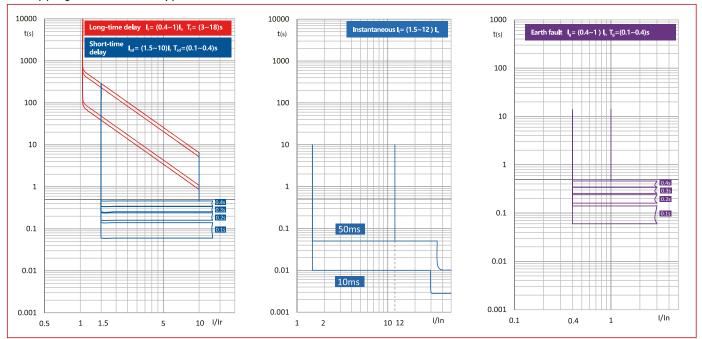


Tripping Characteristic: Type EN

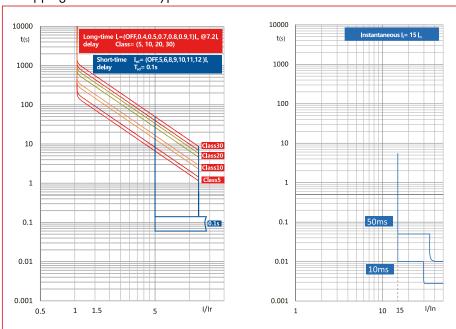




Tripping Characteristic: Type EM



■ Tripping Characteristic: Type ENM



■ MCCB MX Size 2, 3 Pole, 36kA

DESCRIPTION	AVAILABLE	ORDER NO.
125 to 250A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 125A	2000 O G	MX212431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 160A	10-00 G	MX216431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 200A	30-MH 0	MX220431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 250A	10-000 P	MX225431
32 to 250A with Electronic Motor Protection		
Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 32A	30-MM TO	MX232437
Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 63A	1000 G	MX263437
Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 100A	30-000 TO	MX210437
Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 160A	1000 0 G	MX216437
Moulded Case Circuit Breaker Type ENM, 3 pole, 36kA, 250A	30-000 G	MX225437
32 to 250A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 3 pole, 36kA, 32A	30%E	MX232432
Moulded Case Circuit Breaker Type EN, 3 pole, 36kA, 63A	1000 G	MX263432
Moulded Case Circuit Breaker Type EN, 3 pole, 36kA, 100A	1000 0 0 0	MX210432
Moulded Case Circuit Breaker Type EN, 3 pole, 36kA, 160A	1000 0 G	MX216432
Moulded Case Circuit Breaker Type EN, 3 pole, 36kA, 250A	1000 0 9	MX225432
32 to 250A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 3 pole, 36kA, 32A	30-ME 0	MX232433
Moulded Case Circuit Breaker Type EM, 3 pole, 36kA, 63A	1000 0 G	MX263433
Moulded Case Circuit Breaker Type EM, 3 pole, 36kA, 100A		MX210433
Moulded Case Circuit Breaker Type EM, 3 pole, 36kA, 160A	10-00 F	MX216433
Moulded Case Circuit Breaker Type EM, 3 pole, 36kA, 250A	1000 G	MX225433







Schrack-Info

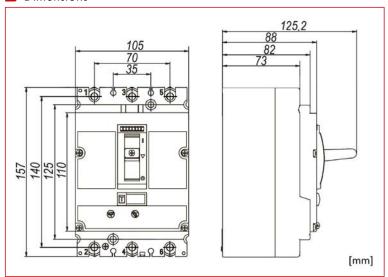
- For system, line protection and motor protection
- Adjustable overload release
 - \circ with thermomagnetic release unit: 0.7 1 x In
 - o with electronic release unit/motor protection: 0.4 1 x ln
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 32A to 250A

■ Technical Data

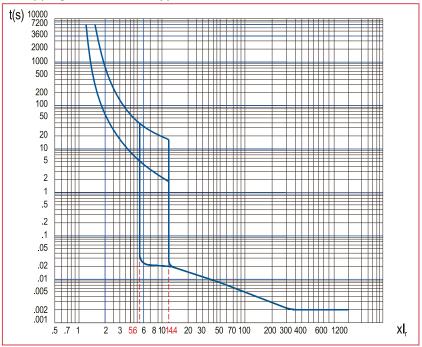
- Iccillical Dala		
Size type		2
Poles	3	
Rated operating current		125 - 250A (Type A); 32 - 250A (Type EN, EM, ENM)
Rated operational voltage		≤690VAC
Short circuit switching capacity (400V)		50kA
Release		Thermomagnetic release - Type A
		Electronic release - Type EN
		Digital electronic release – Type EM
		Electronic release for motor protection - Type ENM
Rated insulation voltage U _i		1000V
Rated impulse withsand voltage U _{imp}		8kV
	AC 380/400/415V	50kA
Rated ultimate short-circuit breaking capacity l _{cu}	AC 440V	50kA
kated utilinate short-circuit breaking capacity I _{cu}	AC 500V	40kA
	AC 660/690V	8kA
	AC 380/400/415V	50kA
Rated service breaking capacity I _{cs}	AC 440V	50kA
kaled service breaking capacity i _{cs}	AC 500V	40kA
	AC 660/690V	8kA
		1kA (32A,63A)
Rated short-time withstand current I_{cw} (1s)		2kA (100A, 160A)
		3kA (250A)
Pollution degree		3
IP Rating		IP20
Min. ambient temperature		-40°C
Max. ambient temperature		70°C
Mechanical durability		15000 operation cycles
Electrical endurance	AC 415V, I _n	6000 operation cycles
Licented chaptanes	AC 690V, I _n	1500 operation cycles
Net weight		1.85kg (Type TM)
THE WEIGHT	2kg (Type EN, EM, ENM)	



Dimensions

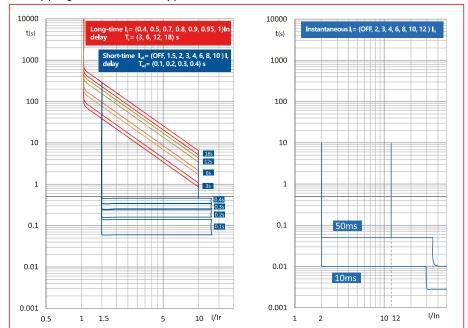


Tripping Characteristic: Type A

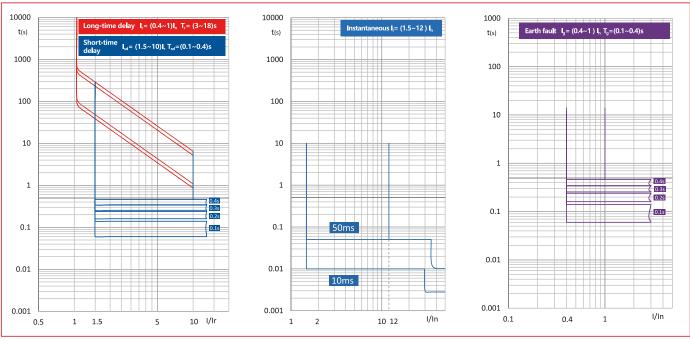




Tripping Characteristic: Type EN

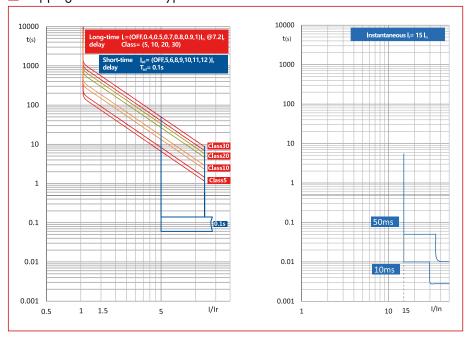


Tripping Characteristic: Type EM





■ Tripping Characteristic: Type EM



DESCRIPTION	AVAILABLE	ORDER NO.
125 to 250A with Fixed Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 125A		MX212231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 160A	The	MX216231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 200A		MX220231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 250A	Andrew One One	MX225231
32 to 250A with Electronic Motor Protection		
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 32A	ODD Owner	MX232237
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 63A	1000 Om (8)	MX263237
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 100A		MX210237
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 160A	1000 Ow (8)	MX216237
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 250A		MX225237
32 to 250A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 32A		MX232232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 63A		MX263232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 100A		MX210232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 160A	1000 Ow (8)	MX216232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 250A		MX225232
32 to 250A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 32A		MX232233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 63A	30-00 (a)	MX263233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 100A		MX210233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 160A	Thomas (a)	MX216233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 250A	OD OF THE STATE OF	MX225233



MCCB MX Size 2, 4 Pole, 36kA



MX212441

Schrack-Info

- For system, line protection and motor protection
- Adjustable overload release
 - \circ $\;$ with thermomagnetic release unit: 0.7 1 x ln $\;$
 - o with electronic release unit/motor protection: 0.4 1 x ln
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 36kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 32A to 250A

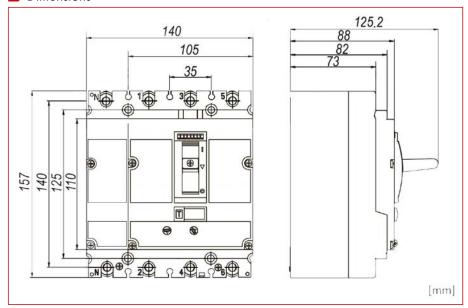
■ Technical Data

Size type		2	
Poles		4	
Rated operating current		125 - 250A (Type A); 32 - 250A (Type EN, EM, ENM)	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		36kA	
Release		Thermomagnetic release - Type A	
		Electronic release - Type EN	
		Digitaler elektronischer Auslöser - Type EM	
		Electronic release for motor protection - Type ENM	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		8kV	
	AC 380/400/415V	36kA	
Rated ultimate short-circuit breaking capacity I _{CII}	AC 440V	36kA	
kalea uliililale short-circuii breaking capacity i _{cu}	AC 500V	25kA	
	AC 660/690V	6kA	
Rated service breaking capacity I _{cs}	AC 380/400/415V	36kA	
	AC 440V	36kA	
	AC 500V	25kA	
	AC 660/690V	6kA	
Rated short-time withstand current I _{Cw} (1s)		1kA (32A,63A) 2kA (100A, 160A)	
Cii .		3kA (250A)	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability operation cycles		15000 operation cycles	
Electrical endurance (operation cycles)	AC 415V, I _n	6000 operation cycles	
	AC 690V, I _n	1500 operation cycles	
Net weight		2.5kg (Type A) 2.65kg (Type EN, EM, ENM)	

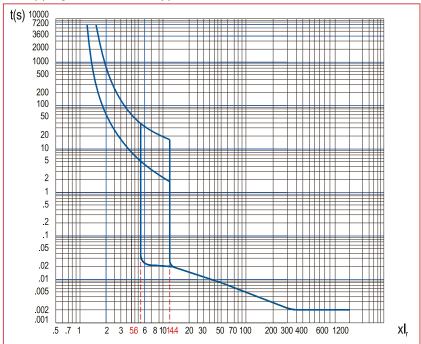


MCCB MX Size 2, 4 Pole, 36kA

Dimensions



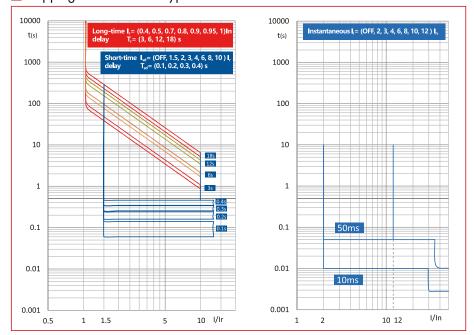
Tripping Characteristic: Type A



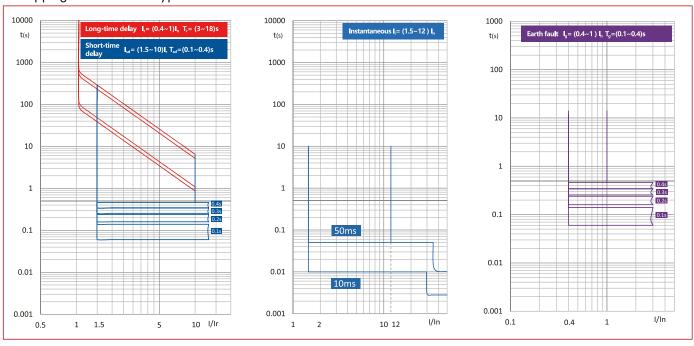


MCCB MX Size 2, 4 Pole, 36kA

Tripping Characteristic: Type EN



Tripping Characteristic: Type EM



■ MCCB MX Size 2, 4 Pole, 36kA

DESCRIPTION	AVAILABLE	ORDER NO.
125 to 250A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 125A	DOG OF G	MX212441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 160A	000 0 0	MX216441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 200A	DOG OF G	MX220441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 250A	000 0 g	MX225441
32 to 250A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 4 pole, 36kA, 32A	DOG OF THE PROPERTY OF THE PRO	MX232442
Moulded Case Circuit Breaker Type EN, 4 pole, 36kA, 63A	DOG OF THE PROPERTY OF THE PRO	MX263442
Moulded Case Circuit Breaker Type EN, 4 pole, 36kA, 100A	DOG OF THE PROPERTY OF THE PRO	MX210442
Moulded Case Circuit Breaker Type EN, 4 pole, 36kA, 160A	DOG OF THE PROPERTY OF THE PRO	MX216442
Moulded Case Circuit Breaker Type EN, 4 pole, 36kA, 250A	JOSEP OF G	MX225442
32 to 250A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 4 pole, 36kA, 32A	DOG OF THE PROPERTY OF THE PRO	MX232443
Moulded Case Circuit Breaker Type EM, 4 pole, 36kA, 63A	DOG OF THE PROPERTY OF THE PRO	MX263443
Moulded Case Circuit Breaker Type EM, 4 pole, 36kA, 100A	Junes	MX210443
Moulded Case Circuit Breaker Type EM, 4 pole, 36kA, 160A	GEG CW G	MX216443
Moulded Case Circuit Breaker Type EM, 4 pole, 36kA, 250A	Jiness	MX225443





Schrack-Info

- For system, line protection and motor protection
- Adjustable overload release
 - \circ with thermomagnetic release unit: 0.7 1 x In
 - o with electronic release unit/motor protection: 0.4 1 x ln
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 32A to 250A

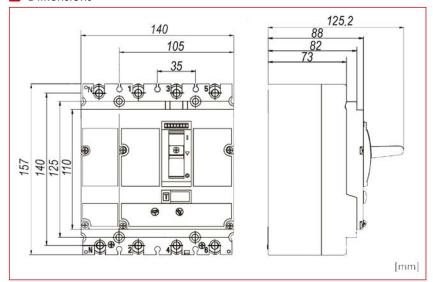
■ Technical Data

- lecillical Dala			
Size type		2	
Poles		4	
Rated operating current		125 - 250A (Type A); 32 - 250A (Type EN, EM, ENM)	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		50kA	
Release		Thermomagnetic release - Type A	
		Electronic release - Type EN	
		Digital electronic release - Type EM	
		Electronic release for motor protection - Type ENM	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		8kV	
	AC 380/400/415V	50kA	
Data di ultimata alcanta insuita harabiana anno arita d	AC 440V	50kA	
Rated ultimate short-circuit breaking capacity I _{cu}	AC 500V	40kA	
	AC 660/690V	8kA	
	AC 380/400/415V	50kA	
Rated service breaking capacity ${\rm I}_{\rm cs}$	AC 440V	50kA	
	AC 500V	40kA	
	AC 660/690V	8kA	
		1kA (32A,63A)	
Rated short-time withstand current I _{cw} (1s)		2kA (100A, 160A)	
- <u></u>		3kA (250A)	
Pollution degree		3	
IP Rating		IP40	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
Electrical endurance	AC 415V, I _n	6000 operation cycles	
Liectrical endurance	AC 690V, I _n	1500 operation cycles	
Net weight		2.5kg (Type A)	
		2.65kg (Type EN, EM, ENM)	

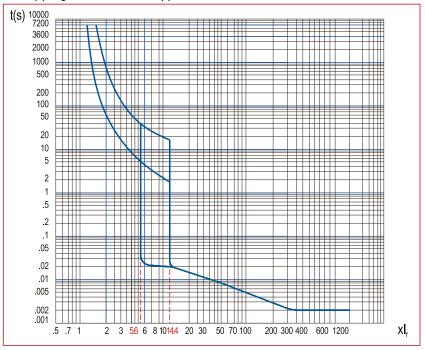


MCCB MX Size 2, 4 Pole, 50kA

Dimensions



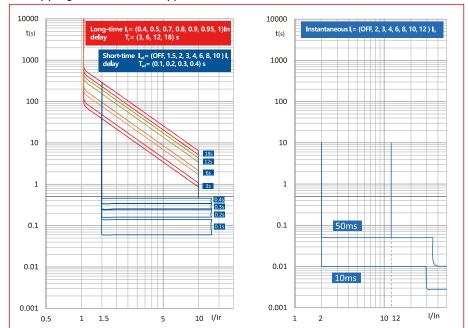
Tripping Characteristic: Type A



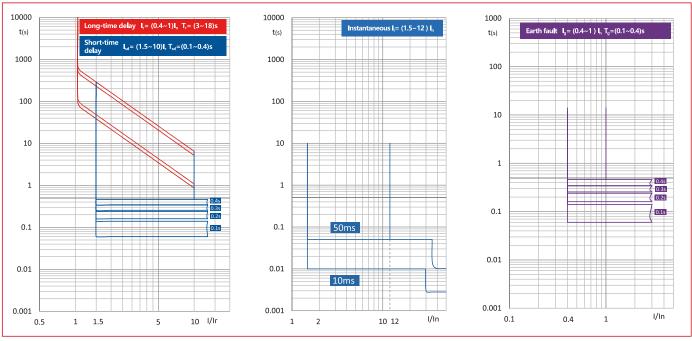


MCCB MX Size 2, 4 Pole, 50kA

Tripping Characteristic: Type EN



Tripping Characteristic: Type EM



■ MCCB MX Size 2, 4 Pole, 50kA

DESCRIPTION	AVAILABLE	ORDER NO.
125 to 250A with Fixed Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 125A	DOG OF G	MX212241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 160A	000 Om @	MX216241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 200A	DOG OF G	MX220241
Moulded Case Circuit Breaker Type A, 4 pole, 50kA, 250A	DOC ON G	MX225241
32 to 250A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 32A	DOG OF THE PROPERTY OF THE PRO	MX232242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 63A	DOG OF THE PROPERTY OF THE PRO	MX263242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 100A	DOG OF THE PROPERTY OF THE PRO	MX210242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 160A	DOG OF THE PROPERTY OF THE PRO	MX216242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 250A	DOC OF THE PROPERTY OF THE PRO	MX225242
32 to 250A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 32A	DOG OF THE PROPERTY OF THE PRO	MX232243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 63A	DOG OF THE PROPERTY OF THE PRO	MX263243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 100A	Junes	MX210243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 160A	GEG OW B	MX216243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 250A	Times	MX225243



Combination MCCB Size 2 and RCD



Schrack-Info

MX210232F1: Combination MX210232 MCCB (Type EN, 3P, 50kA, 100A) and RCD MX210242F1: Combination MX210242 MCCB (Type EN, 4P, 50kA, 100A) and RCD MX225232F1: Combination MX225232 MCCB (Type EN, 3P, 50kA, 250A) and RCD MX225242F1: Combination MX225242 MCCB (Type EN, 4P, 50kA, 250A) and RCD Residual Current Device:

- Release Type A
- Four-step adjustable rated residual operating current $I_{\Delta n}$ = 50mA-200mA-0.5A-2A
- Adjustable delay time 0-60-200-500ms

MX225232F1

■ Technical Data: RCD

Rated operating current I _n (40°C)		250A	
Size		2	
Poles		3P, 4P	
Rated insulation voltage U _i		1000V	
Rated impulse withstand voltage U _{imp}		8kV	
Rated operational voltage U _e (50/60Hz)		380/440/415VAC, 440VAC	
Rated residual operating current $I_{\Delta n}$		0.05-0.2-0.5-1A	
Rated residual non-operating current $I_{\Delta no}$		0,5 I _{∆n} A	
Limit non-actuating time		Δt: 0-60-200-500ms*	
Breakingtime		100-300-500-1000ms	
Rated residual making and breaking capacity $I_{\Delta m}$		0.25I _{cu} kA	
Standard		IEC/EN 60947-2	
Ambient temperature		-25°C~70°C	
Arcing distance		0	
Dimension with circuitbreaker	Width (3P/4P)	105mm/140mm	
	Height	232mm	
	Depth	88mm	
Weight	3P	0.84kg	
	4P	1.08kg	

Note: *When the residual operating current is set to 0.03A, the limit non-actuating time must be set to 0.

Derating Factor for Circuit Breaker with RCD

Model		Derating factor
MX2	100A	1
	250A	0.95

DESCRIPTION	AVAILABLE	ORDER NO.
Combination MCCB Type EN, 3P, 50kA, 100A and RCD up to 1A	DOC DOCUMENT	MX210232F1
Combination MCCB Type EN, 4P, 50kA, 100A and RCD up to 1A	30000F DW 39	MX210242F1
Combination MCCB Type EN, 3P, 50kA, 250A and RCD up to 1A	000 0 0	MX225232F1
Combination MCCB Type EN, 4P, 50kA, 250A and RCD up to 1A	30 metar 100 met	MX225242F1



■ MCCB MX Size 2, Selectivity table

	Upstream	MX2-A MCCB			MX2-EN, EM, ENM MCCB						
Downstream	I _n (A)	125	160	180	200	225	250	32	63	100	160
	≤10	Т	T	T	T	T	T	0.4kA	0.5kA	1kA	T
	16	Т	T	T	T	T	T	0.4kA	0.5kA	1kA	T
	20	Т	T	T	T	T	T		0.5kA	1kA	T
	25	Т	T	T	T	T	T		0.5kA	1kA	T
AM MCB	32	2kA	5kA	T	T	T	T		0.5kA	1kA	Ţ
	40	2kA	5kA	T	T	T	T			1kA	T
	50	2kA	5kA	T	T	T	T			1kA	T
	63	2kA	5kA	T	T	T	T			1kA	T
	≤10	T	T	T	T	T	T	0.42kA	0.54kA	1.1kA	T
	13	Т	T	T	T	T	T	0.42kA	0.54kA	1.1kA	T
	16	T	T	T	T	Ţ	T	0.42kA	0.54kA	1.1kA	Ţ
	20	Т	T	T	T	T	T		0.54kA	1.1kA	T
AK RCBO 1+N	25	Т	T	T	T	T	T		0.54kA	1.1kA	T
	32	2.3kA	5.2kA	T	T	T	T		0.54kA	1.1kA	T
	40	2.3kA	5.2kA	T	T	T	T			1.1kA	T
	50	2.3kA	5.2kA	T	T	T	T			1.1kA	T
	63	2.3kA	5.2kA	T	T	T	T			1.1kA	T
	≤10	T	T	T	T	T	T	0.42kA	0.55kA	1.3kA	T
	16	T	T	T	T	T	T	0.42kA	0.55kA	1.3kA	T
41/ 2020 2:31	20	T	T	T	T	T	T	0.42kA	0.55kA	1.3kA	T
AK RCBO 3+N	25	T	T	T	T	T	T		0.55kA	1.3kA	T
	32	2.3kA	5.2kA	T	T	T	T		0.55kA	1.3kA	T
	40	2.3kA	5.2kA	T	T	T	T			1.3kA	T
	≤10	T	T	T	T	T	T	0.42kA	0.55kA	1.1kA	T
	16	Т	T	T	T	T	T	0.42kA	0.55kA	1.1kA	T
A	20	Т	T	T	T	T	Т		0.55kA	1.1kA	T
AMxxx5xx MCB 1+N/1TE	25	T	T	T	T	T	T		0.55kA	1.1kA	T
	32	2.3kA	5.2kA	T	T	T	T		0.55kA	1.1kA	T
	40	2.3kA	5.2kA	T	T	T	T			1.1kA	T
	16	1kA	2.5kA	2.5kA	2.5kA	2.5kA	2.8kA		0.5kA	1kA	2.5kA
	20	1kA	2.5kA	2.5kA	2.5kA	2.5kA	2.8kA		0.5kA	1kA	2.5kA
	25	1kA	2.5kA	2.5kA	2.5kA	2.5kA	2.8kA		0.5kA	1kA	2.5kA
	32	1kA	2.5kA	2.5kA	2.5kA	2.5kA	2.8kA			1kA	2.5kA
MYI MGCD	40	1kA	2kA	2kA	2.5kA	2.5kA	2.8kA			1kA	2kA
MX1 MCCB	50	1kA	2kA	2kA	2.5kA	2.5kA	2.8kA			1kA	2kA
	63	1kA	2kA	2kA	2.5kA	2.5kA	2.8kA				2kA
	80		2kA	2kA	2.5kA	2.5kA	2.8kA				2kA
	100				2.5kA	2.5kA	2.8kA				
	125					2.5kA	2.8kA				
	32									1kA	2kA
MX2- EN, EM, ENM MCCB	63										2kA

Notes:



¹⁾ No content, indicating no selectivity.

^{2) 1} kA, indicating local selectivity, the number indicates the maximum fault current to achieve selectivity. For example, selectivity can be achieved below 1 kA, and above 1 kA upper and lower level circuit breakers may act simultaneously.

³⁾ T, indicates that the full selectivity is satisfied within the breaking capacity of the lower level circuit breaker.





