



Eaton 102872

Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB. Residual current circuit breaker (RCCB), 100A, 4p, 500mA, type A

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PRODUCT NAME	Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB
CATALOG NUMBER	102872
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	80 mm
PRODUCT WIDTH	70 mm
PRODUCT WEIGHT	0.356 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 61008



Powering Business Worldwide

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USED WITH

Residual current circuit breakers
 Type A
 PFIM
 KLV-TC-4 276241 (Compact enclosure)
 Z-FW/LP 248296 (Remote control and automatic switching device)
 Z-RC/AK-4MU 101062 (sealing cover set)

AMPERAGE RATING 100 A

VOLTAGE RATING 230 V AC / 400 V AC

FEATURES

Additional equipment possible
 Residual current circuit breaker

ACCESSORIES REQUIRED Z-HK 248432

10.10 TEMPERATURE RISE

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

10.11 SHORT-CIRCUIT RATING

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.12 ELECTROMAGNETIC COMPATIBILITY

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.13 MECHANICAL FUNCTION

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

10.2.2 CORROSION RESISTANCE

Meets the product standard's requirements.

10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES

Meets the product standard's requirements.

10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT

Meets the product standard's requirements.

10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS

Meets the product standard's requirements.

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□□□□□ [eaton-rccb-rcbo-g9-il019140zu.pdf](https://www.eaton.com/content/dam/eaton/products/circuit-breakers/xcircuit-breakers/eaton-rccb-rcbo-g9-il019140zu.pdf)

□□□□ [eaton-xpole-pfim-x-rccb-catalog-ca019029en-en-us.pdf](https://www.eaton.com/content/dam/eaton/products/circuit-breakers/xcircuit-breakers/eaton-xpole-pfim-x-rccb-catalog-ca019029en-en-us.pdf)

□□ [eaton-xpole-pf67-rccb-3d-drawing.jpg](https://www.eaton.com/content/dam/eaton/products/circuit-breakers/xcircuit-breakers/eaton-xpole-pf67-rccb-3d-drawing.jpg)

□□ [eaton-circuit-breaker-xeffect-frcmm-rccb-dimensions.jpg](https://www.eaton.com/content/dam/eaton/products/circuit-breakers/xcircuit-breakers/eaton-circuit-breaker-xeffect-frcmm-rccb-dimensions.jpg)

10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be evaluated.
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be evaluated.
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
FITTED WITH:	Interlocking device
FRAME	45 mm
FREQUENCY RATING	50 Hz
POLLUTION DEGREE	2
LIFESPAN, MECHANICAL	20000 operations
MOUNTING METHOD	Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 DIN rail
CLIMATIC PROOFING	25-55 °C / 90-95% relative humidity according to IEC 60068-2
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	18.8 W
RATED IMPULSE	4 kV

WITHSTAND VOLTAGE (UIMP)	
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	10 kA
ADMISSIBLE BACK-UP FUSE OVERLOAD - MAX	63 A gG/gL
BUILT-IN WIDTH (NUMBER OF UNITS)	70 mm (4 SU)
BUSBAR MATERIAL THICKNESS	0.8 mm - 2 mm
SHORT-CIRCUIT RATING	100 A (max. admissible back-up fuse)
TERMINAL PROTECTION	Finger and hand touch safe, DGUV VS3, EN 50274
TERMINALS (TOP AND BOTTOM)	Open mouthed/lift terminals
TEST CIRCUIT RANGE	196 V AC - 456 V AC
AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
BUILT-IN DEPTH	70.5 mm
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	16 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1.5 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	35 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1.5 mm ²
FAULT CURRENT RATING	500 mA
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MAX	60 °C
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MIN	-35 °C

DEGREE OF PROTECTION	IP20, IP40 with suitable enclosure IP20
IMPULSE WITHSTAND CURRENT	Partly surge-proof 250 A
NUMBER OF POLES	Four-pole
LEAKAGE CURRENT TYPE	A
LIFESPAN, ELECTRICAL	4000 operations
TYPE	<ul style="list-style-type: none"> • PFIM • Residual current circuit breakers • Type A
SPECIAL FEATURES	<ul style="list-style-type: none"> • Maximum operating temperature is 60 °C: Starting at 40 °C, the max. permissible continuous current decreases by 1.2% for every 1 °C • Tripping signal contact for subsequent installation Z-NHK 248434
APPLICATION	<ul style="list-style-type: none"> • Residual current circuit breaker for residential and commercial applications • xPole - Switchgear for residential and commercial applications
SENSITIVITY TYPE	Pulse-current sensitive
RATED FAULT CURRENT - MAX	0.5 A
RATED FAULT CURRENT - MIN	0.5 A
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	100 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	400 V
RATED RESIDUAL MAKING AND BREAKING CAPACITY	1000 A

