Specifications

Eaton 187456

Eaton Moeller series xPole - PFIM Type F RCCB. Residual current circuit breaker (RCCB), 40A, 4p, 30mA, type G/F

General specifications	
PRODUCT NAME	Eaton Moeller series xPole - PFIM Type F RCCB
CATALOG NUMBER	187456
MODEL CODE	PFIM-40/4/003-G/F
EAN	4015081825141
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	80 mm
PRODUCT WIDTH	70 mm
PRODUCT WEIGHT	0.352 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 61008 IEC/EN 62423 ÖVE E 8601
GLOBAL CATALOG	187456

Product specifications

USED WITH	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	40 A
VOLTAGE RATING	230 V AC / 400 V AC
FEATURES	Residual current circuit breaker Additional equipment possible
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.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.

Resources

APPLICATION NOTES	eaton-rcd-application-guide-br019003en-en-us.pdf
BROCHURES	eaton-xpole-residual-current-devices-type-f-brochure-br019005en-en-us.pdf
CATALOGS	eaton-xpole-pfim-f-rccb-catalog-ca019030en-en-us.pdf
DECLARATIONS OF CONFORMITY	eaton-rccb-declaration-of-conformity-eu250157en.pdf
DRAWINGS	eaton-xpole-pf67-rccb-3d-drawing.jpg eaton-circuit-breaker-xeffect-frcmm-rccb-dimensions.jpg
ECAD MODEL	DA-CE-ETN.PFIM-40_4_003-G_F
INSTALLATION INSTRUCTIONS	IL019173ZU
MCAD MODEL	eaton-residual-current-circuit-breakers-drawings-pfi-4p.dwg eaton-residual-current-circuit-breakers-3d-models-pfi-4p.stp
PEP ECO-PASSPORT	eaton-residual-current-circuit-breakers-pep-eato-00109-v0101-en.pdf
WIRING DIAGRAMS	eaton-xeffect-frcmm-rccb-wiring-diagram-002.jpg

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
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	13.1 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
RATED SHORT-TIME WITHSTAND CURRENT	10 kA

(ICW)	
ADMISSIBLE BACK-UP FUSE OVERLOAD - MAX	25 A gG/gL
BUILT-IN WIDTH (NUMBER OF UNITS)	35 mm (2 SU)
BUSBAR MATERIAL THICKNESS	0.8 mm - 2 mm
SHORT-CIRCUIT RATING	63 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 - 264 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 mm²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1.5 mm²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	35 mm²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1.5 mm²
FAULT CURRENT RATING	30 mA
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MAX	60 °C
PERMITTED STORAGE AND TRANSPORT TEMPERATURE - MIN	-35 °C
CONTACT POSITION INDICATOR COLOR	Red / green
MOUNTING POSITION	As required
LIFESPAN, MECHANICAL	20000 operations
DEGREE OF PROTECTION	IP20 IP20, IP40 with suitable enclosure
IMPULSE WITHSTAND CURRENT	Surge-proof, 3 kA

NUMBER OF POLES	Four-pole
LEAKAGE CURRENT TYPE	Other
LIFESPAN, ELECTRICAL	4000 operations
TYPE	• PFIM-F • Residual current circuit breakers • Type G/F (ÖVE E 8601)
SPECIAL FEATURES	• Current test marks as per inscription • Maximum operating temperature is 60 °C: Starting at 40 °C, the max. permissible continuous current decreases by 2.5% for every 1 °C • Tripping signal contact for subsequent installation Z-NHK 248434
APPLICATION	• 3-phase application without N (400V AC phase-phase) not allowed • Residual current circuit breaker for residential and commercial applications • xPole - Switchgear for residential and commercial applications
FUNCTIONS	Short-time delayed tripping
SENSITIVITY TYPE	Pulse-current sensitive - frequency composition (10 Hz, 50 Hz, 1000 Hz)
TERMINAL CAPACITY (CABLE)	M5 (with cross-recessed screw as defined in EN ISO 4757-Z2, PZ2)
RATED FAULT CURRENT - MAX	0.03 A
RATED FAULT CURRENT - MIN	0.03 A
RATED INSULATION VOLTAGE (UI)	440 V

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	40 A
RATED OPERATIONAL VOLTAGE (UE) - MAX	230 V
RATED RESIDUAL MAKING AND BREAKING CAPACITY	500 A
SURGE CURRENT CAPACITY	3 kA
WIDTH IN NUMBER OF MODULAR SPACINGS	4
VOLTAGE RATING (IEC/EN 60947-2)	230/400 V
VOLTAGE TYPE	AC
TERMINAL CAPACITY (SOLID WIRE)	1.5 mm^2 - 35 mm^2
TRIPPING TIME	Short time-delayed
RATED SHORT-CIRCUIT STRENGTH	10 kA with back-up fuse
TIGHTENING TORQUE	2 Nm - 2.4 Nm
TERMINAL CAPACITY (STRANDED CABLE)	16 mm^2 (2x)
RAL-NUMBER	7035
COLOR	Gray

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

Follow us on social media to get the latest product and support information.