MX290172

MX290000

500







MX290199

MX296732

Schrack-Info

Wide range of accessories

- Auxiliary contacts
- Rotary handles, door coupling handles
- Under voltage release units, shunt-trips
- Residual current release units
- Connection accessories
- General accessories

Installation Diagram for Accessories

Alarm contact	10	Shunt trip, alarm contact	
Auxiliary contact	ol H lo	Auxiliary contact, alarm contact	
Shunt trip		Under-voltage release, alarm contact	
Under-voltage release		Shunt trip, auxiliary contact, alarm contact	
Shunt trip, auxiliary contact		Under-voltage release, auxiliary contact, alarm contact	
Auxiliary contact, under-voltage release			



- 1) Left 2) Right
- 3) Handle
- Shunt trip
 - Under-voltage release Auxiliary contact
 - Alarm contact

- -) MX2 cannot be equipped with undervoltage release and shunt release at the same time;
- -) MX2 can be equipped with a maximum of 2 auxiliary contacts

Derating Factor Table for Circuit Breaker with Residual Current Protection Module

Model		Derating factor
MX2 MCCB Type A +	125A ~ 180A	1
MX2 RCD	200A ~ 250A	0.9
MX2 MCCB - Type EN, EM, ENM +	32A ~ 160A	1
MX2 RCD	250A	0.95

Derating Factor Table for Circuit Breakers with Plug-In and Drive-In socket

	-
	Derating factor
125A ~ 180A	1
200A ~ 250A	0.95
32A ~ 160A	1
250A	0.95
	200A ~ 250A 32A ~ 160A



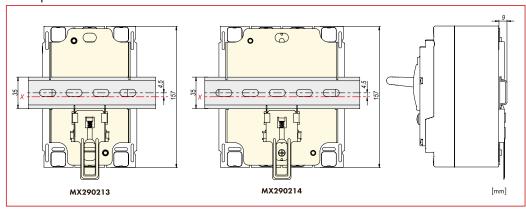
Auxiliary Contact: Indication of Circuit Breaker Status

- F12 F11 F14 F12 F11 F14
- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status

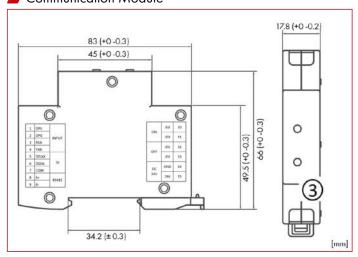
Alarm Contact: Indication of Circuit Breaker Status

- B12 B11 B14 b) B12 B14
- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

Clip Plate for MX2 3- and 4 Pole



Communication Module



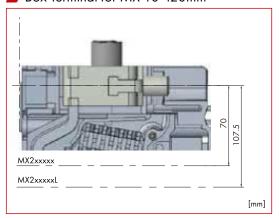
INPUT	1	OPV	15V output, connection to controller 15V input	
INPUT	2	OPG	GND, connect to controller GND	
INPUT	3	RXA	RS485 Bus A, connection to controller RS485A	
INPUT	4	TXB	RS485 Bus B, connection to controller RS485B	
DI	5	DI1(AX)	Auxiliary signal input, connection to AX PIN 4 auxiliary module	
DI	6	DI2(AL)	Alarm signal input, connection to alarm module AL PIN 4	
DI	7	WITH	Common terminal, connection to AX, AL, PIN 1	
RS485	8	A+	RS485 Bus A, connection to external RS485 Bus A	
RS485	9	B-	RS485 Bus B, connection to external RS485 Bus B	
ON	10	JD2	Relay output, connection with motor drive for switching on	
ON	11	JD2	Relay output, connection with motor drive for switching on	
OFF	12	JD1	Relay output, connection with motor drive for switching off	
OFF	13	JD1	Relay output, connection with motor drive for switching off	
DC24V	14	GND	Supply voltage GND (DC24V model)	
DC24V	15	24V	Supply voltage 24V (DC24V model)	
AC230	14	N	Supply voltage 230V (AC230V model)	
AC230	15	L	Supply voltage 230V (AC230V model)	

The communication module is an interface module for communication between the electronic trigger of the circuit breakers and the bus system and takes over the communication and output of the remote control via relay contacts.

- Rated voltage: AC230V or DC24V (fault range ± 15%)
- Communication type: RS485 (Modbus RTU protocol)
- Contact capacity: AC250V/3A; DC30V / 3A
- Transmission medium: shielded twisted cable
- Transmission distance: 1.2 km (with shielded twisted pair of category A) $\,$
- Display of operating status: LED display
- Number of stations: 1 station



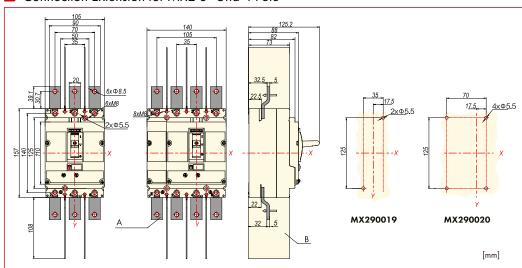
Box Terminal for MX 10-120mm²



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors.

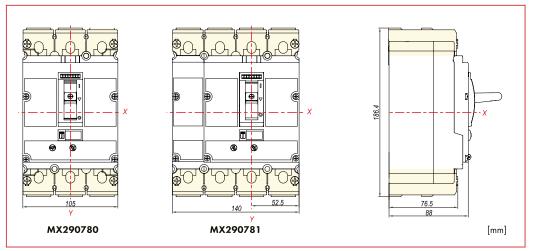
Connection Extension for MX2 3- Und 4 Pole



A	Top view
В	Phase separator
Χ	Horizontal centre
Y	Vertical centre

Enables a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

Terminal Cover Short for MX2 3- Und 4 Pole

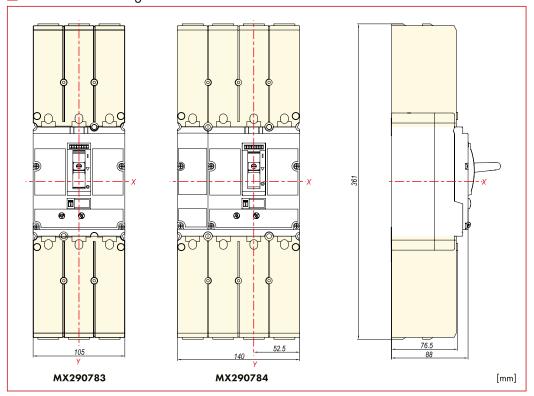


Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation. If the voltage exceeds 500V, the terminal cover must be used



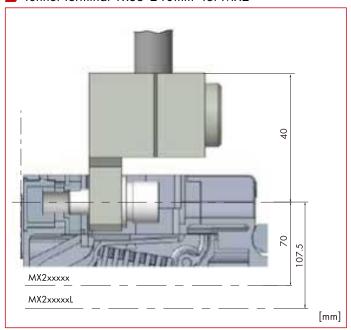
■ Terminal Cover Long for MX2 3- and 4 Pole



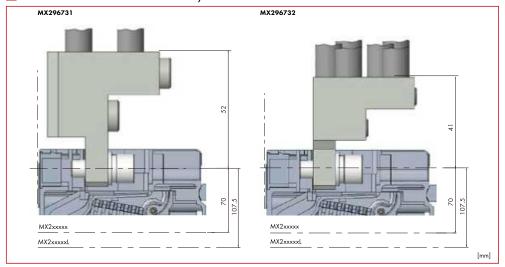
Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation. If the voltage exceeds 500V, the terminal cover must be used

■ Tunnel Terminal 1x35-240mm² for MX2



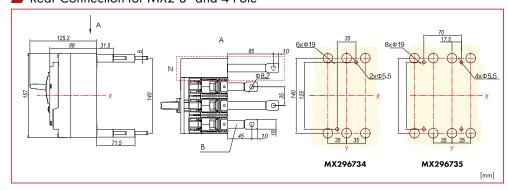
■ Tunnel Terminal 2x35-120mm²/6X35mm² for MX2



Suitable for aluminum and Cu conductors.

Allows the direct connection of bare conductors.

Rear Connection for MX2 3- and 4 Pole



B Connection extension

N Neutral conductor

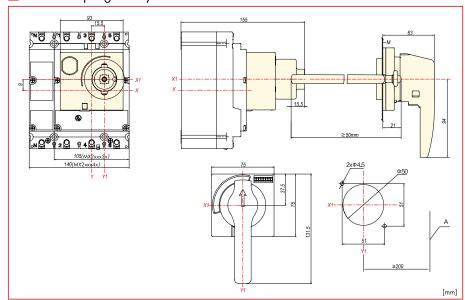
X Horizontal centre

Y Vertical centre

A Top view

Allows the circuit breaker to be connected behind the mounting level.

■ Door Coupling Rotary Handle Lockable for MX2



| X | Horizontal centre switch | | X1 | Horizontal centre rotary handle | Y | Vertical centre switch | | Y1 | Vertical centre rotary handle |

Protection class: IP50

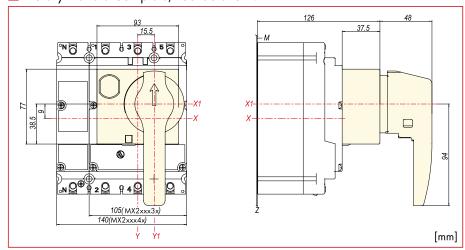
Switching position 0, I and triggered, in 3 positions.

The rotary handle can be locked with a padlock in the OFF position.

 $\stackrel{\cdot}{\text{Attention:}}$ two versions for thermomagnetic or electronic release.

Enclosure door locked in "I" position

Rotary Handle Complete, Lockable for MX2



X Horizontal centre switch
X1 Horizontal centre rotary handle
Y Vertical centre switch
Y1 Vertical centre rotary handle

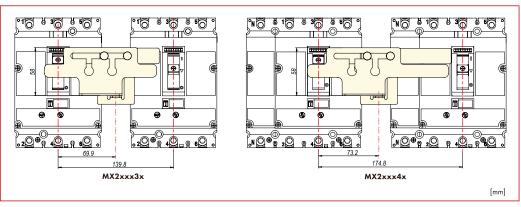
Protection class: IP40

Switching position 0, I and triggered, in 3 positions.

The rotary handle can be locked with a padlock in the OFF position.

Attention: two versions for thermomagnetic or electronic release.

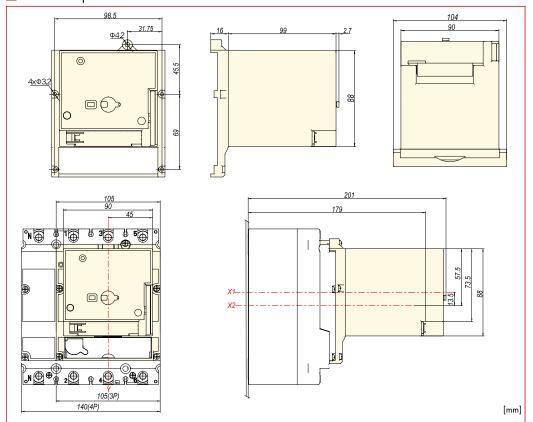
Mechanical Interlock for MX2 3- and 4 Pole



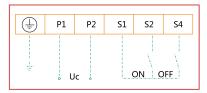
When using this locking device with two circuit breakers of the same size, only one of them can be operated. For manual locking of two circuit breakers.



Remote Operator for MX2



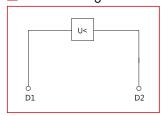
X1 Horizontal centre remote operator
X2 Horizontal centre switch
Y Vertical centre



It is suitable for switching on, off and switching on circuit breakers over long distances, as well as for automation applications.

- Protection class: IP40
- Display 0, I and triggered in 3 positions
- Switching between Automatic and Manual Operation
- Automatic switching via electrical control inputs
- Manual switching via key.
- When control voltage is between 85% and 110%, the circuit breaker can be reliably switched on and off.

Under Voltage Release

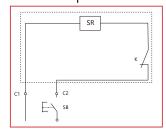


 $Immediate\ triggering\ of\ circuit\ breakers\ or\ switch\ disconnectors\ when\ the\ supply\ voltage\ drops\ below\ 35\%\ -\ 70\%.$

Can be used for EMERGENCY STOP devices.

If the undervoltage trigger is de-energized, contacting the switch main contacts during switch-on tests is safely prevented.

Shunt Trip



Immediate triggering of circuit breakers or switch disconnectors at voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the working current trigger is live, contacting the switch main contacts during switch-on tests is reliably prevented.

DESCRIPTION	AVAILABLE	ORDER NO.
General Accessories		
Toggle Lever Locking Device for MX2	JOHNS TO	MX290199
Clip Plate 25mm DIN-S for MX2 3 pole	2000 O O	MX290213
Clip Plate 25mm DIN-S for MX2 4 pole	JUNE DE S	MX290214
Communication module Modbus-RTU 24VDC 1.5m	TOOL OM B	MX290000
Communication module Modbus-RTU 230VAC 1.5m		MX290001
Battery Box for MX Molded Case Circuit Breaker Typ EN, ENM, EM	TOOL Ow B	MXBAT001
Measuring Unit with Modbus 3-pole for MX2, IT-Net	COO O G	MX290031
Measuring Unit with Modbus 3-pole for MX2, TT/TN-Net	Theorem	MX290032
Connecting Technic, Accessories		
Box Terminal for MX2 10-120mm², 1 piece	JOHNS TO	MX290015
Connection extension 3 pole for MX2, 6 pieces	TOOL OM B	MX290019
Connection extension 4 pole for MX2, 8 pieces	COD OF G	MX290020
Terminal Cover short 3 pole for MX2	TOOL OM B	MX290780
Terminal Cover short 4 pole for MX2	JOHN DWG	MX290781
Terminal Cover long 3 pole for MX2	3000 Ow 9	MX290783
Terminal Cover long 4 pole for MX2	JOHN DWG	MX290784
Tunnel Terminal 1x35-240mm² for MX2, 1 piece	3000 Ow 9	MX296730
Tunnel Terminal 2x35-120mm² for MX2, 1 piece	JUNE 1	MX296731
Tunnel Terminal 6x10-35mm² for MX2, 1 piece	3000 Ow 9	MX296732
Rear Connection, 3 pole for MX2	COO O G	MX296734
Rear Connection, 4 pole for MX2	1000 Ow 9	MX296735
Socket for MX2 3 pole	JUNE DE S	MX296871
Socket for MX2 4 pole	TOOL OW B	MX296872
Safety release for socket MX2 for thermal release	Thomas of	MX296873
Safety release for socket MX2 for electronic release	BDB Ow G	MX296874
Phase separator plates MX2	Trooff of	MX296870
Rotary Handles, Door Coupling Handles, Accessories		
Rotary handle complete, lockable for MX2, thermal release		MX290125
Rotary handle complete, lockable for MX2, electronic release	Theorem	MX290126



Door Coupling Rotary Handle, lockable, for MX2 for thermal release Door Coupling Rotary Handle, lockable, for MX2 for electronic release MX290173 Mechanical Interlock for MX2 3 pole MX291581 Mechanical Interlock for MX2 4 pole MX291582 Under Voltage Release Units, Shunt-trips and Accessories Under Voltage Release 110VAC for MX2, MX3 MX299462 Under Voltage Release 220-240VAC for MX2, MX3 MX299471 Under Voltage Release 220-250 for MX2, MX3 MX299473 Under Voltage Release 24VDC for MX2, MX3 MX299473 Under Voltage Release 220VDC for MX2, MX3 MX299489 Shunt trip 10VAC for MX2, MX3 MX299489 Shunt trip 220-240VAC for MX2, MX3 MX299567 Shunt trip 220-240VAC for MX2, MX3 MX299567 Shunt trip 220-250VDC for MX2, MX3 MX299736 Shunt trip 220-250VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 240DC for MX2 MX299737 Semole Operator 240DC for MX2 MX299838 Remote Operator 240DC for MX2 MX299839 MX299830 MX2998	DESCRIPTION	AVAILABLE	ORDER NO.
Door Coupling Rotary Handle, lockable, for MX2 for electronic release MX291581 Mechanical Interlock for MX2 a pole MX291582 Under Voltage Release Units, Shunt-trips and Accessories Under Voltage Release 110VAC for MX2, MX3 MX299462 Under Voltage Release 220-240VAC for MX2, MX3 MX299471 Under Voltage Release 220-240VAC for MX2, MX3 MX299473 Under Voltage Release 220-240VAC for MX2, MX3 MX299473 Under Voltage Release 220-240VAC for MX2, MX3 MX299481 Under Voltage Release 220VDC for MX2, MX3 MX299489 Shunt trip 110VAC for MX2, MX3 MX299489 Shunt trip 220-240VAC for MX2, MX3 MX299567 Shunt trip 220-240VAC for MX2, MX3 MX299154 Shunt trip 220-240VAC for MX2, MX3 MX299736 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299837 Remote Operator 24VDC for MX2 MX299838 Remote Operator 24VDC for MX2 MX299838 Remote Operator 380-415VAC for MX2 MX299838 Remote Operator 380-415VAC for MX2 MX299833 Mx299833 Mx299833 Mx299833 Mx299833 Mx299833 Mx299833 Mx299833 Mx299831 Mx2998411	Rotary Handles, Door Coupling Handles, Accessories		
Mechanical Interlock for MX2 3 pole MX291581 Mechanical Interlock for MX2 4 pole MX291582 Under Voltage Release Units, Shunt-trips and Accessories Under Voltage Release 110VAC for MX2, MX3 MX299462 Under Voltage Release 220-240VAC for MX2, MX3 MX299471 Under Voltage Release 380-415VAC for MX2, MX3 MX299473 Under Voltage Release 24VDC for MX2, MX3 MX299481 Under Voltage Release 220VDC for MX2, MX3 MX299489 Shunt trip 110VAC for MX2, MX3 MX299489 Shunt trip 220-240VAC for MX2, MX3 MX299567 Shunt trip 220-240VAC for MX2, MX3 MX299154 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299837 Remote Operator 24VDC for MX2 MX299838 Remote Operator 24VDC for MX2 MX299838 Remote Operator 380-415VAC for MX2 MX299838 Remote Operator 380-415VAC for MX2 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX2998411	Door Coupling Rotary Handle, lockable, for MX2 for thermal release		MX290172
Mechanical Interlock for MX2 4 pole Under Voltage Release Units, Shunt-trips and Accessories Under Voltage Release 110VAC for MX2, MX3 Under Voltage Release 220-240VAC for MX2, MX3 Under Voltage Release 220-240VAC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Shunt trip 210VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 Remote Operator 24VDC for MX2 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 Remote Operator 380-4	Door Coupling Rotary Handle, lockable, for MX2 for electronic release	Tools On B	MX290173
Under Voltage Release Units, Shunt-trips and Accessories Under Voltage Release 110VAC for MX2, MX3 Under Voltage Release 220-240VAC for MX2, MX3 Under Voltage Release 380-415VAC for MX2, MX3 Under Voltage Release 380-415VAC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 WA299489 Shunt trip 110VAC for MX2, MX3 WA299567 Shunt trip 220-240VAC for MX2, MX3 WA290154 Shunt trip 220VDC for MX2, MX3 WA299736 Shunt trip 24VDC for MX2 WA299837 WA299837 WA299838 WA299838 WA299839 WA299839 WA299833 WA299833 WA299833 WA299833 WA299833 WA299833 WA299040 WA290040	Mechanical Interlock for MX2 3 pole		MX291581
Under Voltage Release 110VAC for MX2, MX3 Under Voltage Release 220-240VAC for MX2, MX3 Under Voltage Release 380-415VAC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 MX299481 Under Voltage Release 220VDC for MX2, MX3 MX299489 Shunt trip 110VAC for MX2, MX3 MX299567 Shunt trip 220-240VAC for MX2, MX3 MX299154 Shunt trip 24VDC for MX2, MX3 MX2991607 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299837 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 110VAC/220VDC for MX2 MX299838 Remote Operator 380-415VAC for MX2 MX299833 Max299833	Mechanical Interlock for MX2 4 pole	1000 Om 20	MX291582
Under Voltage Release 220-240VAC for MX2, MX3 Under Voltage Release 380-415VAC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Shunt trip 110VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 380-415VAC for MX2 Remote Operator 380-415VAC for MX2 MX299833	Under Voltage Release Units, Shunt-trips and Accessories		
Under Voltage Release 380-415VAC for MX2, MX3 Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Shunt trip 110VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 MX299154 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 380-415VAC for MX2 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX290040	Under Voltage Release 110VAC for MX2, MX3	TOOL Ow B	MX299462
Under Voltage Release 24VDC for MX2, MX3 Under Voltage Release 220VDC for MX2, MX3 Shunt trip 110VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 380-415VAC for MX2, MX3 Shunt trip 22VDC for MX2, MX3 Shunt trip 22VDC for MX2, MX3 MX299736 Shunt trip 22VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299738 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833	Under Voltage Release 220-240VAC for MX2, MX3	Took on a	MX299471
Under Voltage Release 220VDC for MX2, MX3 Shunt trip 110VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 380-415VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 MX291607 Shunt trip 220VDC for MX2, MX3 MX29736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299837 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299833 MX290040	Under Voltage Release 380-415VAC for MX2, MX3		MX299473
Shunt trip 110VAC for MX2, MX3 Shunt trip 220-240VAC for MX2, MX3 Shunt trip 380-415VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299742 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299832 Remote Operator 380-415VAC for MX2 MX299833 MX299831 MX299833 MX299833 MX299833 MX299833 MX299833 MX299833	Under Voltage Release 24VDC for MX2, MX3		MX299481
Shunt trip 220-240VAC for MX2, MX3 Shunt trip 380-415VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 Shunt trip 220VDC for MX2, MX3 MX299736 Shunt trip 220VDC for MX2, MX3 MX299742 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299832 Remote Operator 380-415VAC for MX2 MX299833 Mx299833 Mx299834 Mx299835 Mx299836 Mx299836 Mx299837 Mx299838 Mx299838 Mx299838 Mx299838 Mx299839 Mx299839 Mx299839 Mx299831 Mx299831 Mx299833 Mx299833 Mx299833 Mx299833	Under Voltage Release 220VDC for MX2, MX3		MX299489
Shunt trip 380-415VAC for MX2, MX3 Shunt trip 24VDC for MX2, MX3 Shunt trip 220VDC for MX2, MX3 Shunt trip 220VDC for MX2, MX3 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299833 Measuring Unit with Modbus 4-pole for MX2 MX290040 Auxiliary Contacts Auxiliary contact 1 CO MX199411	Shunt trip 110VAC for MX2, MX3		MX299567
Shunt trip 24VDC for MX2, MX3 Shunt trip 220VDC for MX2, MX3 Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 Remote Operator 380-415VAC for MX2 MX299833	Shunt trip 220-240VAC for MX2, MX3		MX290154
Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299833 Measuring Unit with Modbus 4-pole for MX2 Auxiliary Contacts MX199411	Shunt trip 380-415VAC for MX2, MX3	1000 Om 20	MX291607
Remote Operator 24VDC for MX2 Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 Remote Operator 380-415VAC for MX2 MX299833 Measuring Unit with Modbus 4-pole for MX2 MX299833 Muscliary Contacts Auxiliary contact 1 CO MX199411	Shunt trip 24VDC for MX2, MX3		MX299736
Remote Operator 110VAC/110-120VDC for MX2 Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 MX299833 Measuring Unit with Modbus 4-pole for MX2 MX299833 Multiple Contacts Auxiliary Contact 1 CO MX199411	Shunt trip 220VDC for MX2, MX3	1000 Om 20	MX299742
Remote Operator 220-240VAC/220VDC for MX2 Remote Operator 380-415VAC for MX2 Mx299833 Measuring Unit with Modbus 4-pole for MX2 Mx290040 Auxiliary Contacts Auxiliary contact 1 CO Mx199411	Remote Operator 24VDC for MX2		MX299837
Remote Operator 380-415VAC for MX2 Measuring Unit with Modbus 4-pole for MX2 Mx299833 Muxiliary Contacts Auxiliary contact 1 CO Mx199411	Remote Operator 110VAC/110-120VDC for MX2	1000 Om 20	MX299838
Measuring Unit with Modbus 4-pole for MX2 Auxiliary Contacts Auxiliary contact 1 CO MX199411	Remote Operator 220-240VAC/220VDC for MX2		MX299832
Auxiliary Contacts Auxiliary contact 1 CO MX199411	Remote Operator 380-415VAC for MX2	1000 Om 20	MX299833
Auxiliary contact 1 CO MX199411	Measuring Unit with Modbus 4-pole for MX2		MX290040
	Auxiliary Contacts		
Alarm contact 1 CO MX199511	Auxiliary contact 1 CO		MX199411
	Alarm contact 1 CO	1000 Om 20	MX199511



MCCB MX Size 3, 3 Pole, 36kA



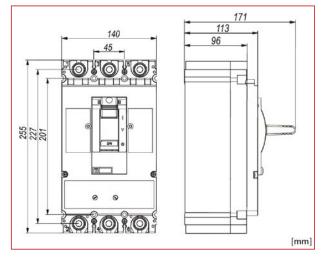
Schrack-Info

- For system and line protection
- Adjustable overload release 0.7 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 36kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 400A to 500A

■ Technical Data

Rated operating current 400-500A Rated operational voltage ≤690VAC Short circuit switching capacity (400V) 36kA Release Thermomagnetic release - Type A Rated insulation voltage U _{imp} 12kV Rated impulse withsand voltage U _{imp} AC 380/400/415V 36kA Rated ultimate short-circuit breaking capacity I _{cu} AC 440V 36kA AC 500V 25kA AC 660/690V 10kA Rated service breaking capacity I _{cs} AC 440V 36kA AC 440V 36kA AC 440V 36kA AC 500V 25kA AC 660/690V 10kA Rated short-time withstand current I _{cw} (1s) - Pollution degree 3 IP Rating IP 20 Min. ambient temperature -40°C Max. ambient temperature 70°C Mechanical durability 15000 operation cycles Electrical endurance AC 415V, I _n 40000 operation cycles	Size type		3	
Rated operational voltage \$690VAC	Poles		3	
Short circuit switching capacity (400V) 36kA	Rated operating current		400-500A	
Thermomagnetic release - Type A	Rated operational voltage		≤690VAC	
Rated insulation voltage Ui	Short circuit switching capacity (400V)		36kA	
Rated impulse withsand voltage U _{imp} 12kV 36kA	Release		Thermomagnetic release - Type A	
AC 380/400/415V 36kA AC 440V 36kA AC 500V 25kA AC 660/690V 10kA AC 380/400/415V 36kA AC 440V 36kA AC 500V 25kA AC 660/690V 10kA AC 380/400/415V 36kA AC 440V 36kA AC 440V 36kA AC 500V 25kA AC 660/690V 10kA AC 660/690V	Rated insulation voltage U _i		1000V	
AC 440V 36kA	Rated impulse withsand voltage U _{imp}		12kV	
AC 500V 25kA AC 660/690V 10kA AC 380/400/415V 36kA AC 440V 36kA AC 500V 25kA AC 660/690V 10kA AC 380/400/415V 36kA AC 440V 36kA AC 500V 25kA AC 500V 25kA AC 660/690V 10kA AC 500V 10kA AC 500V 10kA AC 500V 10kA AC 500V 10kA AC 660/690V 10kA		AC 380/400/415V	36kA	
AC 500V 25kA	Pated ultimate short circuit broaking canacity I	AC 440V	36kA	
AC 380/400/415V 36kA AC 440V 36kA AC 440V 25kA AC 500V 25kA AC 660/690V 10kA AC 660/690V 1	kaled billindle short-circuit breaking capacity i _{cu}	AC 500V	25kA	
AC 440V 36kA		AC 660/690V	10kA	
AC 500V 25kA AC 500V AC 660/690V 10kA		AC 380/400/415V	36kA	
AC 500V 25kA	Pated service breaking capacity I	AC 440V	36kA	
Rated short-time withstand current Composition Compo	rated service breaking capacity 1 _{cs}	AC 500V	25kA	
Pollution degree 3 1P20		AC 660/690V	10kA	
P Rating	Rated short-time withstand current I_{cw} (1s)		-	
Min. ambient temperature -40 °C Max. ambient temperature 70 °C Mechanical durability 15000 operation cycles Electrical endurance AC 415V, In 4000 operation cycles AC 690V, In 1500 operation cycles	Pollution degree		3	
Max. ambient temperature 70 °C Mechanical durability 15000 operation cycles Electrical endurance AC 415V, I _n 4000 operation cycles AC 690V, I _n 1500 operation cycles	IP Rating		IP20	
Mechanical durability 15000 operation cycles Electrical endurance AC 415V, In 4000 operation cycles AC 690V, In 1500 operation cycles	Min. ambient temperature		-40°C	
AC 415V, In 4000 operation cycles AC 690V, In 1500 operation cycles	Max. ambient temperature		70°C	
Electrical endurance AC 690V, I _n 1500 operation cycles	Mechanical durability		15000 operation cycles	
AC 690V, I _n 1500 operation cycles	Electrical and grance	AC 415V, I _n	4000 operation cycles	
Net weight 5.5kg	Electrical endurance	AC 690V, I _n	1500 operation cycles	
	Net weight		5.5kg	

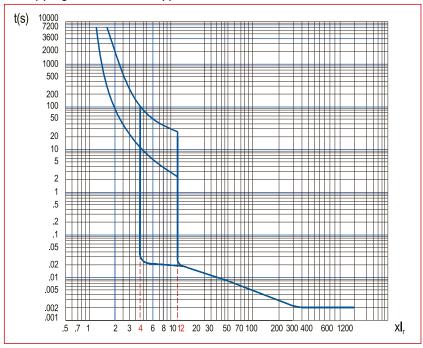
Dimensions





MCCB MX Size 3, 3 Pole, 36kA

■ Tripping Characteristic: Type A



DESCRIPTION	AVAILABLE	ORDER NO.
400 to 500A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 400A	30 metal 1	MX340431
Moulded Case Circuit Breaker Type A, 3 pole, 36kA, 500A	Joseph On G	MX350431

MCCB MX Size 3, 3 Pole, 50kA



MX340231

Schrack-Info

- For system, line protection and motor protection
- Adjustable overload release
 - with thermomagnetic release unit: 0.7 1 x ln
 - with electronic release unit/motor protection: 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 400A to 630A

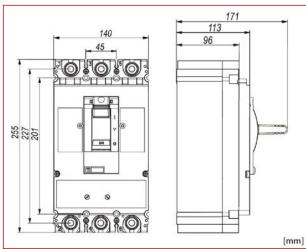
■ Technical Data

Size type		3	
Poles		3	
Rated operating current		400-500A (Type A), 400-630A (Type EN, EM, ENM)	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		50kA	
Release		Thermomagnetic release - Type A	
		Electronic release - Type EN	
		Digital electronic release - Type EM	
		Electronic release for motor protection - Type ENM	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		12kV	
	AC 380/400/415V	50kA	
Rated ultimate short-circuit breaking capacity l _{cu}	AC 440V	50kA	
rated dillifiate short-circuit breaking capacity i _{cu}	AC 500V	40kA	
	AC 660/690V	12kA	
	AC 380/400/415V	50kA	
Rated service breaking capacity I _{cs}	AC 440V	50kA	
rated service breaking capacity I _{cs}	AC 500V	40kA	
	AC 660/690V	12kA	
Rated short-time withstand current I _{cw} (1s)		5kA (400A); 8kA (630A)	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
	AC 415V, I _n	4000 operation cycles (400A)	
Electrical endurance		3000 operation cycles (630A)	
	AC 690V, I _n	1500 operation cycles	
Net weight		5.5kg (Type A); 6kg (Type EN, EM, ENM)	

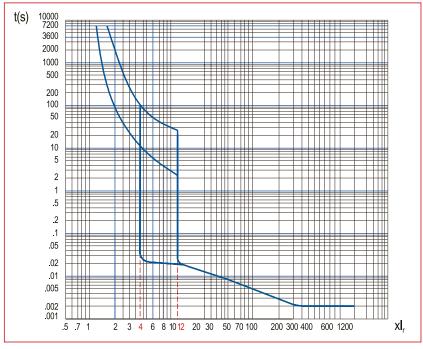


MCCB MX Size 3, 3 Pole, 50kA

Dimensions

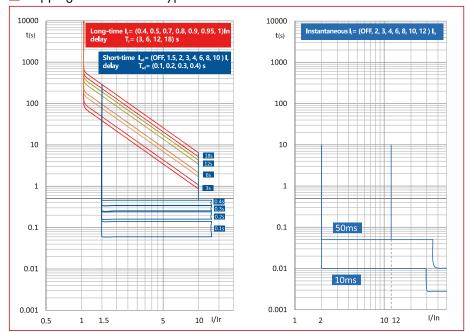


Tripping Characteristic: Type A

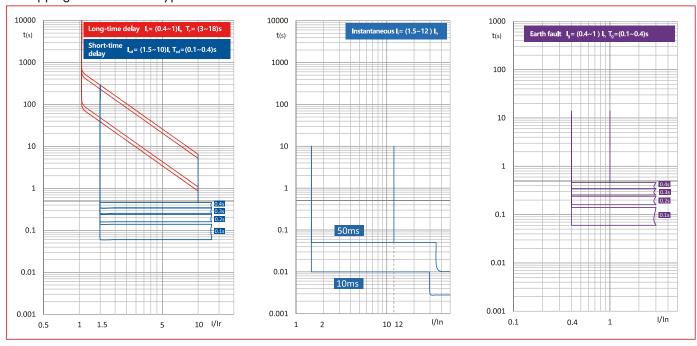


MCCB MX Size 3, 3 Pole, 50kA

Tripping Characteristic: Type EN



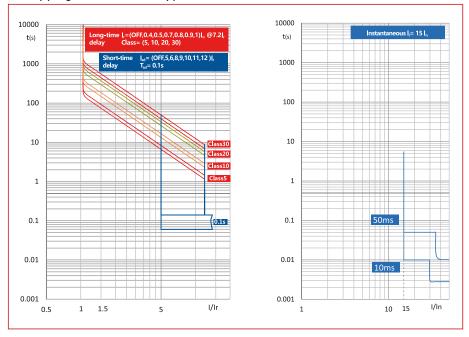
■ Tripping Characteristic: Type EM





■ MCCB MX Size 3, 3 Pole, 50kA

■ Tripping Characteristic: Type ENM



DESCRIPTION	AVAILABLE	ORDER NO.
400 to 500A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 400A	The Company of the Co	MX340231
Moulded Case Circuit Breaker Type A, 3 pole, 50kA, 500A	DEED Own De	MX350231
400 to 630A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 400A	The Company	MX340232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 630A	The Company of the Co	MX363232
400 to 630A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 400A	DOD OF G	MX340233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 630A	DED Own D	MX363233
400 to 630A with Electronic Motor Protection		
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 400A	The Control of the Co	MX340237
Moulded Case Circuit Breaker Type ENM, 3 pole, 50kA, 630A	DEED ON DE	MX363237

MCCB MX Size 3, 3 Pole, 70kA



MX340331

Schrack-Info

- For system, line protection and motor protection
- Adjustable overload release
 - \circ with thermomagnetic release unit: 0.7 1 x ln
 - \circ with electronic release unit/motor protection: 0.4 1 x ln
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 70kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 400A to 630A

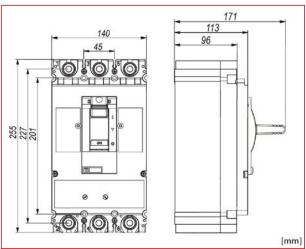
■ Technical Data

Size type		3	
Poles		3	
Rated operating current		400-500A (Type A), 400-630A (Type EN, EM, ENM)	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		70kA	
Release		Thermomagnetic release - Type A	
		Electronic release - Type EN	
		Digital electronic release - Type EM	
		Electronic release for motor protection - Type ENM	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		12kV	
	AC 380/400/415V	70kA	
Data di altinonto de la circuita han altino a consecta di	AC 440V	70kA	
Rated ultimate short-circuit breaking capacity I _{cu}	AC 500V	40kA	
	AC 660/690V	12kA	
	AC 380/400/415V	70kA	
Datadaaniaa karaliaa aanaaska l	AC 440V	70kA	
Rated service breaking capacity I _{cs}	AC 500V	40kA	
	AC 660/690V	12kA	
Rated short-time withstand current I _{cw} (1s)		5kA (400A)	
Raica short-inne wiinsana correin i _{cw} (13)		8kA (630A)	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
	AC 415V, I _n	4000 operation cycles (400A)	
Electrical endurance		3000 operation cycles (630A)	
	AC 690V, I _n	1500 operation cycles	
Net weight		5.5kg (Type A)	
		6kg (Type EN, EM, ENM)	

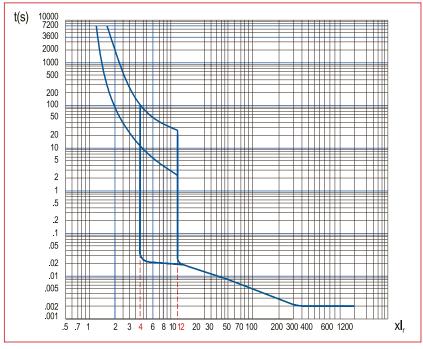


MCCB MX Size 3, 3 Pole, 70kA

Dimensions

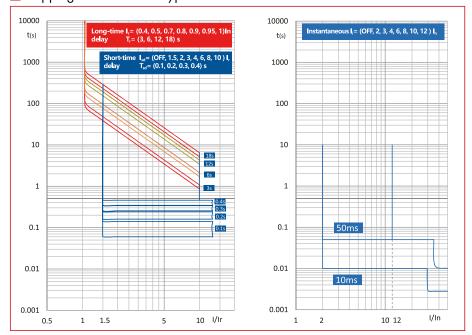


Tripping Characteristic: Type A

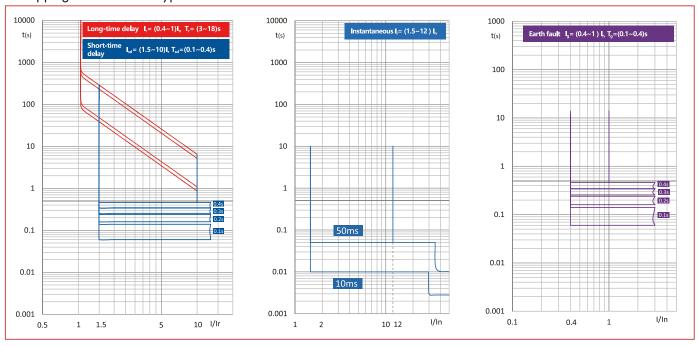


MCCB MX Size 3, 3 Pole, 70kA

Tripping Characteristic: Type EN



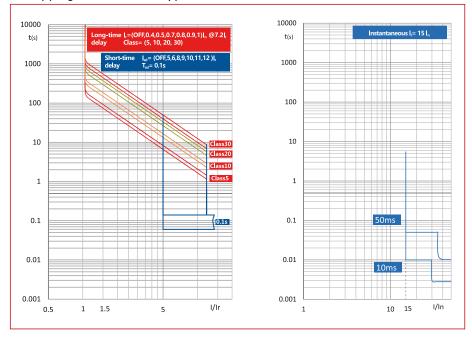
■ Tripping Characteristic: Type EM





■ MCCB MX Size 3, 3 Pole, 70kA

■ Tripping Characteristic: Type ENM



DESCRIPTION	AVAILABLE	ORDER NO.
400 to 500A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 3 pole, 70kA, 400A		MX340331
Moulded Case Circuit Breaker Type A, 3 pole, 70kA, 500A	1000 Om 20	MX350331
400 to 630A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 3 pole, 70kA, 400A		MX340332
Moulded Case Circuit Breaker Type EN, 3 pole, 70kA, 630A	Took on a	MX363332
400 to 630A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 3 pole, 70kA, 400A		MX340333
Moulded Case Circuit Breaker Type EM, 3 pole, 70kA, 630A	1000 Om 30	MX363333
400 to 630A with Electronic Motor Protection		
Moulded Case Circuit Breaker Type ENM, 3 pole, 70kA, 400A		MX340337
Moulded Case Circuit Breaker Type ENM, 3 pole, 70kA, 630A	1000 - 00 go	MX363337

MCCB MX Size 3, 4 Pole, 36kA



MX340441

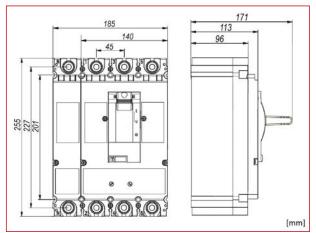
Schrack-Info

- For system and line protection
- Adjustable overload release 0.7 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 36kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 400A to 500A

■ Technical Data

Size type		3	
Poles		4	
Rated operating current		400-500A	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		36kA	
Release		Thermomagnetic release - Type A	
Rated insulatoin voltage U _i		1000V	
Rated impulse withstand voltage U _{imp}		12kV	
	AC 380/400/415V	36kA	
Rated impulse withstand voltage I _{CU}	AC 440V	36kA	
kalea iiipuise wiiiisialia voilage i _{cu}	AC 500V	25kA	
	AC 660/690V	10kA	
	AC 380/400/415V	36kA	
Rated service breaking capacity I _{cs}	AC 440V	36kA	
rated service breaking capacity ics	AC 500V	25kA	
	AC 660/690V	10kA	
Rated short-time withstand current I_{cw} (1s)		-	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
FL . · · · · ·	AC 415V, I _n	4000 operation cycles	
Electrical endurance	AC 690V, I _n	1500 operation cycles	
Net weight		7kg	

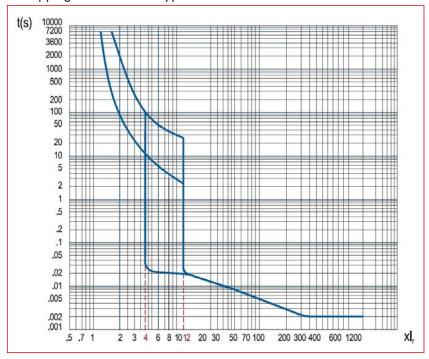
Dimensions





MCCB MX Size 3, 4 Pole, 36kA

■ Tripping Characteristic: Type A



DESCRIPTION	AVAILABLE	ORDER NO.
400 to 500A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 400A		MX340441
Moulded Case Circuit Breaker Type A, 4 pole, 36kA, 500A	SOU OF S	MX350441

MCCB MX Size 3, 4 Pole, 50kA



MX340241

Schrack-Info

- For system and line protection
- Adjustable overload release
 - \circ with thermomagnetic release unit: 0.7 1 x ln
 - with electronic release unit: 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 400A to 630A

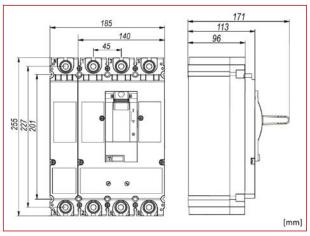
■ Technical Data

Size type		3	
Poles		4	
Rated operating current		400-500A (Type A), 400-630A (Type EN, EM, ENM)	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		50kA	
Release		Thermomagnetic release - Type A	
		Electronic release - Type EN	
		Digital electronic release - Type EM	
		Electronic release for motor protection - Type ENM	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		12kV	
	AC 380/400/415V	50kA	
Rated ultimate short-circuit breaking capacity I _{cu}	AC 440V	50kA	
kalea dilililale short-circuit bleaking capacity i _{cu}	AC 500V	40kA	
	AC 660/690V	12kA	
	AC 380/400/415V	50kA	
Rated service breaking capacity I _{cs}	AC 440V	50kA	
Raied service breaking capacity I _{cs}	AC 500V	40kA	
	AC 660/690V	12kA	
Rated short-time withstand current I _{cw} (1s)		5kA (400A)	
- Kaled Shell lime Willistand Collenn Icw (13)		8kA (630A)	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
Electrical endurance	AC 415V, I _n	4000 operation cycles (400A) 3000 operation cycles (630A)	
	AC 690V, I _n	1500 operation cycles	
Net weight		7kg (Type A) 6kg (Type EN, EM, ENM)	

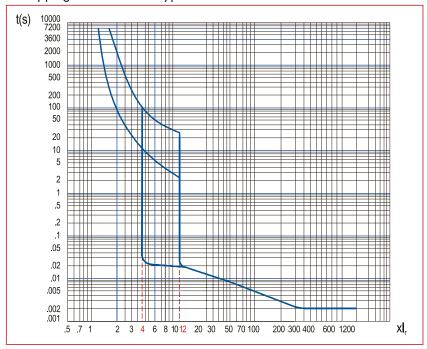


MCCB MX Size 3, 4 Pole, 50kA

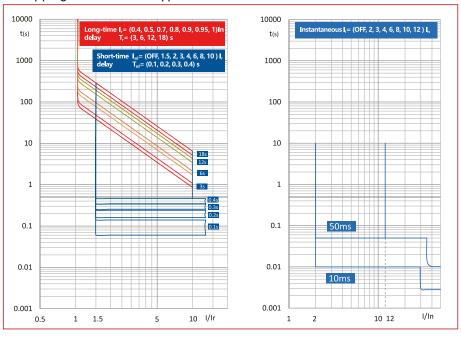
Dimensions



Tripping Characteristic: Type A



Tripping Characteristic: Type EN



■ MCCB MX Size 3, 4 Pole, 50kA

AVAILABLE	ORDER NO.
Jane 1	MX340241
1000 Ow 0	MX350241
,	
2000 TO TO	MX340242
1000 Ow 0	MX363242
2000 Ow G	MX340243
30 metar	MX363243
	CCCC COMPANY CC

MCCB MX Size 3, 4 Pole, 70kA



MX340341

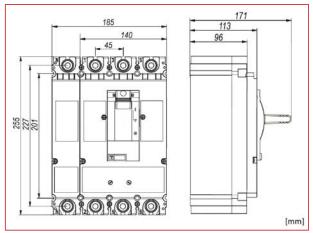
Schrack-Info

- For system and line protection
- Adjustable overload release
 - \circ with thermomagnetic release unit: 0.7 1 x In
 - with electronic release unit: 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 70kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 400A to 630A

■ Technical Data

Size type		3	
Poles		4	
Rated operating current		400-500A (Type A), 400-630A (Type EN, EM, ENM)	
Rated operational voltage		≤690VAC	
Short circuit switching capacity (400V)		70kA	
Release		Thermomagnetic release - Type A	
		Electronic release - Type EN	
		Digital electronic release - Type EM	
		Electronic release for motor protection - Type ENM	
Rated insulation voltage U _i		1000V	
Rated impulse withsand voltage U _{imp}		12V	
	AC 380/400/415V	70kA	
Rated ultimate short-circuit breaking capacity I _{cu}	AC 440V	70kA	
kaled ullillide short-circuit breaking capacity I _{cu}	AC 500V	40kA	
	AC 660/690V	12kA	
	AC 380/400/415V	70kA	
Data da ancia a basalian annusira.	AC 440V	70kA	
Rated service breaking capacity I _{cs}	AC 500V	40kA	
	AC 660/690V	12kA	
Rated short-time withstand current I _{cw} (1s)		5kA (400A)	
Kaled Short-line Willistatia Corteni I _{CW} (15)		8kA (630A)	
Pollution degree		3	
IP Rating		IP20	
Min. ambient temperature		-40°C	
Max. ambient temperature		70°C	
Mechanical durability		15000 operation cycles	
Electrical endurance	AC 415V, I _n	4000 operation cycles (400A) 3000 operation cycles (630A)	
	AC 690V, I _n	1500 operation cycles	
Net weight		7kg (Type A) 8kg (Type EN, EM, ENM)	

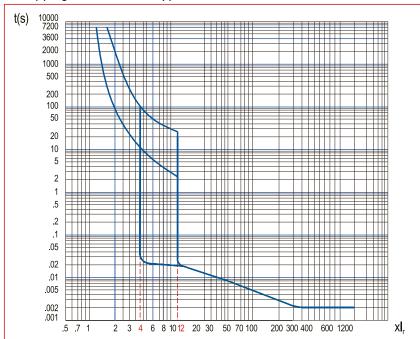
Dimensions



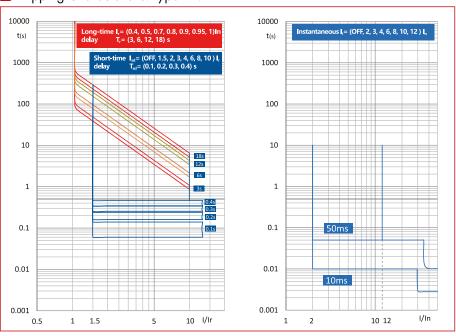


MCCB MX Size 3, 4 Pole, 70kA

Tripping Characteristic: Type A



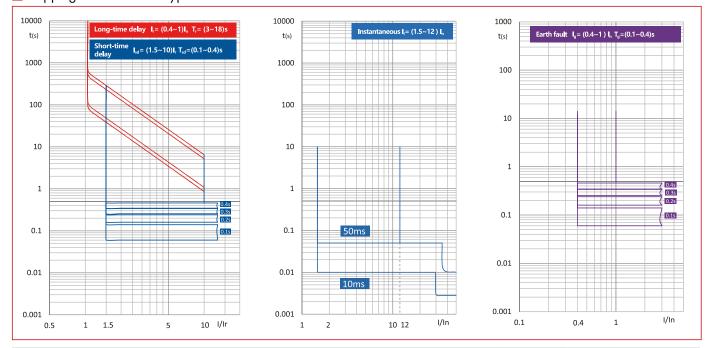
Tripping Characteristic: Type EN





MCCB MX Size 3, 4 Pole, 70kA

■ Tripping Characteristic: Type EM



DESCRIPTION	AVAILABLE	ORDER NO.
400 to 500A with Thermomagnetic Release Unit		
Moulded Case Circuit Breaker Type A, 4 pole, 70kA, 400A		MX340341
Moulded Case Circuit Breaker Type A, 4 pole, 70kA, 500A	1000 00 g	MX350341
400 to 630A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 4 pole, 70kA, 400A		MX340342
Moulded Case Circuit Breaker Type EN, 4 pole, 70kA, 630A	2000 00 g	MX363342
400 to 630A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 4 pole, 70kA, 400A		MX340343
Moulded Case Circuit Breaker Type EM, 4 pole, 70kA, 630A	000 00 g	MX363343



Combination MCCB Size 3 and RCD



MX340332F1

Schrack-Info

MX340332F1: Combination MX340332 MCCB (Type EN, 3P, 70kA, 400A) and RCD F1 MX340342F1: Combination MX340342 MCCB (Type EN, 4P, 70kA, 400A) and RCD F1 MX363332F1: Combination MX363332 MCCB (Type EN, 3P, 70kA, 630A) and RCD F1 MX363342F1: Combination MX363342 MCCB (Type EN, 4P, 70kA, 630A) and RCD F1 MX340332F2: Combination MX340332 MCCB (Type EN, 3P, 70kA, 400A) and RCD F2 MX340342F2: Combination MX340342 MCCB (Type EN, 4P, 70kA, 400A) and RCD F2 MX363332F2: Combination MX363332 MCCB (Type EN, 3P, 70kA, 630A) and RCD F2 MX363342F2: Combination MX363342 MCCB (Type EN, 4P, 70kA, 630A) and RCD F2 Residual Current Device:

- Release Type A
- Four-step adjustable rated residual operating current
 - \circ F1: $I_{\Delta n}$ = 50mA-200mA-0.5A-1A
 - F2: $I_{\Delta n}$ = 100mA-300mA-1A-2A
- Adjustable delay time 0-60-200-500ms

Technical Data: RCD

Rated operating current I _n (40°C)		630A	
Size		3	
Poles		3P, 4P	
Rated insulation voltage U _i		1000V	
Rated impulse withstand voltage U _{imp}		12kV	
Rated operational voltage U_e (50/60Hz)		380/440/415VAC, 440VAC	
Rated residual non-operating current $I_{\Delta n}$	F1	0.05-0.2-0.5-1A	
	F2	0.1-0.3-1-2A	
Rated residual operating current $I_{\Delta no}$		0.5l _{∆n} A	
Limit non-actuating time		Δt: 0-60-200-500ms*	
Breaking time		100-300-500-1000ms	
Rated residual making and breaking capacity $I_{\Delta m}$		0.25I _{cu} kA	
Standard		IEC/EN 60947-2	
Ambient temperature		-25°C ~ 70°C	
Arcing distance		0	
Dimension with circuitbreaker	Width (3P/4P)	140mm/185mm	
	Height	355mm	
	Depth	113mm	
Weight	3P	1.98kg	
	4P	2.69kg	

Note: *When the residual operating current is set to 0.03A, the limit non-actuating time must be set to 0.

Derating Factor for Circuit Breaker with RCD

Model		Derating factor
MX3	400A	1
	630A	0.9



Combination MCCB Size 3 and RCD

DESCRIPTION	AVAILABLE	ORDER NO.
Combination MCCB Type EN, 3P, 70kA, 400A and RCD up to 1A	3000 Ow G	MX340332F1
Combination MCCB Type EN, 3P, 70kA, 400A and RCD up to 2A	30000 OF G	MX340332F2
Combination MCCB Type EN, 3P, 70kA, 630A and RCD up to 1A	3000 OW G	MX363332F1
Combination MCCB Type EN, 3P, 70kA, 630A and RCD up to 2A	300000 F	MX363332F2
Combination MCCB Type EN, 4P, 70kA, 400A and RCD up to 1A	2000 Ow G	MX340342F1
Combination MCCB Type EN, 4P, 70kA, 630A and RCD up to 1A	DDD OF G	MX363342F1
Combination MCCB Type EN, 4P, 70kA, 630A and RCD up to 2A	3000 Ow G	MX363342F2
Combination MCCB Type EN, 4P, 70kA, 400A and RCD up to 2A	DDD Ow G	MX340342F2



■ MCCB MX Size 3, Selectivity table

	Upstream			ихз-а мсс	СВ		мхз-Е	N, EM, EN	и мссв
Downstream	In(A)	250	315	350	400	500	250	400	630
	≤10	T	T	T	T	T	T	T	T
	16	T	T	Т	T	T	T	T	Т
	20	T	Т	T	T	T	T	T	Т
	25	T	T	T	T	T	T	T	T
АМ МСВ	32	T	Т	T	T	T	T	T	Т
	40	Т	T	T	T	T	T	T	Т
	50	Т	T	T	T	T	T	T	Т
	63	Т	Т	T	T	Т	T	Т	Т
	≤10	T	Т	Т	Т	Т	Т	Т	Т
	13	T	T	T	Т	T	T	T	Т
	16	Т	Т	Т	Т	Т	Т	Т	Т
	20	Т	Т	Т	Т	Т	Т	Т	Т
AK RCBO 1+N	25	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T
	50	T	T	T	T	T	T	T	T
	63	T	T	T	T	T	T	T	T
	≤10	Т Т	T	T	T	T	T .	T	т т
	13	T	T	T	T	T	T	T	T
	16	† †	T	T	T	T T	T T	T	Ť
AK RCBO 3+N	20	T	T	T	T	T	T	T	T
AR REBO 3*14	25	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T
							-		
	≤10	T	T	T	T	T	T	T	T
	16	T	T	T	T	T	T	T	T
AMxxx5xx MCB 1+N/ 1TE	20	T	T	T	T	T	T	T	T
,	25	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T
	16	T	T	T	T	T	T	T	T
	20	T	T	T	T	T	T	T	T
	25	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
MX1 MCCB	40	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	T
more meets	50	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	T
	63	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	Т
	80	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	Т
	100	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	T
	125	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	T
	125	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	T
	160	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	Т
MY2 A MCCP	180		3.5kA	4kA	5kA	T		5kA	Т
MX2-A MCCB	200			4kA	5kA	T		5kA	Т
	225				5kA	T		5kA	Т
	250				5kA	Т		5kA	Т
	32	2.8kA	3.5kA	4kA	5kA	Т	2.8kA	5kA	Т
	63	2.8kA	3.5kA	4kA	5kA	Т	2.8kA	5kA	Т
MX2-EN, EM, ENM MCCB	100	2.8kA	3.5kA	4kA	5kA	T	2.8kA	5kA	T
, ,	160	1.2.2.		4kA	5kA	T		5kA	T
	250			1.51	5kA	T		5kA	T
	250				5kA	6kA	+	JIV.	9.5kA
МХЗ-А МССВ	315				JKA	6kA	 		9.5kA 9.5kA
MAJ-A MICCD	350					OKA	+		9.5kA 9.5kA
MX3-EN, EM, ENM MCCB					EI A	41 A	-	E1 A	9.5kA 9.5kA
MAS-EN, EM, ENM MCCB	250				5kA	6kA		5kA	y.3kA



¹⁾ No content, indicating no selectivity.

^{2) 1} kA, indicating local selectivity, the number indicates the maximum fault current to achieve selectivity. For example, selectivity can be achieved below 1 kA, and above 1 kA upper and lower level circuit breakers may act simultaneously.

³⁾ T, indicates that the full selectivity is satisfied within the breaking capacity of the lower level circuit breaker.







MX390125



MX390172



MX390199



MX396731



MX399832



MX390780



MX390783

Schrack-Info

Wide range of accessories:

- Auxiliary contacts
- Rotary handles, door coupling handles
- Under voltage release units, shunt-trips
- Residual current release units
- Connection accessories
- General accessories

Installation Diagram for Accessories

Alarm contact Shunt trip, alarm contact Auxiliary contact Auxiliary contact, alarm contact Shunt trip Under-voltage release, alarm contact Shunt trip, auxiliary contact, alarm Under-voltage release Under-voltage release, auxiliary Shunt trip, auxiliary contact contact, alarm contact Auxiliary contact, under-voltage

- -) MX3 cannot be equipped with undervoltage release and shunt release at the same time;
- -) MX3 can be equipped with a maximum of 3 auxiliary contacts
- -) MX series can only be equipped with one alarm contac

- 1) Left 2) Right 3) Handle
 - Shunt trip
 - Under-voltage release
 - Auxiliary contact
 - Alarm contact

release

Derating Factor Table for Circuit Breaker with Residual Current Protection Module

Model		Derating factor
MX3 MCCB Type A +	400A	0.93
MX3 RCD	500A	0.87
MX3 MCCB Type EN, EM, ENM +	400A ~ 500A	1
MX3 RCD	630A	0.90

■ Derating Factor Table for Circuit Breakers with Plug-In and Drive-In socket

Model		Derating factor
MAY2 MACCO T A	400A	1
MX3 MCCB Type A	500A	0.95
AAV2 AACCD T ENL EAA ENIAA	400A ~ 500A	1
MX3 MCCB Type EN, EM, ENM	630A	0.90

Auxiliary Contact: Indication of Circuit Breaker Status

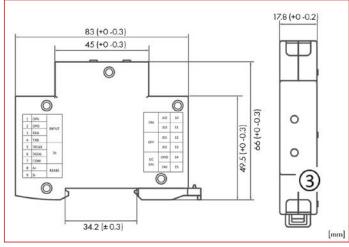
- a)
 F12
 F14

 b)
 F12
 F11
 F14
- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status

Alarm Contact: Indication of Circuit Breaker Status

- a)
 B12
 B14
 b)
 B12
 B12
 B14
 B14
 B11
- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

Communication Module



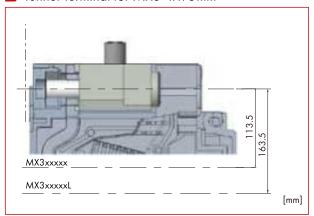
INPUT	1	OPV	15V output, connection to controller 15V input	
INPUT	2	OPG	GND, connect to controller GND	
INPUT	3	RXA	RS485 Bus A, connection to controller RS485A	
INPUT	4	TXB	RS485 Bus B, connection to controller RS485B	
DI	5	DI1(AX)	Auxiliary signal input, connection to AX PIN 4 auxiliary module	
DI	6	DI2(AL)	Alarm signal input, connection to alarm module AL PIN 4	
DI	7	СОМ	Common terminal, connection to AX, AL, PIN 1	
RS485	8	A+	RS485 Bus A, connection to external RS485 Bus A	
RS485	9	B-	RS485 Bus B, connection to external RS485 Bus B	
ON	10	JD2	Relay output, connection with motor drive for switching on	
ON	11	JD2	Relay output, connection with motor drive for switching on	
OFF	12	JD1	Relay output, connection with motor drive for switching off	
OFF	13	JD1	Relay output, connection with motor drive for switching off	
DC24V	14	GND	Supply voltage GND (DC24V model)	
DC24V	15	24V	Supply voltage 24V (DC24V model)	
AC230	14	N	Supply voltage 230V (AC230V model)	
AC230	15	L	Supply voltage 230V (AC230V model)	

The communication module is an interface module for communication between the electronic trigger of the circuit breakers and the bus system and takes over the communication and output of the remote control via relay contacts.

- Rated voltage: AC230V or DC24V (fault range \pm 15%)
- Communication type: RS485 (Modbus RTU protocol)
- Contact capacity: AC250V/3A; DC30V / 3A
- Transmission medium: shielded twisted cable
- Transmission distance: 1.2 km (with shielded twisted pair of category A)
- Display of operating status: LED display
- Number of stations: 1 station



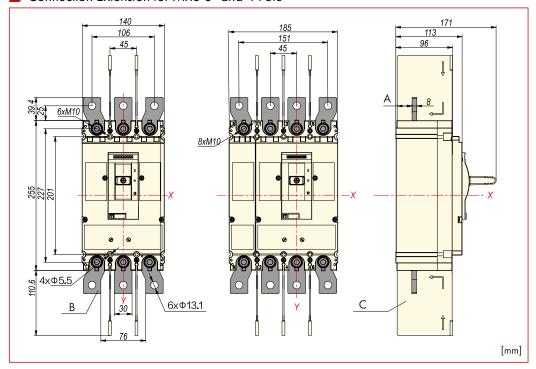
■ Tunnel Terminal for MX3 4X95mm²



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors .

Connection Extension for MX3 3- and 4 Pole

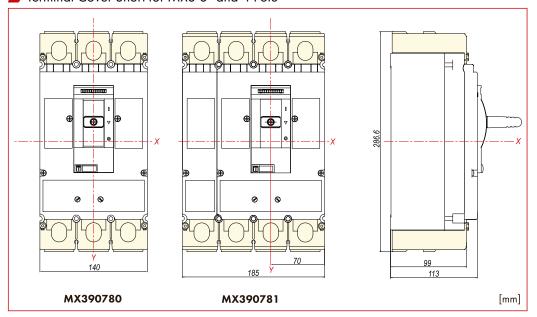


A	Top view
В	Connection expansion
С	Phase separator
X	Horizontal centre
Y	Vertical centre

Enables a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.



■ Terminal Cover Short for MX3 3- and 4 Pole

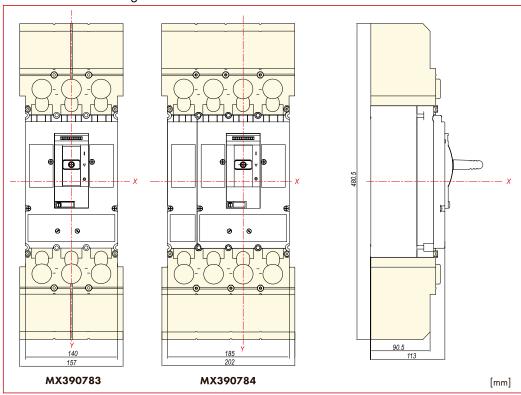


Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.

■ Terminal Cover Long for MX3 3- and 4 Pole



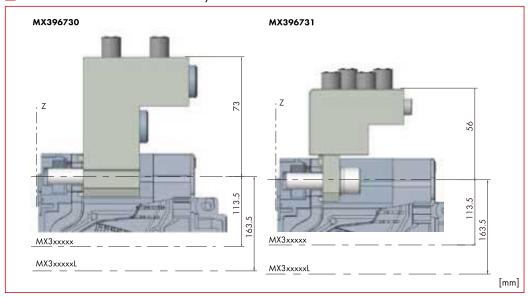
Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.



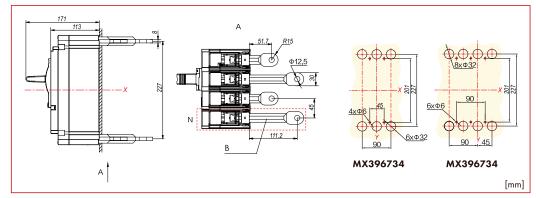
Tunnel Terminal 2x120-240mm²/4X95mm²



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors

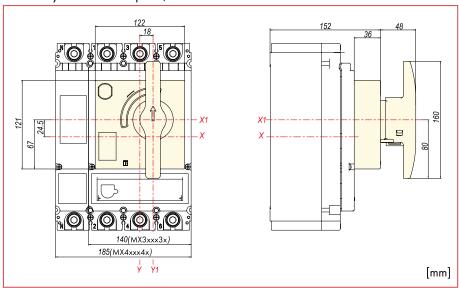
Rear Connection for MX3 3- and 4 Pole



Top view	
Rear Connection	
Neutral conductor	
Horizontal centre	
Y Vertical centre	

Allows the circuit breaker to be connected behind the mounting level.

Rotary Handle Complete, Lockable for MX3



X Horizontal centre Switch
X1 Horizontal centre Rotary Handle
Y Vertical centre switch
Y1 Vertical centre Rotary Handle

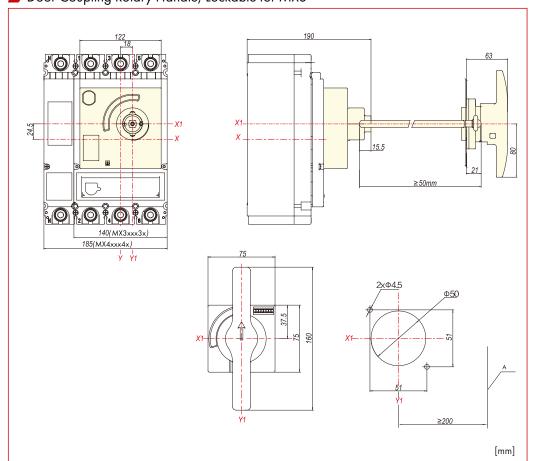
Protection class: IP40

Activating position 0, I and released, in 3 positions

The rotary handle can be locked with a padlock in the OFF state.

Attention: two versions for thermomagnetic or electronic triggers

Door Coupling Rotary Handle, Lockable for MX3



| X | Horizontal centre switch | X1 | Horizontal centre rotary handle | Y | Vertical centre switch | Y1 | Vertical centre rotary handle

Protection class: IP50

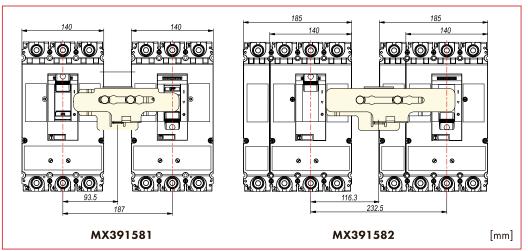
Activation position 0, I and triggered, in 3 positions

The rotary handle can be locked with a padlock in the OFF state.

 $\begin{tabular}{ll} \hline Attention: two versions for thermomagnetic or electronic triggers. \\ \hline \end{tabular}$

Control cabinet door locked in position "I"

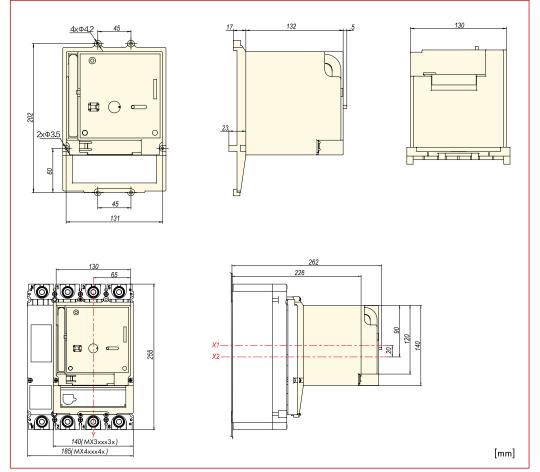
Mechanical Interlock 3- and 4 Pole



When using this locking device with two circuit breakers of the same size, only one of them can be operated. For manual locking of two circuit breakers.



Remote Operator for MX3



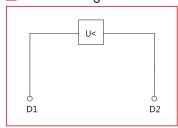
X1 Horizontal centre remote operator
X2 Horizontal centre switch
Y Vertical centre

P1 P2 S1 S2 S4

It is suitable for switching on, off and switching on circuit breakers over long distances, as well as for automation applications.

- Protection class: IP40
- Display 0, I and triggered in 3 positions
- Switching between Automatic and Manual Operation
- Automatic switching via electrical control inputs
- Manual switching via key.
- When control voltage is between 85% and 110%, the circuit breaker can be reliably switched on and off.

Under Voltage Release for MX3



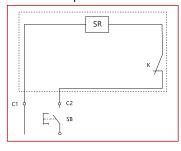
Instantaneous tripping of circuit breakers or switch-disconnectors when the supply voltage drops below 35% - 70%.

Can be used with EMERGENCY STOP devices.

Is installed in the circuit breaker.

When the undervoltage release is de-energised, contacting of the breaker main contacts is reliably prevented during closing attempts.

Shunt Trip for MX3



Immediate triggering of circuit breakers or switch disconnectors at voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the working current trigger is live, contacting the switch main contacts during switch-on tests is reliably prevented.



- MCCB Wix Size 3 - Accessories		
DESCRIPTION	AVAILABLE	ORDER NO.
General Accessories		
Communication module Modbus-RTU 24VDC 1.5m	000 O O	MX290000
Communication module Modbus-RTU 230VAC 1.5m	000 Ow 0	MX290001
Toggle Lever Locking Device for MX3		MX390199
Battery Box for MX Molded Case Circuit Breaker Typ EN,ENM,EM	DOD OF THE PROPERTY OF THE PRO	MXBAT001
Connecting Technic, Accessories		
Box Terminal for MX3 120-240MM², 1 piece	Jimes DOU On S	MX390015
Connection extension 3 pole for MX3, 6 pieces	3000 OF 9	MX390019
Connection extension 4 pole for MX3, 8 pieces	Jimess DOC OF G	MX390020
erminal Cover short 3 pole for MX3	30000	MX390780
erminal Cover short 4 pole for MX3	3000EF 000	MX390781
erminal Cover long 3 pole for MX3	SOUNDER OF THE PROPERTY OF THE	MX390783
erminal Cover long 4 pole for MX3	Sirelas To	MX390784
unnel Terminal 2x120-240mm² for MX3, 1 piece	SOO ON GE	MX396730
unnel Terminal 4x95mm² for MX3, 1 piece		MX396731
lear Connection, 3 pole for MX3	Tracers I	MX396734
lear Connection, 4 pole for MX3		MX396735
ocket for MX3 3 pole	2000 Ow (9)	MX396871
Socket for MX3 4 pole	Jirossi Pa	MX396872
Safety release for socket MX3 for thermal release	30 meter 100 met	MX396873
Safety release for socket MX3 for electronic release		MX396874
Phase separator plates MX3		MX396870
Rotary Handles, Door Coupling Handles, Accessories		
Rotary Handle complete, lockable for MX3 for thermal release	000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MX390125
Rotary Handle complete, lockable for MX3 for electronic release		MX390126
Door Coupling Rotary Handle, lockable, for MX3 for thermal release		MX390172
Door Coupling Rotary Handle, lockable, for MX3 for electronic release	Jones Con	MX390173
Mechanical Interlock for MX3 3 pole		MX391581
Mechanical Interlock for MX3 4 pole	1000 0000 0000 0000 0000 0000 0000 000	MX391582
Jnder Voltage Release Units, Shunt-trips and Accessories		
Under Voltage Release 110VAC for MX2, MX3	JUNEUS TO THE PARTY OF THE PART	MX299462
Under Voltage Release 220-240VAC for MX2, MX3	3000 OF 0	MX299471
Under Voltage Release 380-415VAC for MX2, MX3	2000 0000 0000 0000 0000 0000 0000 000	MX299473
Inder Voltage Release 24VDC for MX2, MX3	JONESE P	MX299481
Under Voltage Release 24VDC for MX2, MX3		MX299489
Shunt trip 110VAC for MX2, MX3		
Shunt trip 220-240VAC for MX2, MX3	COD OF S	MX299567 MX290154
·	JUNESS TO	
Shunt trip 380-415VAC for MX2, MX3	JUNESS TO STREET TO	MX291607
Shunt trip 24VDC for MX2, MX3	CCU OF G	MX299736
hunt trip 220VDC for MX2, MX3	Junear T	MX299742
Remote Operator 24VDC for MX3	Jimeser (MX399837
Remote Operator 110VAC/110-120VDC for MX3	June C	MX399838
Remote Operator 220-240VAC/220VDC for MX3	Jimess C	MX399832
lemote Operator 380-415VAC for MX3	1000 OF 0	MX399833
Measuring Unit with Modbus 3-pole for MX3, IT-Net	DOD OF O	MX390031
Measuring Unit with Modbus 3-pole for MX3, TT/TN-Net		MX390032
Neasuring Unit with Modbus 4-pole for MX3		MX390040
Auxiliary Contacts		
Auxiliary contact 1 CO	Troops	MX199411
Alarm contact 1 CO	SOO ON O	MX199511



■ MCCB MX Size 4, 3 Pole, 50kA



MX480232

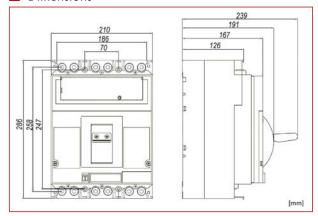
Schrack-Info

- For system and line protection
- Adjustable overload release 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 800A to 1600A

■ Technical Data

Size type		4		
Poles		3		
Rated operating current		800 - 1600A		
Rated operational voltage		≤690VAC		
Short circuit switching capacity (400V)		50kA		
Release		Electronic release - Type EN		
		Digital electronic release - Type EM		
Rated insulation voltage U _i		1000V		
Rated impulse withsand voltage U _{imp}		8kV		
·	AC 380/400/415V	50kA		
Rated ultimate short-circuit breaking capacity I _{cu}	AC 440V	50kA		
kalea ullilliale short-circuit bleaking capacity i _{cu}	AC 500V	40kA		
	AC 660/690V	30kA		
	AC 380/400/415V	50kA		
Rated service breaking capacity I _{cs}	AC 440V	40kA		
rated service breaking capacity 1 _{cs}	AC 500V	30kA		
	AC 660/690V	30kA		
Rated short-time withstand current I _{cw} (1s)		20kA		
Pollution degree		3		
IP Rating		IP40		
Min. ambient temperature		-40°C		
Max. ambient temperature		70°C		
Mechanical durability		6000 operation cycles		
Electrical endurance	AC 415V, I _n	1000 operation cycles		
Electrical endurance	AC 690V, I _n	1000 operation cycles		
Net weight		13.5kg		

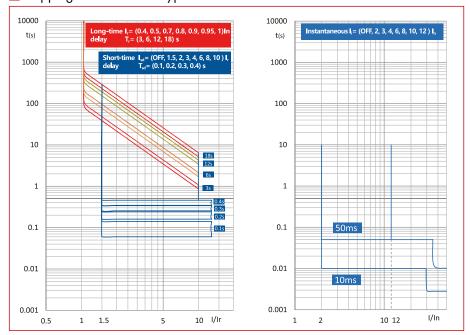
Dimensions



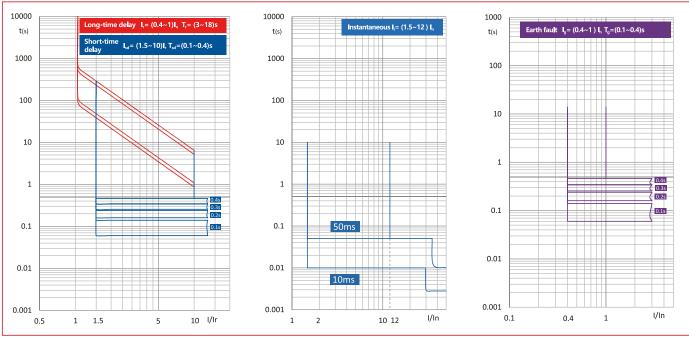


MCCB MX Size 4, 3 Pole, 50kA

Tripping Characteristic: Type EN



Tripping Characteristic: Type EM



DESCRIPTION	AVAILABLE	ORDER NO.
800 to 1600A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 800A	JEPHEN TO SEE	MX480232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 1000A	JOHN OF THE	MX410232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 1250A	JOHN TO THE	MX412232
Moulded Case Circuit Breaker Type EN, 3 pole, 50kA, 1600A	DOD OF THE	MX416232
800 to 1600A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 800A	TOTAL OF THE PARTY	MX480233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 1000A	DOD OF THE	MX410233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 1250A	JOHN OF THE PROPERTY OF THE PR	MX412233
Moulded Case Circuit Breaker Type EM, 3 pole, 50kA, 1600A	Jirota J	MX416233



■ MCCB MX Size 4, 3 Pole, 70kA



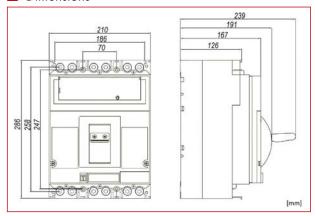
Schrack-Info

- For system and line protection
- Adjustable overload release 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 70kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 800A to 1600A

■ Technical Data

Size type		4		
Poles		3		
Rated operating current		800 - 1600A		
Rated operational voltage		≤690VAC		
Short circuit switching capacity (400V)		70kA		
Release		Electronic release - Type EN		
		Digital electronic release - Type EM		
Rated insulation voltage U _i		1000V		
Rated impulse withsand voltage U _{imp}		8kV		
·	AC 380/400/415V	70kA		
Rated ultimate short-circuit breaking capacity I _{cu}	AC 440V	65kA		
kalea ullililale short-circuit bleaking capacity i _{cu}	AC 500V	50kA		
	AC 660/690V	30kA		
	AC 380/400/415V	70kA		
Rated service breaking capacity I _{cs}	AC 440V	50kA		
Raied service breaking capacity i _{cs}	AC 500V	40kA		
	AC 660/690V	30kA		
Rated short-time withstand current I _{cw} (1s)		20kA		
Pollution degree		3		
IP Rating		IP40		
Min. ambient temperature		-40°C		
Max. ambient temperature		70°C		
Mechanical durability		6000 operation cycles		
Electrical endurance	AC 415V, I _n	1000 operation cycles		
Electrical endurance	AC 690V, I _n	1000 operation cycles		
Net weight		13.5kg		

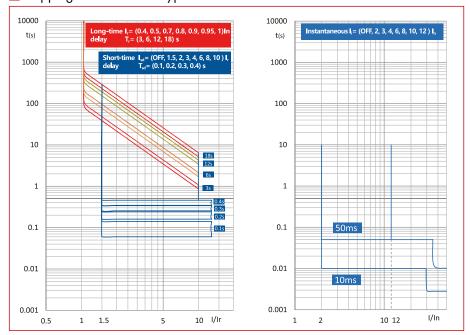
Dimensions



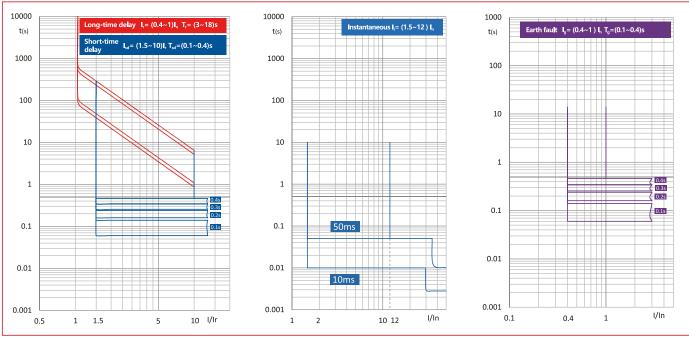


MCCB MX Size 4, 3 Pole, 70kA

Tripping Characteristic: Type EN



Tripping Characteristic: Type EM



DESCRIPTION	AVAILABLE	ORDER NO.
800 to 1600A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 3 pole, 70kA, 800A	Jirotti T	MX480332
Moulded Case Circuit Breaker Type EN, 3 pole, 70kA, 1000A	DOD OF THE	MX410332
Moulded Case Circuit Breaker Type EN, 3 pole, 70kA, 1250A	JOHN TO THE	MX412332
Moulded Case Circuit Breaker Type EN, 3 pole, 70kA, 1600A	DEC OF T	MX416332
800 to 1600A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 3 pole, 70kA, 800A	Jones G	MX480333
Moulded Case Circuit Breaker Type EM, 3 pole, 70kA, 1000A	DOD OF T	MX410333
Moulded Case Circuit Breaker Type EM, 3 pole, 70kA, 1250A	JOHN OF THE PARTY	MX412333
Moulded Case Circuit Breaker Type EM, 3 pole, 70kA, 1600A	BIOU COM OF	MX416333



MCCB MX Size 4, 4 Pole, 50kA



MX480242

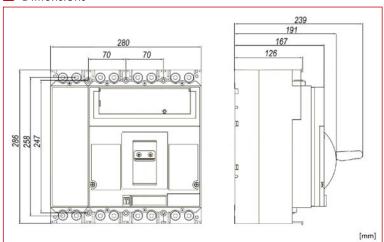
Schrack-Info

- For system and line protection
- Adjustable overload release 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 50kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 800A to 1600A

■ Technical Data

Size type		4		
Poles		4		
Rated operating current		800 - 1600A		
Rated operational voltage		≤690VAC		
Short circuit switching capacity (400V)		50kA		
Release		Electronic release - Type EN		
		Digital electronic release - Type EM		
Rated insulation voltage U _i		1000V		
Rated impulse withsand voltage U _{imp}		8kV		
	AC 380/400/415V	50kA		
Rated ultimate short-circuit breaking capacity I _{cu}	AC 440V	50kA		
kalea dilililale short-circuit breaking capacity i _{cu}	AC 500V	40kA		
	AC 660/690V	30kA		
	AC 380/400/415V	50kA		
Rated service breaking capacity I _{cs}	AC 440V	40kA		
Raied service breaking capacity i _{cs}	AC 500V	30kA		
	AC 660/690V	30kA		
Rated short-time withstand current I _{cw} (1s)		20kA		
Pollution degree		3		
IP Rating		IP20		
Min. ambient temperature		-40°C		
Max. ambient temperature		70°C		
Mechanical durability operation cycles		6000 operation cycles		
	AC 415V, I _n	1000 operation cycles		
Electrical endurance (operation cycles)	AC 690V, I _n	1000 operation cycles		
Net weight		17.5kg		

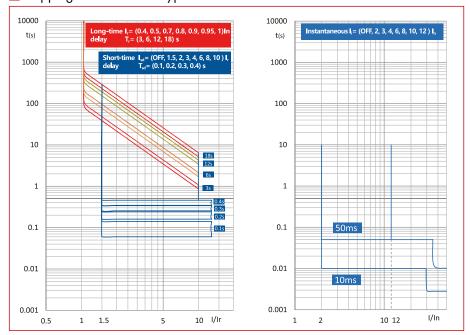
Dimensions



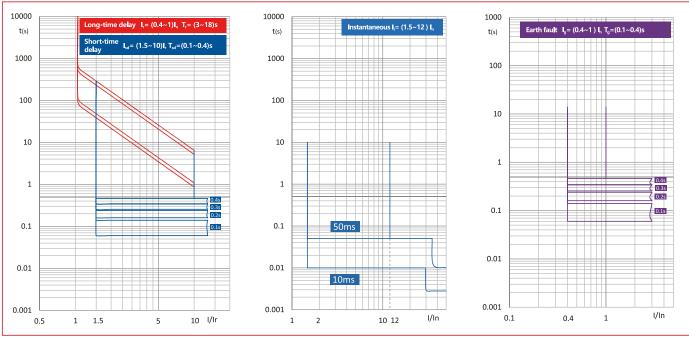


MCCB MX Size 4, 4 Pole, 50kA

Tripping Characteristic: Type EN



Tripping Characteristic: Type EM



DESCRIPTION	AVAILABLE	ORDER NO.
800 to 1600A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 800A	Thomas (MX480242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 1000A		MX410242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 1250A	JUNEST TO SEE	MX412242
Moulded Case Circuit Breaker Type EN, 4 pole, 50kA, 1600A	TOOL OF G	MX416242
800 to 1600A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 800A	DEC - Owe OF	MX480243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 1000A	EGG Com G	MX410243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 1250A	DEG ON P	MX412243
Moulded Case Circuit Breaker Type EM, 4 pole, 50kA, 1600A	TOTAL TOTAL	MX416243



MCCB MX Size 4, 4 Pole, 70kA



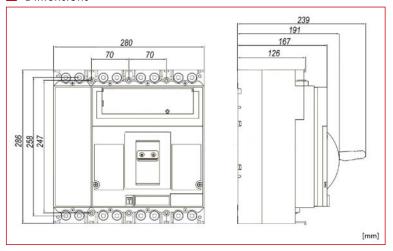
Schrack-Info

- For system and line protection
- Adjustable overload release 0.4 1 x In
- Adjustable short circuit release
- Screw connections standard, box terminals as option
- Switching capacity 70kA at 400V 50/60Hz
- According IEC/EN 60947-2
- Rated current 800A to 1600A

■ Technical Data

Size type		4
Poles		4
Rated operating current		800 - 1600A
Rated operational voltage		≤690VAC
Short circuit switching capacity (400V)		70kA
Release		Electronic release - Type EN
		Digital electronic release - Type EM
Rated insulation voltage U _i		1000V
Rated impulse withsand voltage U _{imp}		8kV
	AC 380/400/415V	70kA
Rated ultimate short-circuit breaking capacity I _{CII}	AC 440V	65kA
kalea ullimale short-circuit breaking capacity i _{cu}	AC 500V	50kA
	AC 660/690V	30kA
	AC 380/400/415V	70kA
Rated service breaking capacity I _{cs}	AC 440V	50kA
raied service breaking capacity i _{cs}	AC 500V	40kA
	AC 660/690V	30kA
Rated short-time withstand current I _{cw} (1s)		20kA
Pollution degree		3
IP Rating		IP20
Min. ambient temperature		-40°C
Max. ambient temperature		70°C
Mechanical durability		6000 operation cycles
	AC 415V, I _n	1000 operation cycles
Electrical endurance	AC 690V, I _n	1000 operation cycles
Weight		17.5kg

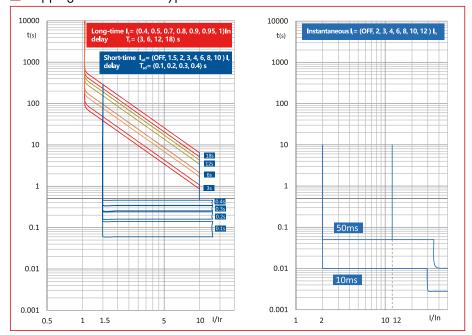
Dimensions



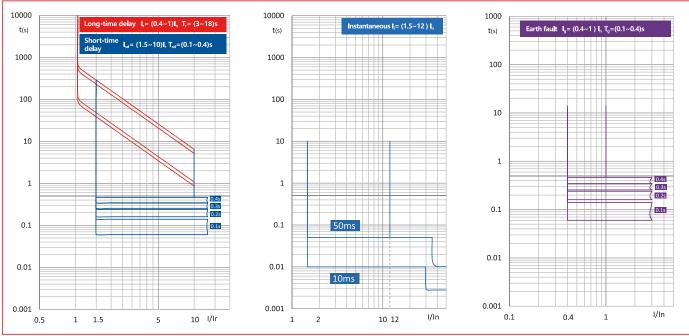


MCCB MX Size 4, 4 Pole, 70kA

Tripping Characteristic: Type EN



Tripping Characteristic: Type EM



DESCRIPTION	AVAILABLE	ORDER NO.
800 to 1600A with Electronic Release Unit		
Moulded Case Circuit Breaker Type EN, 4 pole, 70kA, 800A	1000 00 00 00 00 00 00 00 00 00 00 00 00	MX480342
Moulded Case Circuit Breaker Type EN, 4 pole, 70kA, 1000A	2000	MX410342
Moulded Case Circuit Breaker Type EN, 4 pole, 70kA, 1250A	3000 O G	MX412342
Moulded Case Circuit Breaker Type EN, 4 pole, 70kA, 1600A	1000 O O	MX416342
800 to 1600A with Digital Electronic Release Unit		
Moulded Case Circuit Breaker Type EM, 4 pole, 70kA, 800A	1000 O O	MX480343
Moulded Case Circuit Breaker Type EM, 4 pole, 70kA, 1000A	1000 T	MX410343
Moulded Case Circuit Breaker Type EM, 4 pole, 70kA, 1250A	1000 O O	MX412343
Moulded Case Circuit Breaker Type EM, 4 pole, 70kA, 1600A	TECH CONTROL OF	MX416343



■ MCCB MX Size 4, Selectivity table

	Upstream		MX4-	А МССВ		٨	AX4-EN, EN	A, ENM MC	В
Downstream	In(A)	800	1000	1250	1600	800	1000	1250	1600
	≤10	Т	Т	T	T	Т	Т	T	T
	16	Т	Т	T	T	Т	Т	T	T
	20	Т	T	T	T	T	T	T	T
AM MCB	25	T	T	T	T	T	T	T	T
	32	Т	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T
	50	T	T	T	T	T	T	T	T
	63	Т	T	T	T	T	T	T	T
	≤10	T	T	T	T	T	T	T	T
	13	T	T	T	T	T	T	T	T
	16	T	T	T	T	T	T	T	T
	20	T	T	T	T	T	T	T	T
AK RCBO 1+N	25	Т	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
	40	Т	T	T	T	T	T	T	T
	50	T	T	T	T	T	T	T	T
	63	T	T	T	T	T	T	T	T
	≤10	Т	Т	T	T	Т	Т	T	Т
	13	Т	Т	T	T	Т	T	T	T
	16	T	Т	T	T	Т	Т	T	T
AK RCBO 3+N	20	T	T	T	T	T	T	T	T
	25	Т	T	T	T	T	T	T	T
	32	Т	T	T	T	T	T	T	T
	40	T	T	T	T	T	T	T	T
	≤10	Т	T	T	T	T	T	T	T
	16	T	T	T	T	T	T	T	T
AMxxx5xx MCB 1+N/ 1TE	20	T	T	T	T	T	T	T	T
AMAXAXA MED 1114/ 112	25	Т	T	T	T	T	T	T	T
	32	Т	T	T	T	T	T	T	T
	40	Т	T	T	T	T	T	T	T
	16	Т	T	T	T	T	T	T	T
	20	Т	T	T	T	T	T	T	T
	25	Т	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
MX1 MCCB	40	T	T	T	T	T	T	T	T
	50	T	T	T	T	T	T	T	T
	63	T	T	T	T	T	T	T	T
	80	T	T	T	T	T	T	T	T
	100	T	T	T	T	T	T	T	T
	125	T	T	T	T	T	T	T	T
	125	T	T	T	T	T	T	T	T
	160	T	T	T	T	T	T	T	T
MX2-A MCCB	180	T	T	T	T	T	T	T	T
	200	T	T	T	T	T	T	T	T
	225	T	T	T	T	T	T	T	T
	250	T	T	T	T	T	T	T	T
	32	T	T	T	T	T	T	T	T
	63	T	Т	T	T	T	T	T	T
MX2-EN, EM, ENM MCCB	100	T	T	T	T	T	T	T	T
	160	T	T	T	T	T	T	T	T
	250	T	T	T	T	T	T	T	T
	250	9.5kA	12kA	15kA	19kA	9.5kA	12kA	15kA	19kA
	315	9.5kA	12kA	15kA	19kA	9.5kA	12kA	15kA	19kA
MX3-A MCCB	350	9.5kA	12kA	15kA	19kA	9.5kA	12kA	15kA	19kA
	400	9.5kA	12kA	15kA	19kA	9.5kA	12kA	15kA	19kA
	500	9.5kA	9.5kA	1.25kA	1.6kA	9.5kA	9.5kA	1.25kA	1.6kA
	250	9.5kA	12kA	15kA	19kA	9.5kA	12kA	15kA	19kA
MX3-EN, EM, ENM MCCB	400	9.5kA	12kA	15kA	19kA	9.5kA	12kA	15kA	19kA
	630	-	9.5kA	1.25kA	1.6kA	-	9.5kA	1.25kA	1.6kA

Notes:



¹⁾ No content, indicating no selectivity.

^{2) 1}kA, indicating local selectivity, the number indicates the maximum fault current to achieve selectivity. For example, selectivity can be achieved below 1kA, and above 1kA upper and lower level circuit breakers may act simultaneously.

³⁾ T, indicates that the full selectivity is satisfied within the breaking capacity of the lower level circuit breaker.









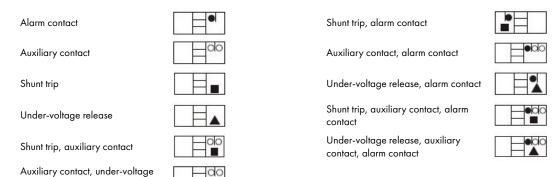
Schrack-Info

release

Wide range of accessories:

- Auxiliary contacts
- Under voltage release units, shunt-trips
- Connection accessories
- General accessories

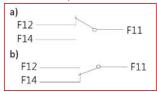
Installation Diagram for Accessories



- -) MX4 cannot be equipped with undervoltage release and shunt release at the same time;
- -) MX4 can be equipped with a maximum of 3 auxiliary contacts
- -) MX series can only be equipped with one alarm contac

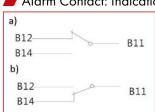
- 1) Left 2) Right 3) Handle
 - Shunt trip
 - Under-voltage release
 - Auxiliary contact Alarm contact

Auxiliary Contact: Indication of Circuit Breaker Status



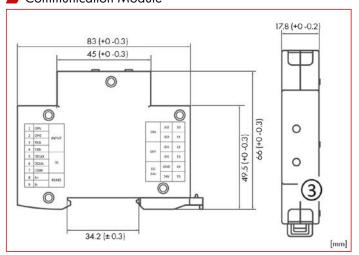
- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status

Alarm Contact: Indication of Circuit Breaker Status



- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

Communication Module

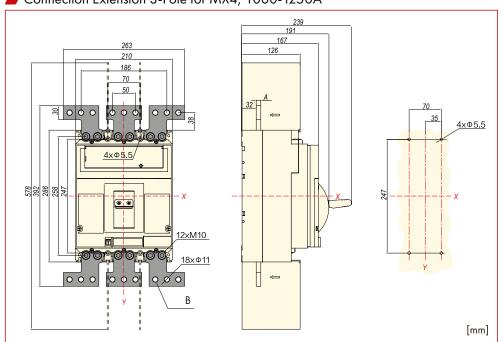


INPUT	1	OPV	15V output, connection to controller 15V input
INPUT	2	OPG	GND, connect to controller GND
INPUT	3	RXA	RS485 Bus A, connection to controller RS485A
INPUT	4	TXB	RS485 Bus B, connection to controller RS485B
DI	5	DI1(AX)	Auxiliary signal input, connection to AX PIN 4 auxiliary module
DI	6	DI2(AL)	Alarm signal input, connection to alarm module AL PIN 4
DI	7	СОМ	Common terminal, connection to AX, AL, PIN 1
RS485	8	A+	RS485 Bus A, connection to external RS485 Bus A
RS485	9	B-	RS485 Bus B, connection to external RS485 Bus B
ON	10	JD2	Relay output, connection with motor drive for switching on
ON	11	JD2	Relay output, connection with motor drive for switching on
OFF	12	JD1	Relay output, connection with motor drive for switching off
OFF	13	JD1	Relay output, connection with motor drive for switching off
DC24V	14	GND	Supply voltage GND (DC24V model)
DC24V	15	24V	Supply voltage GND (DC24V model)
AC230	14	N	Supply voltage 230V (AC230V model)
AC230	15	L	Supply voltage 230V (AC230V model)

The communication module is an interface module for communication between the electronic trigger of the circuit breakers and the bus system and takes over the communication and output of the remote control via relay contacts.

- Rated voltage: AC230V or DC24V (fault range ± 15%)
- Communication type: RS485 (Modbus RTU protocol)
- Contact capacity: AC250V/3A; DC30V / 3A
- Transmission medium: shielded twisted cable
- Transmission distance: 1.2 km (with shielded twisted pair of category A) $\,$
- Display of operating status: LED display
- Number of stations: 1 station

Connection Extension 3-Pole for MX4,	1000-1250A
--------------------------------------	------------

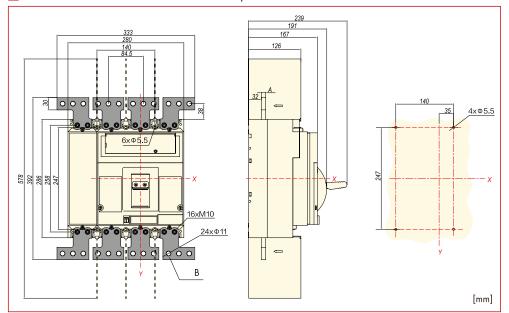


1	A	Top view
	В	Connection extension
7	X	Horizontal centre
1	Y	Vertical centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.



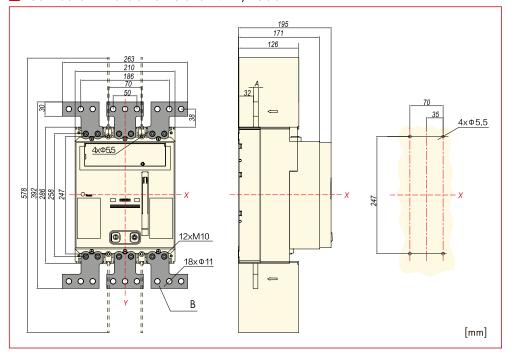
Connection Extension 4-Pole for MX4, 1000-1250A



A	Top view
В	Connection extension
Х	Horizontal centre
Y	Vertikal centre
	В

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

Connection Extension 3-Pole for MX4, 1600A

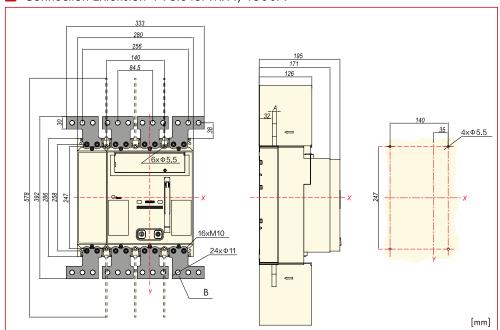


A	Top view
В	Connection extension
Х	Horizontal centre
Y	Vertical centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.



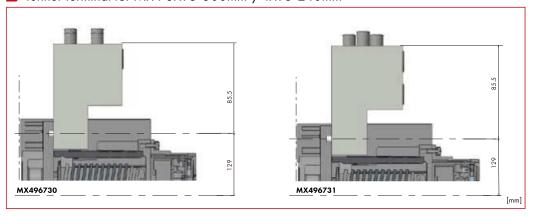
Connection Extension 4-Pole for MX4, 1600A



A	Top view
В	Connection extension
Х	Horizontal centre
Y	Vertical centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

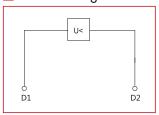
■ Tunnel Terminal for MX4 3X95-300mm²/4X95-240mm²



Suitable for aluminum and Cu conductors. Allows the direct connection of bare conductors.



Under Voltage Release for MX4



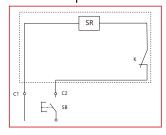
 $Immediate\ triggering\ of\ circuit\ breakers\ or\ switch\ disconnectors\ when\ the\ supply\ voltage\ drops\ below\ 35\%\ -\ 70\%.$

Can be used for EMERGENCY STOP devices. Installed in the circuit breaker.

Is built into the circuit breake

If the undervoltage trigger is de-energized, contacting the switch main contacts during switch-on tests is safely prevented.

Shunt Trip for MX4



Immediate triggering of circuit breakers or switch disconnectors at voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the working current trigger is live, contacting the switch main contacts during switch-on tests is reliably prevented.



DESCRIPTION	AVAILABLE	ORDER NO.
General Accessories		
Communication module Modbus-RTU 24VDC 1.5m	DOG OF G	MX290000
Communication module Modbus-RTU 230VAC 1.5m	000 0m @	MX290001
Battery Box for MX Molded Case Circuit Breaker Typ EN,ENM,EM	-000 -0 -0	MXBAT001
Connecting Technic, Accessories		
Connection extension 3 pole for MX4, 1000-1250A, 6 pieces	ODD OF G	MX490017
Connection extension 4 pole for MX4, 1000-1250A, 8 pieces	000 0 0	MX490018
Connection extension 3 pole for MX4, 1600A, 6 pieces	-000 -0 -0	MX490019
Connection extension 4 pole for MX4, 1600A, 8 pieces	TOOL ON GO	MX490020
Tunnel Terminal 3x95-300mm² for MX4, 800-1250A, 1 piece	DDD Owner	MX496730
Tunnel Terminal 4x95-240mm² for MX4, 800-1250A, 1 piece	1000 On 30	MX496731
Phase separator plates MX4	TOOL ON GO	MX496870
Under Voltage Release Units, Shunt-trips and Accessories		
Under Voltage Release 220-240VAC for MX4	ODD ON GO	MX499471
Under Voltage Release 380-415VAC for MX4	ODD OF G	MX499473
Shunt trip 220-240VAC for MX4	TOOL ON GO	MX490154
Shunt trip 380-415VAC for MX4	DEG OF S	MX491607
Shunt trip 24VDC for MX4	Jimes J	MX499736
Auxiliary Contacts		
Auxiliary contact 1 CO	Jimes J	MX199411
Alarm contact 1 CO	2000	MX199511



Load Switches MX Size 1



■ Load Switches MX Size 2



■ Load Switches MX Size 3



Load Switches MX Size 1



■ Load Switches MX Size 3



■ Load Switches MX Size 4



Load Switches MX, Fix Installed

■ Table of Contents

Load Switches MX Size 1	Page	100
Load Switches MX Size 2	Page	112
Load Switches MX Size 3	Page	125
Load Switches MX Size 4	Page	139



Load Switches MX Size 1, 3 Pole



MX112035

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity Icm = 3.2kA at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 125A

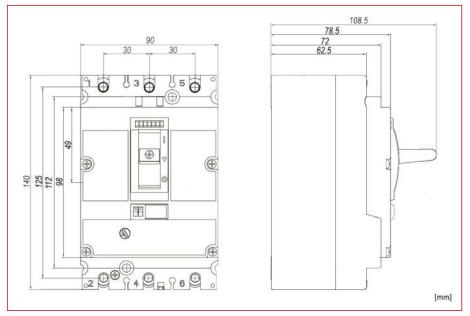
■ Technical Data

Size type			1
Poles			3
Conventional thermal current I _{th} 40°C			125A
Rated operating current I _e			125A
Rated operating voltage			≤690VAC
Rated insulation voltage U _i			1000V
Rated impulse withsand voltage U _{imp}			8kV
Rated short-circuit making capacity I _{cm}			3.2kA
Rated short-time withstand current I _{cw} 1s / 3s			2kA / 2kA
Utilization category			AC-22A/AC-23A
Min. ambient temperature			-40°C
Max. ambient temperature			70°C
Arcing distance			0
Mechanical durability			15000 operation cycles
FL · · · · ·	AC 415V, I _n		8000 operation cycles
Electrical endurance	AC 690V, I _n		2000 operation cycles
	Fixed	Front connection	•
		Rear connection	•
	Plug-in	Front connection	•
Mounting and connection		Rear connection	•
	Draw-out	Front connection	-
		Rear connection	-
	DIN rail	Front connection	•
Net weight			1.05kg



■ Load Switches MX Size 1, 3 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.	
to 125A load switches, remote releasable			
Switch Disconnector MX1.3 pole 125A	Junear District	MX112035	

Load Switches MX Size 1, 4 Pole



MX112045

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity Icm = 3.2kA at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 125A

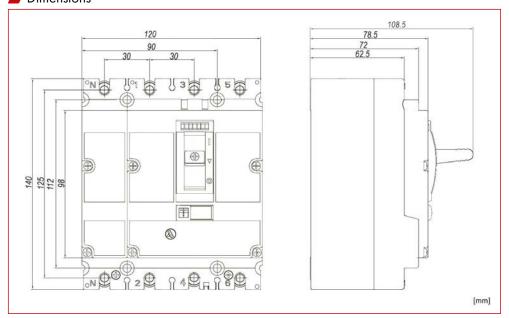
Technical Data

Size type			1
Poles			4
Conventional thermal current I _{th} 40°C			125A
Rated operating current l _e			125A
Rated operating voltage			≤690VAC
Rated insulation voltage U _i			1000V
Rated impulse withsand voltage U _{imp}			8kV
Rated short-circuit making capacity I _{cm}			3.2kA
Rated short-time withstand current I _{cw}	1s / 3s		2kA / 2kA
Utilization category	,	,	AC-22A/AC-23A
Min. ambient temperature			-40°C
Max. ambient temperature			70°C
Arcing distance			0
Mechanical durability			15000 operation cycles
Electrical endurance	AC 415V, I _n		8000 operation cycles
Electrical endurance	AC 690V, I _n		2000 operation cycles
	Fixed	Front connection	•
		Rear connection	•
	Plug-in	Front connection	•
Mounting and connection		Rear connection	•
	Draw-out	Front connection	-
		Rear connection	-
	DIN rail	Front connection	•
Net weight			1.5kg



Load Switches MX Size 1, 4 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
to 125A load switches, remote releasable		
Switch Disconnector MX1 4 pole 125A	Joness	MX112045



MX190015



MX 190125



MX 190172



MX190780



MX196730



MX199832



MX 199471



MX190783

Schrack-Info

Wide range of accessories

- Auxiliary contacts
- Under voltage release units, shunt-trips
- Connection accessories
- General accessories

Installation Diagram for Accessories

Alarm contact Shunt trip, alarm contact Auxiliary contact Auxiliary contact, alarm contact Shunt trip Under-voltage release, alarm contact Shunt trip, auxiliary contact, alarm Under-voltage release Under-voltage release, auxiliary Shunt trip, auxiliary contact contact, alarm contact Auxiliary contact, under-voltage release

- -) MX1 cannot be equipped with undervoltage release and shunt release at the same time
- -) MX1 can be equipped with a maximum of 2 auxiliary contacts

- 1) Left 2) Right 3) Handle
 - Shunt trip
 - Under-voltage release Auxiliary contact
 - Alarm contact

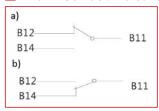
Auxiliary Contact: Indication of Circuit Breaker Status

- a)
 F12
 F14

 b)
 F12
 F14

 F14
- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status

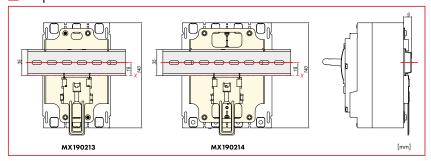
Alarm Contact: Indication of Circuit Breaker Status



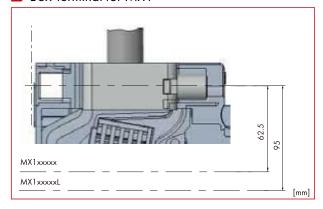
- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus



Clip Plate for MX1 3- and 4 Pole



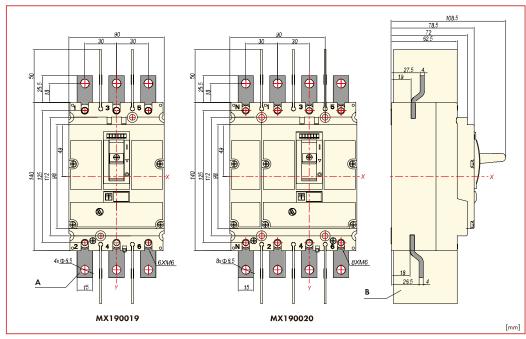
Box Terminal for MX1



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors

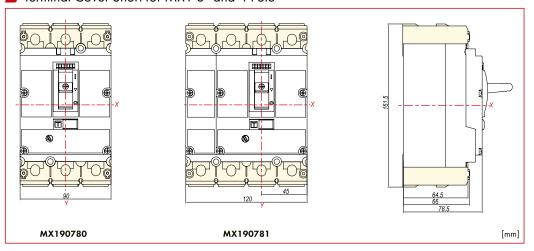
Connection Extesnsion for MX1 3- and 4 Pole



A	Top view
В	Phase separator
X	Horizontal centre
Y	Vertical centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

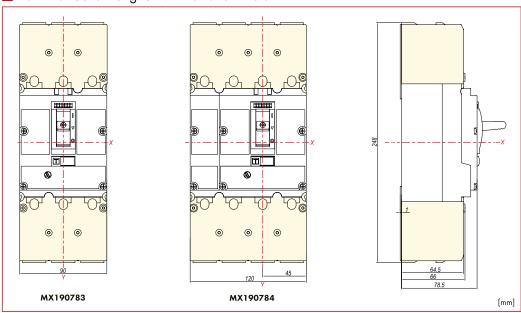
■ Terminal Cover Short for MX1 3- and 4 Pole



Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation. If the voltage exceeds 500V, the terminal cover must be used.

■ Terminal Cover Long for MX1 3- and 4 Pole

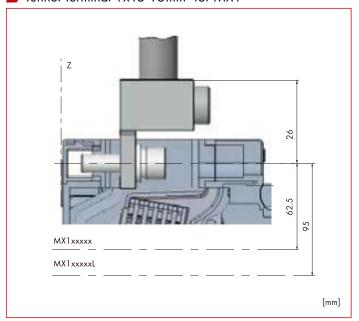


Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.

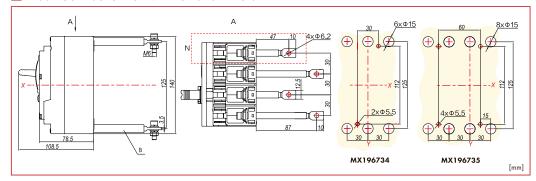
- Load Switches MX Size 1 Accessories
- Tunnel Terminal 1x16-95mm² for MX1



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors.

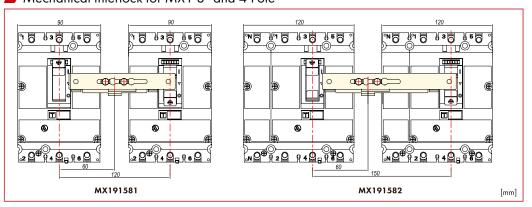
Rear Connection for MX1 3- and 4 Pole



A	Top view	
В	Connection extension	
N	Neutral conductor	
Х	Horizontal centre	
Y	Vertical centre	

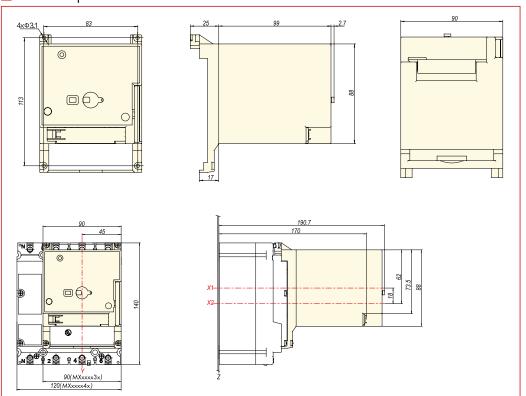
Allows the circuit breaker to be connected behind the mounting level.

■ Mechanical Interlock for MX1 3- and 4 Pole

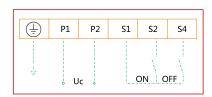


When using this locking device with two circuit breakers of the same size, only one of them can be operated. For manual locking of two circuit breakers.

Remote Operator for MX1



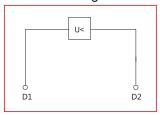
X1 Horizontal centre remote operator
X2 Horizontal centre switch
Y Vertical centre



It is suitable for closing, opening and reclosing circuit breakers over long distances, as well as for automation applications.

- Protection class: IP40
- Display 0, I and tripped in 3 positions
- Switching between automatic and manual operation
- Automatic switching via electrical control inputs.
- Manual switching via switching key.
- When control voltage is between 85% and 110%, the circuit-breaker can be reliably switched on and off.

Under Voltage Release for MX1



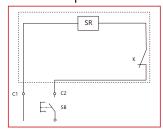
 $In stantaneous \ tripping \ of \ circuit \ breakers \ or \ switch-disconnectors \ when \ the \ supply \ voltage \ drops \ below \ 35\% - 70\%.$

Can be used with EMERGENCY STOP devices.

Is installed in the circuit breaker.

When the undervoltage release is de-energised, contacting of the breaker main contacts is reliably prevented during closing attempts.

Shunt Trip for MX1



Instantaneous tripping of circuit-breaker or switch-disconnector on voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the shunt release is live, contacting of the breaker main contacts is reliably prevented during closing attempts.

_ 23 dd 3 77 iid i 23 7 7 (23 3 3 5 1 7)		
DESCRIPTION	AVAILABLE	ORDER NO.
General accessories		
oggle Lever Locking Device for MX1	30000	MX190199
Clip Plate 35mm DIN-S for MX1 3 pole	June 0	MX190213
Clip Plate 35mm DIN-S for MX1 4 pole	30000	MX 190214
Connecting technic, accessories		
Box Terminal for MX1 2.5-75mm², 1 piece	31mesi 100	MX190015
Connection extension 3 pole for MX1, 6 pieces	310000	MX190019
Connection extension 4 pole for MX1, 8 pieces	31mess 1000	MX190020
Ferminal Cover short 3 pole for MX1	TOD OF G	MX190780
Ferminal Cover short 4 pole for MX1	30mes (m)	MX190781
erminal Cover long 3 pole for MX1	Jimes O	MX190783
Ferminal Cover long 4 pole for MX1	3000 TO	MX190784
unnel Terminal 1x16-95mm² for MX1, 1 piece	1000 000 J	MX196730
Rear Connection, 3 pole for MX1	30000	MX196734
Rear Connection, 4 pole for MX1	June On De	MX196735
Socket for MX1 3 pole	Junes Doc 2	MX196871
Socket for MX1 4 pole	31000	MX196872
Safety release for socket MX1	James Doct	MX196873
Phase separator plates MX1	31000	MX196870
Rotary handles, door coupling handles, accessories		
Mechanical Interlock for MX1 3 pole	3000 TO	MX191581
Mechanical Interlock for MX1 4 pole	Jimes O	MX191582
Indervoltage release units, shunt-trips and accessories		,
Under Voltage Release 110VAC for MX1	31mess 100	MX199462
Jnder Voltage Release 220-240VAC for MX1	31mess (m)	MX199471
Under Voltage Release 380-415VAC for MX1	30000 TO	MX199473
Under Voltage Release 24VDC for MX1	31mess (m)	MX199481
Under Voltage Release 220VDC for MX1	30000 To	MX199489
Shunt trip 110VAC for MX1	3000	MX199567
Shunt trip 220-240VAC for MX1	3000 TO	MX190154
Shunt trip 380-415VAC for MX1	3000	MX191607
Shunt trip 24VDC for MX1		MX199736
Shunt trip 220VDC for MX1	Thomas and the second s	MX199742
Remote Operator 24VDC for MX1	The Market Marke	MX199837
Remote Operator 110VAC/110-120VDC for MX1	Tools On G	MX199838
Remote Operator 220-240VAC/220VDC for MX1	The Market Marke	MX199832
Remote Operator 380-415VAC for MX1	3000	MX199833
Auxiliary contacts		
Auxiliary contacts Auxiliary contact 1 CO	CCCI ON G	MX199411





Load Switches MX Size 2, 3 Pole



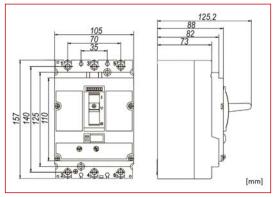
Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity lcm = 5kA at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 250A

■ Technical Data

- lecillical Dala			
Size type			2
Poles			3
Conventional thermal current I _{th} 40°C			250A
Rated operating current l _e			250A
Rated operating voltage			≤690VAC
Rated insulation voltage U _i			1000V
Rated impulse withsand voltage U _{imp}			8kV
Rated short-circuit making capacity I _{cm}			5kA
Rated short-time withstand current I _{cw}	1s / 3s		3.2kA / 3.2kA
Utilization category			AC-22A/AC-23A
Min. ambient temperature			-40°C
Max. ambient temperature			70°C
Arcing distance			0
Mechanical durability			15000 operation cycles
Electrical endurance	AC 415V, I _n		6000 operation cycles
Electrical endurance	AC 690V, I _n		1500 operation cycles
	Fixed	Front connection	•
		Rear connection	•
	Plug-in	Front connection	•
Mounting and connection		Rear connection	•
	Draw-out	Front connection	-
		Rear connection	-
	DIN rail	Front connection	•
Net weight			1.75kg

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
to 250A load switches, remote releasable		
Switch Disconnector MX2 3 pole 250A		MX225035



Load Switches MX Size 2, 4 Pole



MX225045

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity Icm = 5kA at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 250A

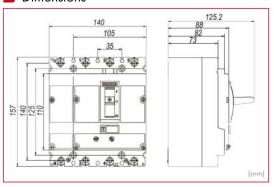
■ Technical Data

Size type			2
Poles			4
Conventional thermal current I _{th} 40°C	,		250A
Rated operating current I _e			250A
Rated operating voltage			≤690VAC
Rated insulation voltage U _i			1000V
Rated impulse withsand voltage U _{imp}			8kV
Rated short-circuit making capacity I _{cm}			5kA
Rated short-time withstand current I _{cw}	1s / 3s		3.2kA / 3.2kA
Utilization category			AC-22A/AC-23A
Min. ambient temperature			-40°C
Max. ambient temperature			70°C
Arcing distance			0
Mechanical durability			15000 operation cycles
Electrical endurance	AC 415V, I _n		6000 operation cycles
Electrical endurance	AC 690V, I _n		1500 operation cycles
	Fixed	Front connection	•
		Rear connection	•
	Plug-in	Front connection	•
Mounting and connection		Rear connection	•
	Draw-out	Front connection	-
		Rear connection	-
	DIN rail	Front connection	•
Net weight			2.4kg



■ Load Switches MX Size 2, 4 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
to 250A load switches, remote releasable		
Switch Disconnector MX2 4 pole 250A	1000 O 9	MX225045









MX290125



MX290172



MX296732



MX299832



MX290199



MX299471



MX296731

Schrack-Info

Wide range of accessories

- Auxiliary contacts
- Rotary handles, door coupling handles
- Under voltage release units, shunt-trips
- Connection accessories
- General accessories

Installation Diagram for Accessories

Alarm contact		Shunt trip, alarm contact	
Auxiliary contact	ol H b	Auxiliary contact, alarm contact	
Shunt trip		Under-voltage release, alarm contact	
Under-voltage release		Shunt trip, auxiliary contact, alarm contact	
Shunt trip, auxiliary contact		Under-voltage release, auxiliary contact, alarm contact	
Auxiliary contact, under-voltage release			
			1) Left 2) Right 3) Handle

- -) MX2 cannot be equipped with undervoltage release and shunt release at the same time;
- -) MX2 can be equipped with a maximum of 2 auxiliary contacts

- S) Hanale
- Under-voltage releaseAuxiliary contact
- Alarm contact



Auxiliary Contact: Indication of Circuit Breaker Status

- a)
 F12
 F14

 b)
 F12
 F11
 F14
- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status

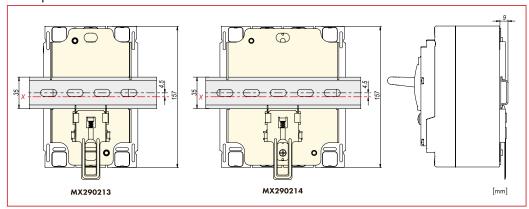
Alarm Contact: Indication of Circuit Breaker Status

- a)
 B12
 B14

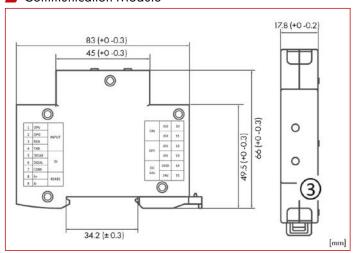
 b)
 B12
 B14

 B11
- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

Clip Plate for MX2 3- and 4 Pole



■ Communication Module



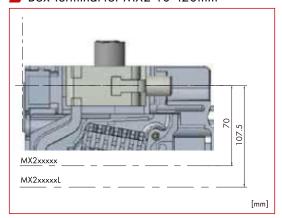
INPUT	1	OPV	15V output, connection to controller 15V input		
INPUT	2	OPG	GND, connect to controller GND		
INPUT	3	RXA	RS485 Bus A, connection to controller RS485A		
INPUT	4	TXB	RS485 Bus B, connection to controller RS485B		
DI	5	DI1(AX)	Auxiliary signal input, connection to AX PIN 4 auxiliary module		
DI	6	DI2(AL)	Alarm signal input, connection to alarm module AL PIN 4		
DI	7	WITH	Common terminal, connection to AX, AL, PIN 1		
RS485	8	A+	RS485 Bus A, connection to external RS485 Bus A		
RS485	9	B-	RS485 Bus B, connection to external RS485 Bus B		
ON	10	JD2	Relay output, connection with motor drive for switching on		
ON	11	JD2	Relay output, connection with motor drive for switching on		
OFF	12	JD1	Relay output, connection with motor drive for switching off		
OFF	13	JD1	Relay output, connection with motor drive for switching off		
DC24V	14	GND	Supply voltage GND (DC24V model)		
DC24V	15	24V	Supply voltage 24V (DC24V model)		
AC230	14	N	Supply voltage 230V (AC230V model)		
AC230	15	L	Supply voltage 230V (AC230V model)		

The communication module is an interface module for communication between the electronic trigger of the circuit breakers and the bus system and takes over the communication and output of the remote control via relay contacts.

- Rated voltage: AC230V or DC24V (fault range ± 15%)
- Communication type: RS485 (Modbus RTU protocol)
- Contact capacity: AC250V/3A; DC30V / 3A
- Transmission medium: shielded twisted cable
- Transmission distance: 1.2 km (with shielded twisted pair of category A)
- Display of operating status: LED display
- Number of stations: 1 station



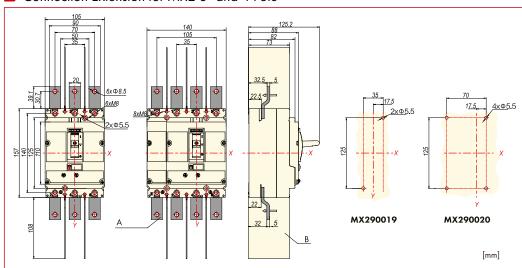
Box Terminal for MX2 10-120mm²



Suitable for aluminum and Cu conductors.

It enables the direct connection of bare conductors.

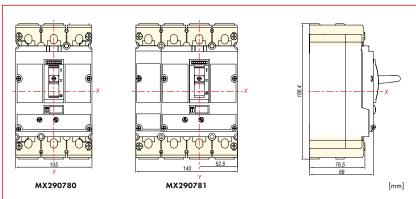
■ Connection Extension for MX2 3- and 4 Pole



A	Top view
В	Phase separator
Χ	Horizontal centre
Y	Vertical centre

Enables a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

Terminal Cover Short for MX2 3- and 4 Pole

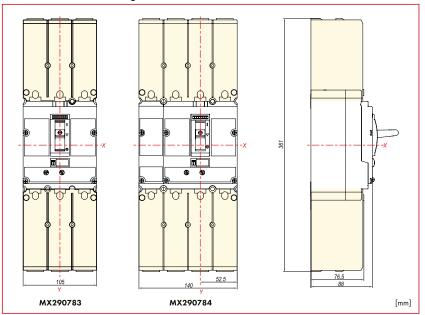


Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation. If the voltage exceeds 500V, the terminal cover must be used



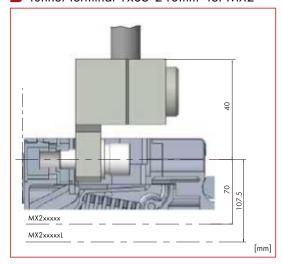
Terminal Cover Long for MX2 3- and 4 Pole



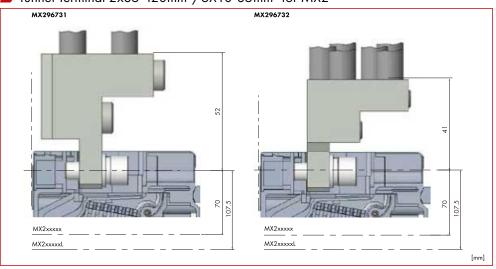
Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation. If the voltage exceeds 500V, the terminal cover must be used

■ Tunnel Terminal 1x35-240mm² for MX2



■ Tunnel Terminal 2x35-120mm²/6X10-35mm² for MX2

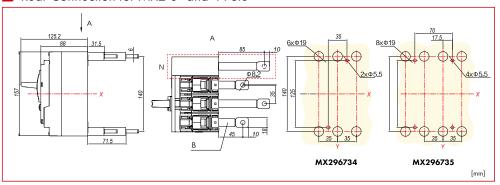


Suitable for aluminum and Cu conductors.

Allows the direct connection of bare conductors.



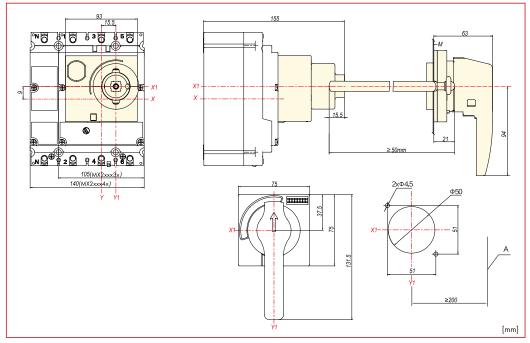
Rear Connection for MX2 3- and 4 Pole



A	Top view		
В	Connection extension		
N	Neutral conductor		
Х	Horizontal centre		
Y	Vertical centre		

Allows the circuit breaker to be connected behind the mounting level.

Door Coupling Rotary Handle for MX2, Lockable



X Horizontal centre switch
X1 Horizontal centre rotary handle
Y Vertical centre switch
Y1 Vertical centre rotary handle

Protection class: IP50

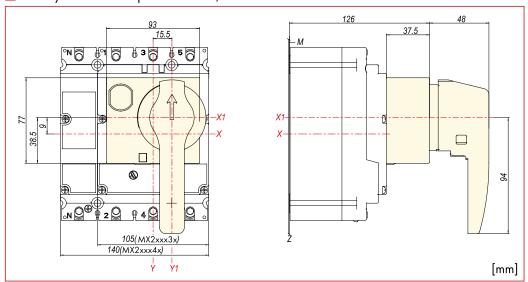
Switching position 0, I and triggered, in 3 positions.

The rotary handle can be locked with a padlock in the OFF position.

Attention: two versions for thermomagnetic or electronic release.

Enclosure door locked in "I" position

Rotary Handle Complete for MX2, Lockable



X Horizontal centre switch
X1 Horizontal centre rotary handle
Y Vertical centre switch
Y1 Vertical centre rotary handle

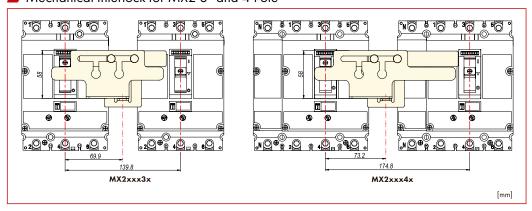
Protection class: IP40

Switching position 0, I and triggered, in 3 positions.

The rotary handle can be locked with a padlock in the OFF position.

Attention: two versions for thermomagnetic or electronic release.

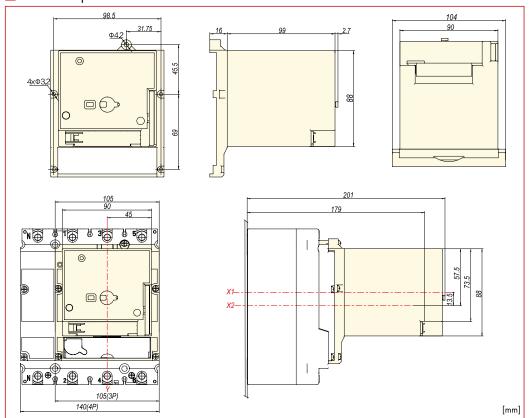
■ Mechanical Interlock for MX2 3- and 4 Pole



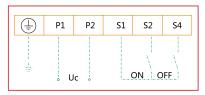
When using this locking device with two circuit breakers of the same size, only one of them can be operated. For manual locking of two circuit breakers.



Remote Operator for MX2



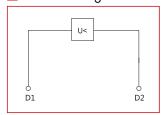
X1 Horizontal centre remote operator
X2 Horizontal centre switch
Y Vertical centre



It is suitable for switching on, off and switching on circuit breakers over long distances, as well as for automation applications.

- Protection class: IP40
- Display 0, I and triggered in 3 positions
- Switching between Automatic and Manual Operation
- Automatic switching via electrical control inputs
- Manual switching via key.
- When control voltage is between 85% and 110%, the circuit breaker can be reliably switched on and off.

Under Voltage Release



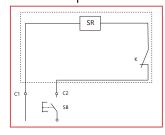
 $Immediate\ triggering\ of\ circuit\ breakers\ or\ switch\ disconnectors\ when\ the\ supply\ voltage\ drops\ below\ 35\%\ -\ 70\%.$

Can be used for EMERGENCY STOP devices.

Installed in the circuit breaker.

If the undervoltage trigger is de-energized, contacting the switch main contacts during switch-on tests is safely prevented.

Shunt Trip



Immediate triggering of circuit breakers or switch disconnectors at voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the working current trigger is live, contacting the switch main contacts during switch-on tests is reliably prevented.



DESCRIPTION	AVAILABLE	ORDER NO.
General accessories		
Toggle Lever Locking Device for MX2	ODD - On O	MX290199
Clip Plate 25mm DIN-S for MX2 3 pole		MX290213
Clip Plate 25mm DIN-S for MX2 4 pole	OD OF THE STATE OF	MX290214
Connecting technic, accessories		
Box Terminal for MX2 10-120mm², 1 piece	71-000 J	MX290015
Connection extension 3 pole for MX2, 6 pieces	ODD OF O	MX290019
Connection extension 4 pole for MX2, 8 pieces		MX290020
Terminal Cover short 3 pole for MX2	11-000 Jan 30	MX290780
Terminal Cover short 4 pole for MX2		MX290781
Terminal Cover long 3 pole for MX2	The state of the s	MX290783
Terminal Cover long 4 pole for MX2	200 - 000 g	MX290784
Tunnel Terminal 1x35-240mm² for MX2, 1 piece	1000 Om 30	MX296730
Tunnel Terminal 2x35-120mm² for MX2, 1 piece	2000 - Om (20)	MX296731
Tunnel Terminal 6x10-35mm² for MX2, 1 piece		MX296732
Rear Connection, 3 pole for MX2	Thomas (a)	MX296734
Rear Connection, 4 pole for MX2	Thomas and the state of the sta	MX296735
Socket for MX2 3 pole	Dom Jump	MX296871
Socket for MX2 4 pole	ODD OF O	MX296872
Safety release for socket MX2 for thermal release	DON - On Ja	MX296873
Safety release for socket MX2 for electronic release	ODD OF O	MX296874
Phase separator plates MX2	DOM - On the	MX296870
Rotary handles, door coupling handles, accessories		
Mechanical Interlock for MX2 3 pole		MX291581
Mechanical Interlock for MX2 4 pole		MX291582
Rotary handle complete, lockable for MX2 SD		MX290127
Door coupling rotary handle, lockable, for MX2 SD	Towns (MX290174
Undervoltage release units, shunt-trips and accessories		
Under Voltage Release 110VAC for MX2, MX3		MX299462
Under Voltage Release 220-240VAC for MX2, MX3	30°000 00°00	MX299471
Under Voltage Release 380-415VAC for MX2, MX3	10°000 00°0	MX299473
Under Voltage Release 24VDC for MX2, MX3	30°000 00°00	MX299481
Under Voltage Release 220VDC for MX2, MX3	DOD OF THE PARTY O	MX299489
Shunt trip 110VAC for MX2, MX3	1000U 0	MX299567
Shunt trip 220-240VAC for MX2, MX3	OCC OF G	MX290154
Shunt trip 380-415VAC for MX2, MX3	100-00F	MX291607
Shunt trip 24VDC for MX2, MX3		MX299736
Shunt trip 220VDC for MX2, MX3	Towns (MX299742
Remote Operator 24VDC for MX2		MX299837
Remote Operator 110VAC/110-120VDC for MX2	JOHNSE TO SEE	MX299838
Remote Operator 220-240VAC/220VDC for MX2	JONESS OF ST	MX299832
	ODU OF TO	MX299833
Remote Operator 380-415VAC for MX2	000 000	
Measuring Unit with Modbus 4-pole for MX2	30000	MX290040
·		MX290040
Measuring Unit with Modbus 4-pole for MX2		MX290040 MX199411
Measuring Unit with Modbus 4-pole for MX2 Auxiliary contacts	The Control of the Co	



Load Switches MX Size 3, 3 Pole



MX340035

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity lcm = 8kA (für MX34) / 14kA (für MX38) at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 400A / 800A

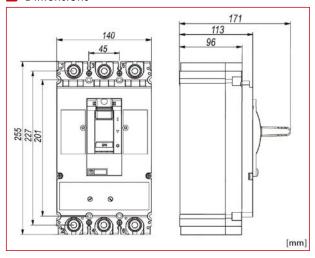
■ Technical Data

			MX34	MX38	
Size type				3	
Poles				3	
Conventional thermal current I _{th} 40°C			400A	800A	
Rated operating current l _e			400A	800A	
Rated operating voltage			≤69	POVAC	
Rated insulation voltage U _i			1000V	1250V	
Rated impulse withsand voltage U _{imp}			1	2kV	
Rated short-circuit making capacity I _{cm}			8kA	14kA	
Rated short-time withstand current I _{cw}	1s / 3s		5kA/5kA	8kA/10kA (1s); 8kA/10kA (3s)	
Utilization category			AC-22A	A/AC-23A	
Min. ambient temperature		'	-40°C		
Max. ambient temperature			70°C		
Arcing distance			0		
Mechanical durability			15000 operation cycles	10000 operation cycles	
Electrical endurance	AC 415V, I _n		4000 operation cycles	2000 operation cycles	
Electrical endurance	AC 690V, I _n		1500 operation cycles	1000 operation cycles	
	Fixed	Front connection	•	-	
		Rear connection	•	•	
	Plug-in	Front connection	•	-	
Mounting and connection		Rear connection	•	-	
	Draw-out	Front connection	•	•	
		Rear connection	•	•	
	DIN rail	Front connection	-	-	
Net weight	<u> </u>	·	5kg	9.5kg	



■ Load Switches MX Size 3, 3 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
to 800A load switches, remote releasable		
Switch Disconnector MX3, 3 pole, 400A	Joseph Com	MX340035
Switch Disconnector MX3, 3 pole, 800A	30000 Ov 00	MX380035

Load Switches MX Size 3, 4 Pole



MX340045

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity Icm = 8kA (für MX34) / 14kA (für MX38) at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 400A / 800A

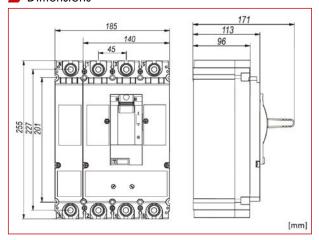
Technical Data

			MX34	MX38
Size type	3			
Poles		4		
Conventional thermal current I _{th} 40°C			400A	800A
Rated operating current l _e			400A	800A
Rated operating voltage			≤690	OVAC
Rated insulation voltage U _i			1000V	1250V
Rated impulse withsand voltage U _{imp}			12	kV
Rated short-circuit making capacity I _{cm}			8kA	14kA
Rated short-time withstand current I _{cw}	1s / 3s		5kA/5kA	8kA/10kA (1s); 8kA/ 10kA (3s)
Utilization category	,		AC-22A/AC-23A	
Min. ambient temperature			-40°C	
Max. ambient temperature			70°C	
Arcing distance			0	
Mechanical durability			15000 operation cycles	10000 operation cycles
Electrical endurance	AC 415V, I _n		4000 operation cycles	2000 operation cycles
Liecifical enablance	AC 690V, I _n		1500 operation cycles	1000 operation cycles
	Fixed	Front connection	•	-
		Rear connection	•	•
	Plug-in	Front connection	•	-
Mounting and connection		Rear connection	•	-
	Draw-out	Front connection	•	•
		Rear connection	•	•
	DIN rail	Front connection	-	-
Net weight			5.5kg	12.5kg



■ Load Switches MX Size 3, 4 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
to 800A load switches, remote releasable		
Switch Disconnector MX3, 4 pole, 400A		MX340045
Switch Disconnector MX3, 4 pole, 800A	Towers 1	MX380045







MX390125



MX390172





MX396731



MX399832



MX390780



MX390783

Schrack-Info

Wide range of accessories

- Auxiliary contacts
- Rotary handles, door coupling handles
- Under voltage release units, shunt-trips
- Connection accessories
- General accessories

Installation Diagram for Accessories

Alarm contact	Shunt trip, alarm contact	
Auxiliary contact	Auxiliary contact, alarm contact	
Shunt trip	Under-voltage release, alarm contact	
Under-voltage release	Shunt trip, auxiliary contact, alarm contact	
Shunt trip, auxiliary contact	Under-voltage release, auxiliary contact, alarm contact	
Auxiliary contact, under-voltage release		

- -) MX3 cannot be equipped with undervoltage release and shunt release at the same time;
- -) MX3 can be equipped with a maximum of 3 auxiliary contacts
- -) MX series can only be equipped with one alarm contac

- 1) Left 2) Right 3) Handle
 - Shunt trip
 - Under-voltage release Auxiliary contact
 - Alarm contact

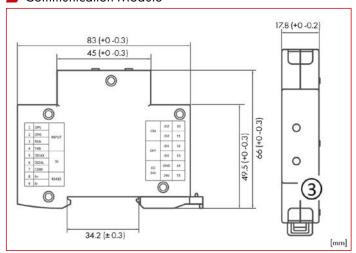
Auxiliary Contact: Indication of Circuit Breaker Status

- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status
- a) F12 F14 b) F12 F11 F14

Alarm Contact: Indication of Circuit Breaker Status

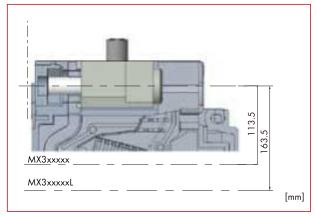
- a) B12 B11 B14 b) B12 B14
- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

Communication Module



INPUT	1	OPV	15V output, connection to controller 15V input		
INPUT	2	OPG	GND, connect to controller GND		
INPUT	3	RXA	RS485 Bus A, connection to controller RS485A		
INPUT	4	TXB	RS485 Bus B, connection to controller RS485B		
DI	5	DI1(AX)	Auxiliary signal input, connection to AX PIN 4 auxiliary module		
DI	6	DI2(AL)	Alarm signal input, connection to alarm module AL PIN 4		
DI	7	СОМ	Common terminal, connection to AX, AL, PIN 1		
RS485	8	A+	RS485 Bus A, connection to external RS485 Bus A		
RS485	9	B-	RS485 Bus B, connection to external RS485 Bus B		
ON	10	JD2	Relay output, connection with motor drive for switching on		
ON	11	JD2	Relay output, connection with motor drive for switching on		
OFF	12	JD1	Relay output, connection with motor drive for switching off		
OFF	13	JD1	Relay output, connection with motor drive for switching off		
DC24V	14	GND	Supply voltage GND (DC24V model)		
DC24V	15	24V	Supply voltage 24V (DC24V model)		
AC230	14	Ν	Supply voltage 230V (AC230V model)		
AC230	15	L	Supply voltage 230V (AC230V model)		

■ Tunnel Terminal for MX3 4X95mm²



Suitable for aluminum and Cu conductors.

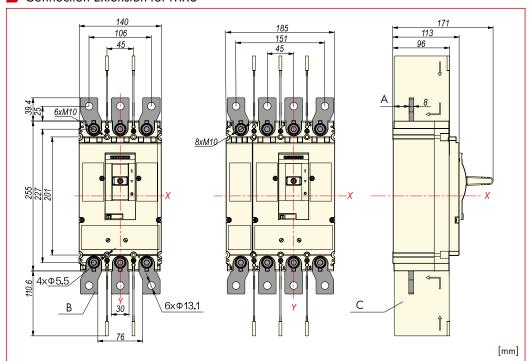
It enables the direct connection of bare conductors .

The communication module is an interface module for communication between the electronic trigger of the circuit breakers and the bus system and takes over the communication and output of the remote control via relay contacts.

- Rated voltage: AC230V or DC24V (fault range ± 15%)
- Communication type: RS485 (Modbus RTU protocol)
- Contact capacity: AC250V/3A; DC30V / 3A
- Transmission medium: shielded twisted cable
- Transmission distance: 1.2 km (with shielded twisted pair of category A)
- Display of operating status: LED display
- Number of stations: 1 station



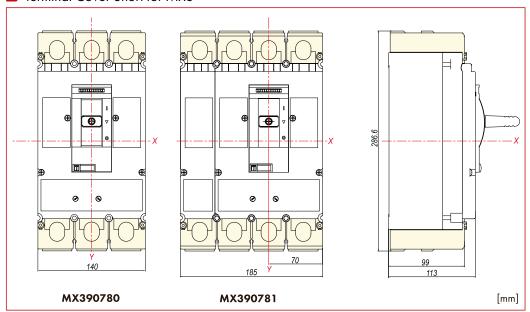
Connection Extension for MX3



A	Top view	
В	Connection expansion	
С	Phase separator	
Х	Horizontal centre	
Υ	Vertical centre	

Enables a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

Terminal Cover Short for MX3



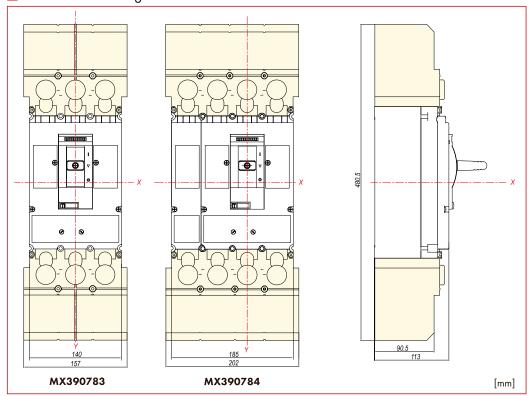
Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.



Terminal Cover Long for MX3

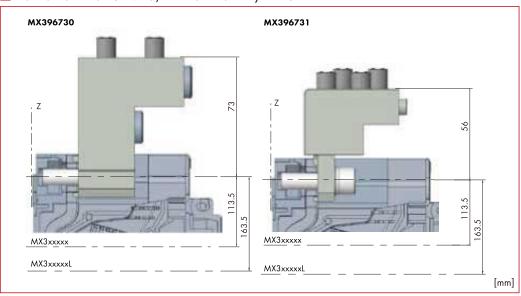


Protection class: IP40

Serves to protect the contacts against contact and also serves as phase separation.

If the voltage exceeds 500V, the terminal cover must be used.

■ Tunnel Terminal for MX3, 2x120-240mm²/4X95mm²

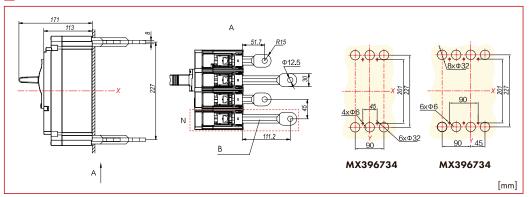


Suitable for aluminum and $\mbox{\rm Cu}$ conductors.

It enables the direct connection of bare conductors



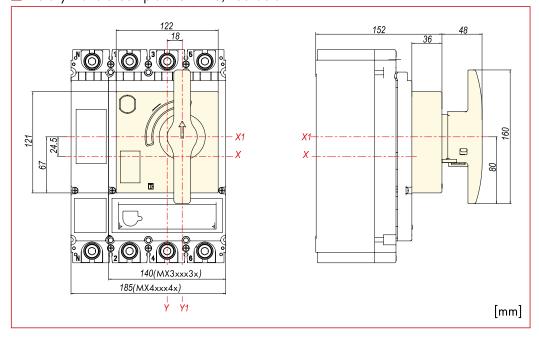
Rear Connection for MX3 3- and 4 Pole



A	Top view	
В	Rear Connection	
N	Neutral conductor	
Х	Horizontal centre	
Y	Vertical centre	
	B N	

Allows the circuit breaker to be connected behind the mounting level.

Rotary Handle Complete for MX3, Lockable

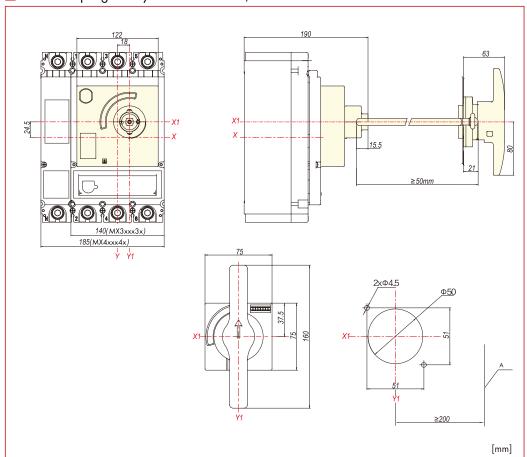


X	Horizontal centre Switch	
X1	Horizontal centre Rotary Handle	
Y	Vertical centre switch	
Υı	Vertical centre Rotary Handle	

Protection class: IP40
Activating position 0, I and released, in 3 positions
The rotary handle can be locked with a padlock in the OFF state.
Attention: two versions for thermomagnetic or electronic triggers



Door Coupling Rotary Handle for MX3, Lockable



X Horizontal centre switch

X1 Horizontal centre rotary handle

Y Vertical centre switch

Y1 Vertical centre rotary handle

Protection class: IP50

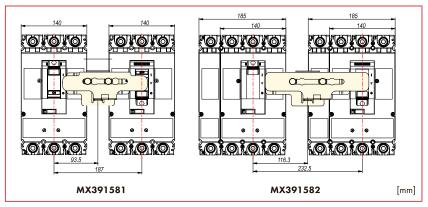
Activation position 0, I and triggered, in 3 positions

The rotary handle can be locked with a padlock in the OFF state.

 $\begin{tabular}{lll} Attention: two versions for thermomagnetic or electronic triggers. \end{tabular}$

Control cabinet door locked in position "I"

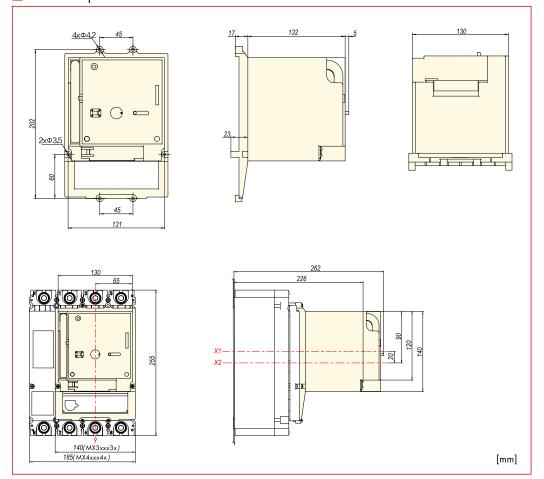
■ Mechanical Interlock for MX3 3- and 4 Pole



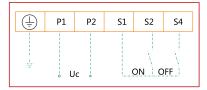
When using this locking device with two circuit breakers of the same size, only one of them can be operated. For manual locking of two circuit breakers.



Remote Operator for MX3



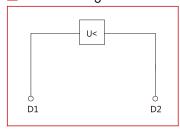
X1	Horizontal centre remote operator
X2	Horizontal centre switch
Y	Vertical centre



It is suitable for switching on, off and switching on circuit breakers over long distances, as well as for automation applications.

- Protection class: IP40
- Display 0, I and triggered in 3 positions
- Switching between Automatic and Manual Operation
- Automatic switching via electrical control inputs
- Manual switching via key.
- When control voltage is between 85% and 110%, the circuit breaker can be reliably switched on and off.

Under Voltage Release for MX3



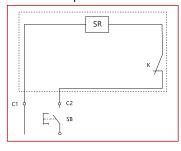
Instantaneous tripping of circuit breakers or switch-disconnectors when the supply voltage drops below 35% - 70%.

Can be used with EMERGENCY STOP devices.

Is installed in the circuit breaker.

When the undervoltage release is de-energised, contacting of the breaker main contacts is reliably prevented during closing attempts.

Shunt Trip for MX3



Immediate triggering of circuit breakers or switch disconnectors at voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the working current trigger is live, contacting the switch main contacts during switch-on tests is reliably prevented.



DESCRIPTION	AVAILABLE	ORDER NO.
General accessories		
Toggle Lever Locking Device for MX3	Juneary Co.	MX390199
Connecting technic, accessories		
Box Terminal for MX3 120-240MM², 1 piece	Joseph Company	MX390015
Connection extension 3 pole for MX3, 6 pieces	3000 On On	MX390019
Connection extension 4 pole for MX3, 8 pieces	Toward Co.	MX390020
Terminal Cover short 3 pole for MX3	Transfer a	MX390780
Terminal Cover short 4 pole for MX3	3000 OF 000	MX390781
Terminal Cover long 3 pole for MX3	Thomas and the second s	MX390783
Terminal Cover long 4 pole for MX3	Therefore the Control of the Control	MX390784
Tunnel Terminal 2x120-240mm² for MX3, 1 piece	Tracests (MX396730
Tunnel Terminal 4x95mm² for MX3, 1 piece	3000 OF	MX396731
Rear Connection, 3 pole for MX3	30000	MX396734
Rear Connection, 4 pole for MX3	Jimess G	MX396735
Socket for MX3 3 pole	30000	MX396871
Socket for MX3 4 pole	J. 1000	MX396872
Safety release for socket MX3 for thermal release	3000 Ow 0	MX396873
Safety release for socket MX3 for electronic release	3000 O O	MX396874
Phase separator plates MX3	2000	MX396870
Rotary handles, door coupling handles, accessories	000 000	
Mechanical Interlock for MX3 3 pole	JOHNE 1	MX391581
Mechanical Interlock for MX3 4 pole	1000 000 000 000 000 000 000 000 000 00	MX391582
Rotary handle complete, lockable for MX3 SD	3000 OF 00	MX390127
Door coupling rotary handle, lockable, for MX3 SD	1000 OF 0	MX390174
Undervoltage release units, shunt-trips and accessories		
Under Voltage Release 110VAC for MX2, MX3	Jimes 1000 1	MX299462
Under Voltage Release 220-240VAC for MX2, MX3	J. 2000	MX299471
Under Voltage Release 380-415VAC for MX2, MX3	J. 1000	MX299473
Under Voltage Release 24VDC for MX2, MX3	3000 Ow 9	MX299481
Under Voltage Release 220VDC for MX2, MX3		MX299489
Shunt trip 110VAC for MX2, MX3	30000	MX299567
Shunt trip 220-240VAC for MX2, MX3	Jimess 1	MX290154
Shunt trip 380-415VAC for MX2, MX3	350000	MX291607
Shunt trip 24VDC for MX2, MX3	Jimes 0	MX299736
Shunt trip 220VDC for MX2, MX3	30000	MX299742
Remote Operator 24VDC for MX3	3000 O G	MX399837
Remote Operator 110VAC/110-120VDC for MX3	J. 1000 Ow 0	MX399838
Remote Operator 220-240VAC/220VDC for MX3	JUNE 1000	MX399832
Remote Operator 380-415VAC for MX3	1000 OF 6	MX399833
Measuring Unit with Modbus 3-pole for MX3, IT-Net	3000 O	MX390031
Measuring Unit with Modbus 3-pole for MX3, TT/TN-Net	1000 OF 6	MX390032
Measuring Unit with Modbus 4-pole for MX3	Junear D	MX390040
Auxiliary contacts		
Auxiliary contact 1 CO	30-00E	MX199411
Alarm contact 1 CO	1000 OF 6	MX199511
	000 0* 0*	



Load Switches MX Size 4, 3 Pole



MX480035

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity Icm = 40kA at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 800A / 1600A

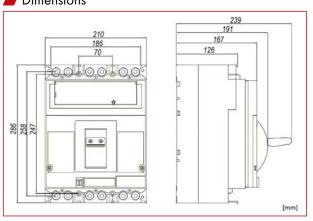
■ Technical Data

Size type			4
Poles			3
Conventional thermal current I _{th} 40°C			1600A
Rated operating current l _e			1600A
Rated operating voltage			≤690VAC
Rated insulation voltage U _i			1000V
Rated impulse withsand voltage U _{imp}			12kV
Rated short-circuit making capacity I _{cm}			40kA
Rated short-time withstand current I _{cw}	1s / 3s		20kA / 20kA
Utilization category			AC-22A/AC-23A
Min. ambient temperature			-40°C
Max. ambient temperature			70°C
Arcing distance			0
Mechanical durability			6000 operation cycles
Electrical endurance	AC 415V, I _n		1000 operation cycles
Electrical endurance	AC 690V, I _n		1000 operation cycles
	Fixed	Front connection	•
		Rear connection	•
	Plug-in	Front connection	-
Mounting and connection		Rear connection	-
	Draw-out	Front connection	-
		Rear connection	-
	DIN rail	Front connection	-
Net weight			13kg



Load Switches MX Size 4, 3 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
800 to 1600A load switches, remote releasable		
Switch Disconnector MX4/800 3 pole 800A	JONES 1	MX480035
Switch Disconnector MX4/1600 3 pole 1600A	Trades	MX416035



Load Switches MX Size 4, 4 Pole



MX480045

Schrack-Info

- Load Switches without release unit
- Screw connections standard, box terminals as option
- Retrofittable with auxiliary contacts, undervoltage and shunt release
- Rated short-circuit making capacity Icm = 40kA at 415V 50/60Hz
- According IEC/EN 60947-3
- Rated operational current 800A / 1600A

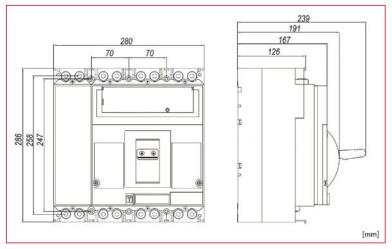
Technical Data

Size type			4
Poles			4
Conventional thermal current I _{th} 40°C			1600A
Rated operating current l _e			1600A
Rated operating voltage			≤690VAC
Rated insulation voltage U _i			1000V
Rated impulse withsand voltage U _{imp}			12kV
Rated short-circuit making capacity l _{cm}			40kA
Rated short-time withstand current I _{cw}	1s / 3s		20kA / 20kA
Utilization category			AC-22A/AC-23A
Min. ambient temperature			-40°C
Max. ambient temperature			70°C
Arcing distance			0
Mechanical durability operation cycles			6000 operation cycles
	AC 415V, I _n		1000 operation cycles
Electrical endurance (operation cycles)	AC 690V, I _n		1000 operation cycles
	Fixed	Front connection	•
		Rear connection	•
	Plug-in	Front connection	-
Mounting and connection		Rear connection	-
	Draw-out	Front connection	-
		Rear connection	-
	DIN rail	Front connection	-
Net weight			17kg



Load Switches MX Size 4, 4 Pole

Dimensions



DESCRIPTION	AVAILABLE	ORDER NO.
800 to 1600A load switches, remote releasable		
Switch Disconnector MX4/800 4 pole 800A	JOHN DO GO	MX480045
Switch Disconnector MX4/1600 4 pole 1600A	Jineur G	MX416045









MX490017

release

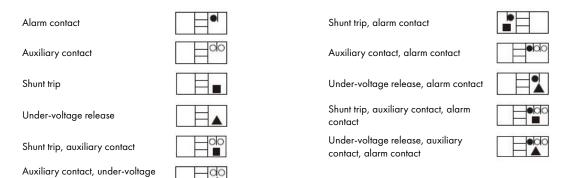
MX496730

Schrack-Info

Wide range of accessories

- Auxiliary contacts
- Under voltage release units, shunt-trips
- Connection accessories
- General accessories

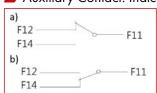
Installation Diagram for Accessories



- -) MX4 cannot be equipped with undervoltage release and shunt release at the same time;
- -) MX4 can be equipped with a maximum of 3 auxiliary contacts
- -) MX series can only be equipped with one alarm contac

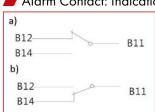
- 1) Left 2) Right
- 3) Handle
- Shunt trip
- Under-voltage release
- Auxiliary contact
- Alarm contact

Auxiliary Contact: Indication of Circuit Breaker Status



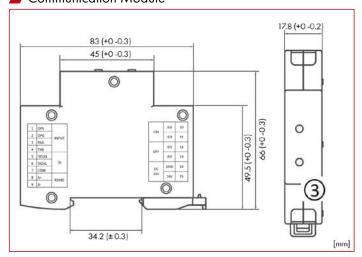
- a) Circuit breaker is at breaking status
- b) Circuit breaker is at making status

Alarm Contact: Indication of Circuit Breaker Status



- a) Circuit breaker is at breakingor making status
- b) Circuit breaker is at free trippingstatus

Communication Module

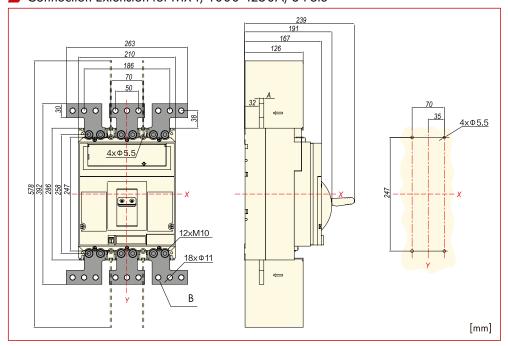


INPUT	1	OPV	15V output, connection to controller 15V input					
INPUT	2	OPG	GND, connect to controller GND					
INPUT	3	RXA	RS485 Bus A, connection to controller RS485A					
INPUT	4	TXB	485 Bus B, connection to controller RS485B					
DI	5	DI1(AX)	Auxiliary signal input, connection to AX PIN 4 auxiliary module					
DI	6	DI2(AL)	Alarm signal input, connection to alarm module AL PIN 4					
DI	7	СОМ	Common terminal, connection to AX, AL, PIN 1					
RS485	8	A+	RS485 Bus A, connection to external RS485 Bus A					
RS485	9	B-	RS485 Bus B, connection to external RS485 Bus B					
ON	10	JD2	elay output, connection with motor drive for switching on					
ON	11	JD2	elay output, connection with motor drive for switching on					
OFF	12	JD1	Relay output, connection with motor drive for switching off					
OFF	13	JD1	Relay output, connection with motor drive for switching off					
DC24V	14	GND	Supply voltage GND (DC24V model)					
DC24V	15	24V	Supply voltage GND (DC24V model)					
AC230	14	N	Supply voltage 230V (AC230V model)					
AC230	15	L	Supply voltage 230V (AC230V model)					

The communication module is an interface module for communication between the electronic trigger of the circuit breakers and the bus system and takes over the communication and output of the remote control via relay contacts.

- Rated voltage: AC230V or DC24V (fault range ± 15%)
- Communication type: RS485 (Modbus RTU protocol)
- Contact capacity: AC250V/3A; DC30V / 3A
- Transmission medium: shielded twisted cable
- Transmission distance: 1.2 km (with shielded twisted pair of category A) $\,$
- Display of operating status: LED display
- Number of stations: 1 station

Connection Extension for MX4, 1000-1250A, 3 Pole

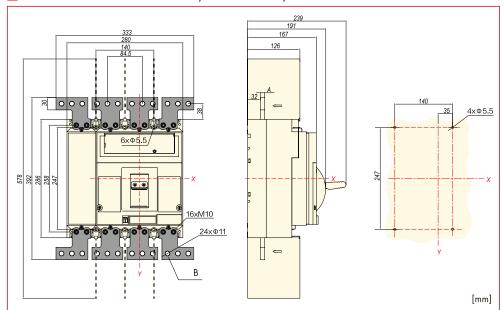


A	Top view
В	Connection extension
Х	Horizontal centre
Y	Vertical centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.



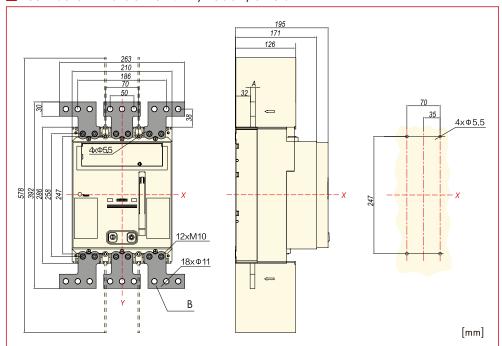
Connection Extension for MX4, 1000-1250A, 4 Pole



A	Top view
В	Connection extension
X	Horizontal centre
Y	Vertikal centre

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

Connection Extension for MX4, 1600A, 3 Pole

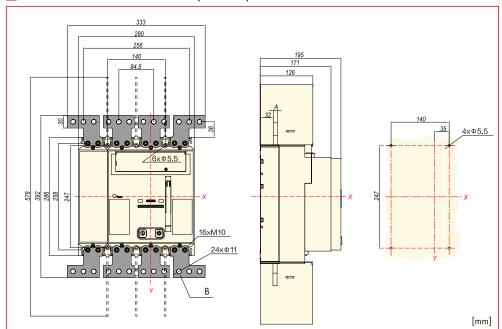


A	Top view						
В	Connection extension						
Х	Horizontal centre						
Y	Vertical centre						

Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.



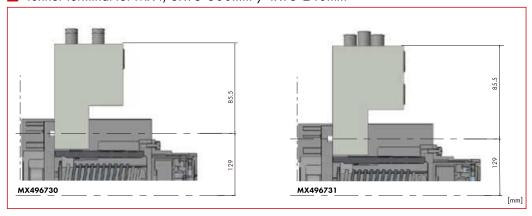
- Load Switches MX Size 4 Accessories
- Connection Extension for MX4, 1600A, 4 Pole



A	Top view
В	Connection extension
Х	Horizontal centre
Y	Vertical centre
	В

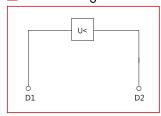
Allows for a more flexible connection. Installation allows the distance between adjacent poles at the inputs and outputs of the circuit breaker to be increased.

■ Tunnel Terminal for MX4, 3X95-300mm²/4X95-240mm²



Suitable for aluminum and Cu conductors. Allows the direct connection of bare conductors.

Undervoltage Release

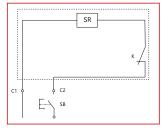


 $Immediate\ triggering\ of\ circuit\ breakers\ or\ switch\ disconnectors\ when\ the\ supply\ voltage\ drops\ below\ 35\%\ -\ 70\%.$

Can be used for EMERGENCY STOP devices. Installed in the circuit breaker.

If the undervoltage trigger is de-energized, contacting the switch main contacts during switch-on tests is safely prevented.

Shunt Trip



Immediate triggering of circuit breakers or switch disconnectors at voltage pulse or application of continuous voltage in the range of 70% to 110% of the rated control voltage. If the working current trigger is live, contacting the switch main contacts during switch-on tests is reliably prevented.

DESCRIPTION	AVAILABLE	ORDER NO.
Connecting technic, accessories		
Connection extension 3 pole for MX4, 1000-1250A, 6 pieces	Troops of	MX490017
Connection extension 4 pole for MX4, 1000-1250A, 8 pieces	10-001 Jan-001	MX490018
Connection extension 3 pole for MX4, 1600A, 6 pieces	71-000 J	MX490019
Connection extension 4 pole for MX4, 1600A, 8 pieces	Trough Ow G	MX490020
Tunnel Terminal 3x95-300mm² for MX4, 800-1250A, 1 piece	The state of the s	MX496730
Tunnel Terminal 4x95-240mm² for MX4, 800-1250A, 1 piece	Trough of the state of the stat	MX496731
Phase separator plates MX4	Towns (a)	MX496870
Undervoltage release units, shunt-trips and accessories		
Under Voltage Release 220-240VAC for MX4	Towns (a)	MX499471
Under Voltage Release 380-415VAC for MX4	Towns (a)	MX499473
Shunt trip 220-240VAC for MX4	Towns (a)	MX490154
Shunt trip 380-415VAC for MX4	30-000 June 19	MX491607
Shunt trip 24VDC for MX4	Troops of	MX499736
Auxiliary contacts		
Auxiliary contact 1 CO	Troops of the state of the stat	MX199411
Alarm contact 1 CO	Jones Own	MX199511



ORDER NO.	PAGE	ORDER NO.	PAGE	ORDER NO.	PAGE	ORDER NO.	PAGE	ORDER NO.	PAGE	ORDER NO.	PAGE
M		MX210232F1	40	MX290213	51	MX390199	82	L			
MX110231	9	MX210233	31	MX290214	51	MX390780	82				
MX110231F1	14	MX210237	31	MX290780	51	MX390781	82				
MX110241	13	MX210242	39	MX290781	51	MX390783	82				
MX110241F1	14	MX210242F1	40	MX290783	51	MX390784	82				
MX110431	7	MX210243	39	MX290784	51	MX391581	82				
MX110441	11	MX210432	27	MX291581	52	MX391582	82				
MX 112035	101	MX210433	27	MX291582	52	MX396730	82				
MX 112045 MX 112231	103 9	MX210437 MX210442	27 35	MX291607 MX296730	52 51	MX396731 MX396734	82 82				
MX112231 MX112231F1	14	MX210442 MX210443	35	MX296731	51	MX396735	82				
MX112241	13	MX212231	31	MX296732	51	MX396870	82				
MX112241F1	14	MX212241	39	MX296734	51	MX396871	82				
MX112431	7	MX212431	27	MX296735	51	MX396872	82				
MX112441	11	MX212441	35	MX296870	51	MX396873	82				
MX116231	9	MX216231	31	MX296871	51	MX396874	82				
MX116241	13	MX216232	31	MX296872	51	MX399832	82				
MX116431	7	MX216233	31	MX296873	51	MX399833	82				
MX116441	11	MX216237	31	MX296874	51	MX399837	82				
MX 120231	9	MX216241	39	MX299462	52	MX399838	82				
MX120241	13	MX216242	39	MX299471	52	MX410232	84				
MX120431	7	MX216243	39	MX299473	52	MX410233	84				
MX120441	11	MX216431	27	MX299481	52	MX410242	88				
MX 125231	9	MX216432	27	MX299489	52	MX410243	88				
MX 125241	13	MX216433	27	MX299567	52	MX410332	86				
MX 125431	7 11	MX216437	27 25	MX299736	52 53	MX410333	86				
MX 125441 MX 132231	11 9	MX216441 MX216442	35 35	MX299742 MX299832	52 52	MX410342 MX410343	90 90				
MX 132231 MX 132241	13	MX216442 MX216443	35	MX299833	52	MX412232	84				
MX 132241 MX 132431	7	MX220231	31	MX299837	52 52	MX412232 MX412233	84				
MX132441	11	MX220241	39	MX299838	52	MX412242	88				
MX140231	9	MX220431	27	MX340035	126	MX412243	88				
MX140241	13	MX220441	35	MX340045	128	MX412332	86				
MX140431	7	MX225035	112	MX340231	58	MX412333	86				
MX140441	11	MX225045	114	MX340232	58	MX412342	90				
MX150231	9	MX225231	31	MX340233	58	MX412343	90				
MX150241	13	MX225232	31	MX340237	58	MX416035	140				
MX150431	7	MX225232F1	40	MX340241	67	MX416045	142				
MX150441	11	MX225233	31	MX340242	67	MX416232	84				
MX163231	9	MX225237	31	MX340243	67	MX416233	84				
MX163241	13	MX225241	39	MX340331	62	MX416242	88				
MX163431	7	MX225242	39	MX340332	62	MX416243	88				
MX 163441 MX 180231	11 9	MX225242F1 MX225243	40 39	MX340332F1 MX340332F2	72 72	MX416332 MX416333	86 86				
MX180231F1	14	MX225431	27	MX34033212	62	MX416333 MX416342	90				
MX180241	13	MX225431	27	MX340337	62	MX416342 MX416343	90				
MX180241F1	14	MX225433	27	MX340341	70	MX480035	140				
MX180431	7	MX225437	27	MX340342	70	MX480045	142				
MX180441	11	MX225441	35	MX340342F1	72	MX480232	84				
MX 190015	23	MX225442	35	MX340342F2	72	MX480233	84				
MX190019	23	MX225443	35	MX340343	70	MX480242	88				
MX190020	23	MX232232	31	MX340431	54	MX480243	88				
MX 190125	23	MX232233	31	MX340441	64	MX480332	86				
MX190154	23	MX232237	31	MX350231	58	MX480333	86				
MX 190172	23	MX232242	39	MX350241	67	MX480342	90				
MX 190199 MX 190213	23 23	MX232243 MX232432	39 27	MX350331 MX350341	62 70	MX480343 MX490017	90 97				
MX 190213 MX 190214	23	MX232432 MX232433	27	MX350431	54	MX490017 MX490018	97 97				
MX 190214 MX 190780	23	MX232433 MX232437	27	MX350431	64	MX490018 MX490019	97 97				
MX 190780 MX 190781	23	MX232437 MX232442	35	MX363232	58	MX490019 MX490020	97 97				
MX190783	23	MX232443	35	MX363233	58	MX490154	97				
MX 190784	23	MX263232	31	MX363237	58	MX491607	97				
MX 191581	23	MX263233	31	MX363242	67	MX496730	97				
MX191582	23	MX263237	31	MX363243	67	MX496731	97				
MX 191607	23	MX263242	39	MX363332	62	MX496870	97				
MX 196730	23	MX263243	39	MX363332F1	72	MX499471	97				
MX 196734	23	MX263432	27	MX363332F2	72	MX499473	97				
MX196735	23	MX263433	27	MX363333	62	MX499736	97				
MX196870	23	MX263437	27	MX363337	62	MXBAT001	51				
MX196871	23	MX263442	35	MX363342	70						
MX 196872	23	MX263443	35 51	MX363342F1	72 72						
MX 196873	23	MX290000	51 51	MX363342F2	72 70						
MX 199411 MX 199462	23 23	MX290001 MX290015	51 51	MX363343 MX380035	<i>7</i> 0 126						
MX 199462 MX 199471	23	MX290015 MX290019	51 51	MX380035 MX380045	128						
MX 199471 MX 199473	23	MX290019 MX290020	51	MX390015	82						
MX199481	23	MX290031	51	MX390019	82						
MX199489	23	MX290032	51	MX390020	82						
MX 199511	23	MX290040	52	MX390031	82						
MX199567	23	MX290125	51	MX390032	82						
MX 199736	23	MX290126	51	MX390040	82						
MX 199742	23	MX290127	124	MX390125	82						
MX199832	23	MX290154	52	MX390126	82						
MX199833	23	MX290172	52	MX390127	138						
MX199837	23	MX290173	52	MX390172	82						
MX199838	23	MX290174	124	MX390173	82						
MX210232	31	MX290199	51	MX390174	138						
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General Terms of Delivery

issued by the Austrian Electrical and Electronics Industry Association (FEEI)



1. Scope

- 1.1. These General Terms shall govern legal transactions between business enterprises, namely the delivery of commodities and, mutatis mutandis, the rendering of services. Software transactions are with precedence governed by the Software Conditions issued by the Austrian Electrical and Electronics Industry Association, assembly work by the Terms and Conditions for Assembly Work issued by the Austrian Power Current and Light Current Engineering Industry and/or (where applicable) the Terms and Conditions for the Assembly of Electrical Equipment used in Medicine issued by the Austrian Electrical and Electronics Industry (the current versions are available at www.feei.at).
- 1.2. Any departure from the terms and conditions mentioned in 1.1 above shall be valid only if expressly accepted in writing by Seller.

2. Submission of offers

- 2.1. Seller's offers shall be deemed offers without engagement.
- 2.2. Tender documents and project documentation must not be duplicated nor made available to third parties without the permission of Seller. They may be claimed back at any time and shall be returned to Seller immediately if the order is placed elsewhere.

3. Conclusion of contract

- 3.1. The contract shall be deemed concluded upon written confirmation by Seller of an order received or upon dispatch of a delivery.
- 3.2. Particulars appearing in catalogues, folders etc. as well as any oral or written statements shall only be binding if Seller makes express reference to them in the confirmation of the order.
- 3.3. Subsequent amendments of or additions to the contract shall be subject to written confirmation.

4. Prices

- 4.1. Prices shall be quoted ex works or ex Seller's warehouse without VAT, packing and packaging, loading, disassembly, take-back and proper recycling and disposal of waste electrical and electronic equipment for commercial purposes as defined by the Ordinance Regulating the Handling of Waste Electrical Equipment. Buyer shall be liable for any and all charges, taxes or other duties levied in respect of delivery. If the terms of delivery include transport to a destination designated by Buyer, transport costs as well as the cost of any transport insurance desired by Buyer shall be borne by the latter. Delivery does not, however, include unloading and subsequent handling. Packaging materials will be taken back only by express agreement.
- 4.2. Seller reserves the right to modify prices if the order placed is not in accordance with the offer submitted.
- 4.3. Prices are based on costs obtaining at the time of the first quotation. In the event that the costs have increased by the time of delivery, Seller shall have the right to adjust prices accordingly.
- 4.4. In carrying out repair orders, Seller shall provide all services deemed expedient and shall charge Buyer for the same on the basis of the work input and/or expenditures required. The same holds for any services or additional services the expediency of which becomes apparent only as the repair order is executed. In such an event special notification of Buyer shall not be required.
- 4.5. Expenses for estimates of costs of repair and maintenance or for expert valuations shall be invoiced to Buyer.

5. Delivery

- 5.1. The period allowed for delivery shall commence at the latest of the following dates:a) the date of order confirmation by Seller;
 - b) the date of fulfilment by Buyer of all the conditions, technical, commercial and other, for which he is responsible;
 - c) the date of receipt by Seller of a deposit or security due before delivery of the goods in question.
- 5.2. Buyer shall obtain whatever licences or approvals may be required from authorities or third parties for the construction of plant and equipment. If the granting of such licences or approvals is delayed for any reason the delivery period shall be extended accordingly.
- 5.3. Seller may carry out, and charge Buyer for, partial or advance deliveries. If delivery on call is agreed upon, the commodity shall be deemed called off at the latest one year after the order was placed.
- 5.4. In case of unforeseeable circumstances or circumstances beyond the parties control, such as all cases of force majeure, which impede compliance with the agreed period of delivery, the latter shall be extended in any case for the duration of such circumstances; these include in particular armed conflicts, official interventions and prohibitions, delays in transport or customs clearance, damages in transit, energy shortage and raw materials scarcity, labour disputes, and default on performance by a major component supplier who is difficult to replace. The aforesaid circumstances shall be deemed to prevail irrespective of whether they affect Seller or his subcontractor(s).
- 5.5. If a contractual penalty for default of delivery was agreed upon by contracting parties when the contract was concluded, it shall be executed as follows, and any deviations concerning individual items shall not affect the remaining provisions: Where delay in performance can be shown to have occurred solely through the fault of Seller, Buyer may claim for each completed week of delay an indemnity

- of at most one half of one per cent, a total of no more than 5 %, however, of the value of that part of the goods to be delivered which cannot be used on account of Seller's failure to deliver an essential part thereof, provided the Buyer has suffered a damage to the aforesaid extent. Assertion of rights of damages exceeding this extent is precluded.
- Passage of risk and place of performance
- 6.1. Unless otherwise agreed, the delivery of goods is considered sold EXW in accordance with INCOTERMS® 2010.
- 6.2. For services, the place of performance shall be the place indicated in the written order confirmation, secondary to that at which the service is actually rendered by Seller. The risk in respect of such services or any part thereof shall pass to Buyer at the time the services have been rendered.

. Paymen

- 7.1. Unless otherwise agreed, one third of the purchase price shall fall due at the time of receipt by Buyer of the order confirmation of Seller, one third after half the delivery period has elapsed and the balance at the time of delivery. Irrespective thereof the turnover tax comprised in the amount of the invoice shall be paid within 30 days of the invoice date. If bankruptcy proceedings are instituted against the assets of Buyer or if an application for bankruptcy proceedings is not granted for insufficiency of assets, deliveries shall only be made against cash in advance.
- 7.2. In the case of part settlements the individual part payments shall fall due upon receipt of the respective invoices. The same shall apply to amounts invoiced for additional deliveries or resulting from additional agreements beyond the scope of the original contract, irrespective of the terms of payment agreed upon for the principal delivery.
- 7.3. Payment shall be made without any discount free Seller's domicile in the agreed currency. Drafts and checks shall be accepted on account of payment only, with all interest, fees and charges in connection therewith (such as collection and discounting charges) to be borne by Buyer.
- 7.4. Buyer shall not be entitled to withhold or offset payment on the grounds of any warranty claims or other counterclaims.
- 7.5. Payment shall be deemed to have been effected on the date at which the amount in question is at Seller's disposal.
- 7.6. If Buyer fails to meet the terms of payment or any other obligation arising from this or other legal transactions, Seller may without prejudice to his other rights
 - a) suspend performance of his own obligations until payments have been made or other obligations fulfilled, and exercise his right to extend the period of delivery to a reasonable extent,
 - b) call in debts arisen from this or any other legal transactions and charge default interest amounting to 1.25 % per month plus turnover tax for these amounts beginning with the due dates, unless Seller proves costs exceeding this.
 - c) only perform other legal transactions against cash in advance in the case of qualified insolvency, in other words, following two delays in payment.
 - In any case Seller has the right to invoice all expenses arising prior to a lawsuit, especially reminder charges and lawyer's fees.
- 7.7. Discounts or bonuses are subject to complete payment in due time.
- .8. Seller retains title to all goods delivered by him until receipt of all amounts invoiced including interests and charges. Buyer herewith assigns his claim out of a resale of conditional commodities, even if they are processed, transformed or combined with other commodities, to Seller to secure the latter's purchase money claim. In the case of resale granting respite Buyer shall have the power of disposal of the product under retention of ownership only with the proviso that upon reselling Buyer notifies the secondary buyer of the assignment for security or enters the assignment in his account books. Upon request Buyer has to notify the assigned claim and the debtor thereof to Seller, and to make all information and material required for his debt collection available and to notify the assignment to the third-party debtor. If the goods are attached or otherwise levied upon, Buyer shall draw attention to Sellers title and immediately inform Seller of the attachment or levy.

8. Warranty and acceptance of obligation to repair defects

- 8.1. Once the agreed terms of payment have been complied with, Seller shall, subject to the conditions hereunder, remedy any defect existing at the time of acceptance of the article in question whether due to faulty design, material or manufacture, that impairs the functioning of said article. From particulars appearing in catalogues, folders, promotional literature as well as written or oral statements which have not been included in the agreement no warranty obligations may be deduced.
- 8.2. Unless special warranty periods operate for individual items the warranty period shall be 12 months. These conditions shall also apply to any goods supplied, or services rendered in respect of goods supplied, that are firmly attached to buildings or the ground. The warranty period begins at the point of passage of risk acc. to paragraph 6.
- 8.3. For improved or exchanged parts, the warranty period shall start again, but shall end in any case 6 months after the original warranty period has expired.
- 8.4. If delivery or the performance of services is delayed for reasons outside the control of Seller, the warranty period shall begin 2 weeks after Seller is ready to deliver or perform services.



- 8.5. The foregoing warranty obligations are conditional upon the Buyer giving within a reasonable period notice in writing of any defects that have occurred and such notice reaching the Seller. Buyer shall prove within a reasonable period the presence of a defect, in particular he shall make available within a reasonable period to Seller all material and data in his possession. Upon receipt of such notice Seller shall, in the case of a defect covered by the warranty under 8.1 above, have the option to replace the defective goods or defective parts thereof or else to repair them on Buyer's premises or have them returned for repair, or to grant a fair and reasonable price reduction.
- 8.6. Any expenses incurred in connection with rectifying defects (e. g. expenses for assembly and disassembly, transport, waste disposal, travel and siteto-quarters time) shall be borne by Buyer. For warranty work on Buyer's premises Buyer shall make available free of charge any assistance, hoisting gear, scaffolding and sundry supplies and incidentals that may he required. Replaced parts shall become the property of Seller.
- 8.7. If an article is manufactured by Seller on the basis of design data, design drawings, models or other specifications supplied by Buyer, Seller's warranty shall be restricted to non-compliance with Buyers specifications.
- 8.8. Seller's warranty obligation shall not extend to any defects due to assembly and installation work not undertaken by Seller, inadequate equipment, or due to non-compliance with installation requirements and operating conditions, overloading of parts in excess of the design values stipulated by Seller, negligent or faulty handling or the use of inappropriate materials, nor for defects attributable to material supplied by Buyer. Nor shall Seller be li- able for damage due to acts of third parties, atmospheric discharges. Excess voltage and chemical influences. The warranty does not cover the replacement of parts subject to natural wear and tear. Seller accepts no warranty for the sale of used goods.
- 8.9. The warranty shall lapse immediately if, without written consent of Seller, Buyer himself or a third party not expressly authorised undertakes modifications or repairs on any items delivered.
- 8.10. Claims acc. to \S 933b ABGB are struck by the statute of limitation with lapse of the period mentioned under point 8.2.
- 8.11. The provisions of sub-paragraphs 8.1 to 8.10 shall apply, mutatis mutandis, to all cases where the obligation to repair defects has to be accepted for other reasons laid down by law.

9. Withdrawal from contract

- 9.1. Buyer may withdraw from the contract only in the event of delays caused by gross negligence on the part of Seller and only after a reasonable period of grace has elapsed. Withdrawal from contract shall be notified in writing by registered mail.
- 9.2. Irrespective of his other rights Seller shall be entitled to withdraw from the contract
 - a) if the execution of delivery or the inception or continuation of services to be rendered under the contract is made impossible for reasons within the responsibility of Buyer and if the delay is extended beyond a reasonable period of grace allowed;
 - b) if doubts have arisen as to Buyer's creditworthiness and if same fails, on Seller's request, to make an advance payment or to provide adequate security prior to delivery, or
 - c) if, for reasons mentioned in 5.4, the period allowed for delivery is extended by more than half of the period originally agreed or by at least 6 months, or
 - d) if Buyer does not or does not properly meet the obligations imposed as per paragraph 13.
- 9.3. For the reasons given above withdrawal from the contract shall also be possible in respect of any outstanding part of the delivery or service contracted for.
- 9.4. If bankruptcy proceedings are instituted against Buyer or an application for bankruptcy proceedings is not granted for insufficiency of assets, Seller may withdraw from the contract without allowing a period of grace. If this withdrawal is taken, it shall take effect immediately upon the decision that the business will not be continued. If the business will be continued, a withdrawal shall not take effect until 6 months after the institution of bankruptcy proceedings or after an application for bankruptcy proceedings has not been granted for insufficiency of assets. In any case, the contract shall be terminated immediately unless the bankruptcy law to which Buyer is subject conflicts with this or if termination of the contract is necessary to prevent significant damages to Seller.
- 9.5. Without prejudice to Seller's claim for damages including expenses arising prior to a lawsuit, upon withdrawal from contract any open accounts in respect of deliveries made or services rendered in whole or in part shall be settled according to contract This provision also covers deliveries or services not yet accepted by Buyer as well as any preparatory acts performed by Seller. Seller shall, however, have the option alternatively to require the restitution of articles already delivered.
- 9.6. Withdrawal from contract shall have no consequences other than those stipulated above.
- 9.7. The assertion of claims on the ground of laesio enormis, error, or lapse of purpose by the Buyer is excluded.

10. Disposal of waste electrical and electronic equipment

- 10.1. The Buyer of electrical/electronic equipment for commercial purposes, incorporated in Austria, is responsible for the financing of the collection and treatment of waste electrical and electronic equipment as defined by the Ordinance Regulating the Handling of Waste Electrical Equipment, if he is himself the user of the electrical/electronic equipment. If the Buyer is not the end user, he shall transfer the full financial commitment to his customer by agreement and furnish proof thereof to the Seller.
- 10.2. The Buyer incorporated in Austria shall ensure that the Seller is provided with all information necessary to meet the Seller's obligations as manufacturer/importer, particularly according to §§ 11 and 24 of the Ordinance Regulating the Handling of Waste Electrical Equipment and the Waste Management Act.
- 10.3. The Buyer incorporated in Austria is liable vis-à-vis the Seller for any damage and other financial disadvantages incurred by Seller due to Buyer's failure to meet or fully meet his financing commitment or any other obligations according to Article 10. The Buyer shall bear the burden of proof of performance of this obligation.

11. Seller's liability

- 11.1. Outside the scope of the Product Liability Act, Seller shall be liable only if the damage in question is proved to be due to intentional acts or acts of gross negligence, within the limits of statutory provisions. Seller's total liability in cases of gross negligence is limited to the net value of the order or EUR 500,000, depending on which amount is lower.
- 11.2. For each incident of damage, Seller shall be liable for 25% of the net value of the order or EUR 125,000, depending on which amount is lower.
- 11.3. Seller shall not be liable for damage due to acts of ordinary negligence nor for consequential damages or damages for pure economic loss, indirect damages, loss of production, financing costs, costs for replacement energy, loss of energy, data or information, loss of profits, loss of savings or interest, or damage resulting from third-party claims against buyer.
- 11.4. Seller shall not be liable for damages in case of non-compliance with instructions for assembly, commissioning and operation (such as are contained in instructions for use) or non-compliance with licensing requirements.
- 11.5. Claims that exceed the contractual penalties that were agreed on are excluded from the respective title. The provisions of paragraph 11 apply exclusively for all claims by Buyer against Seller, regardless of the legal basis or entitlement, and also apply to all employees, subcontractors and subsuppliers of Seller.

2. Industrial property rights and copyrights

- 12.1. Buyer shall indemnify Seller and hold him harmless against any claims for any infringement of industrial property rights raised against him if Seller manufactures an article pursuant to any design data, design drawings, models or other specifications made available to him by Buyer.
- 12.2. Design documents such as plans and drawings and other technical specifications as well as samples, catalogues, prospectuses, pictures and the like shall remain the intellectual property of Seller and are subject to the relevant statutory provisions governing reproduction, imitation, competition etc. The provisions of 2.2 above shall also cover design documents.

13. Compliance with export provisions

- 13.1. When passing on goods delivered by Seller to third parties (as well as any related documentation, regardless of the method of provision or the services performed by Seller [including technical support of any kind]), Buyer must comply with the applicable regulations of national and international (re-)export provisions. In any case, Buyer must observe the (re-)export provisions of Seller's country of residence, the European Union and the United States of America.
- 13.2. If necessary for export controls, Buyer must provide Seller with all necessary information immediately after being requested to do so, for example, information about the final recipient, final destination and purpose of the goods or services.

14. General

Should individual provisions of the contract or of these provisions be invalid the validity of the other provisions shall not be affected. The invalid provision shall be replaced by a valid one, which comes as close to the target goal as possible.

15. Jurisdiction and applicable law

Any litigations arising under the contract including litigations over the existence or non-existence thereof shall fall within the exclusive jurisdiction of the competent court at Sellers domicile; the competent court of the Bezirksgericht Innere Stadt, Vienna, shall have exclusive jurisdiction if Seller is domiciled in Vienna. The contract is subject to Austrian law excluding the referral rules. Application of the UN Convention on Contracts for the International Sale of Goods is renounced.

16. Proviso

The execution of the contract by Seller is subject to the condition that there are no obstacles standing in the way of execution due to national or international (re-)export provisions, and especially no embargos and/or other sanctions.

Last revised in September 2011



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