

Residual current circuit breaker (RCCB), 40A, 4p, 300mA, type S/F



Part no. **PFIM-40/4/03-S/F**
187363

General specifications	
Product name	Eaton Moeller series xPole - PFIM Type F RCCB
Part no.	PFIM-40/4/03-S/F
EAN	4015081824212
Product Length/Depth	80 millimetre
Product height	76 millimetre
Product width	70 millimetre
Product weight	0.352 kilogram
Compliances	RoHS conform
Certifications	IEC/EN 61008 IEC/EN 62423
Product Tradename	xPole - PFIM Type F
Product Type	RCCB
Product Sub Type	None
Delivery program	
Application	Residual current circuit breaker for residential and commercial applications xPole - Switchgear for residential and commercial applications
Number of poles	Four-pole
Tripping time	40 ms delayed - selective switch off Selective switch off
Amperage Rating	40 A
Rated short-circuit strength	10 kA with back-up fuse
Fault current rating	300 mA
Sensitivity type	Pulse-current sensitive - frequency composition (10 Hz, 50 Hz, 1000 Hz)
Impulse withstand current	Surge-proof 5 kA
Type	PFIM-F Residual current circuit breakers Type S/A
Technical Data - Electrical	
Voltage rating	230 V AC / 400 V AC
Voltage rating (IEC/EN 60947-2)	230/400 V
Rated operational voltage (Ue) - max	230 V
Rated insulation voltage (Ui)	440 V
Rated impulse withstand voltage (Uimp)	4 kV
Rated fault current - min	0.3 A
Rated fault current - max	0.3 A
Frequency rating	50 Hz
Short-circuit rating	63 A (max. admissible back-up fuse)
Leakage current type	Other
Rated residual making and breaking capacity	500 A
Admissible back-up fuse overload - max	25 A gG/gL
Rated fault switching capacity	500 A
Rated short-time withstand current (Icw)	10 kA
Surge current capacity	5 kA
Test circuit range	196 V AC - 456 V AC
Pollution degree	2
Lifespan, electrical	4000 operations
Technical Data - Mechanical	
Frame	45 mm
Width in number of modular spacings	4

Built-in width (number of units)	70 mm (4 SU)
Built-in depth	70.5 mm
Mounting Method	Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 DIN rail
Mounting position	As required
Degree of protection	IP20 IP20, IP40 with suitable enclosure
Terminals (top and bottom)	Open mouthed/lift terminals
Terminal capacity (solid wire)	1.5 mm ² - 35 mm ²
Connectable conductor cross section (solid-core) - min	1.5 mm ²
Connectable conductor cross section (solid-core) - max	35 mm ²
Terminal capacity (stranded cable)	16 mm ² (2x)
Connectable conductor cross section (multi-wired) - min	1.5 mm ²
Connectable conductor cross section (multi-wired) - max	16 mm ²
Terminal capacity (cable)	M5 (with cross-recessed screw as defined in EN ISO 4757-Z2, PZ2)
Terminal protection	Finger and hand touch safe, DGUV VS3, EN 50274
Contact position indicator color	Red / green
Tightening torque	2 Nm - 2.4 Nm
Busbar material thickness	0.8 mm - 2 mm
Lifespan, mechanical	20000 operations
Permitted storage and transport temperature - min	-35 °C
Permitted storage and transport temperature - max	60 °C
Climatic proofing	25-55 °C / 90-95% relative humidity according to IEC 60068-2

Design verification as per IEC/EN 61439 - technical data

Rated operational current for specified heat dissipation (In)	40 A
Equipment heat dissipation, current-dependent	13.1 W
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	60 °C

Design verification as per IEC/EN 61439

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.
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.
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.

Additional information

Accessories required	Z-HK 248432
Features	Selective protection Additional equipment possible

Fitted with:		Residual current circuit breaker
Special features		Interlocking device 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
Used with		Residual current circuit breakers PFIM-F Type S/A KLV-TC-4 276241 (Compact enclosure) Z-FW/LP 248296 (Remote control and automatic switching device) Z-RC/AK-4MU 101062 (sealing cover set)

Technical data ETIM 8.0

Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003)		
Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ecl@ss10.0.1-27-14-22-01 [AAB906014])		
Number of poles		4
Rated voltage	V	230
Rated current	A	40
Rated fault current	A	0.3
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Mounting method		DIN rail
Leakage current type		Other
Selective protection		Yes
Short-time delayed tripping		No
Short-circuit breaking capacity (Icw)	kA	10
Surge current capacity	kA	5
Voltage type		AC
With interlocking device		Yes
Frequency		50 Hz
Additional equipment possible		Yes
Degree of protection (IP)		IP20
Width in number of modular spacings		4
Built-in depth	mm	70.5
Ambient temperature during operating	°C	-25 - 60
Pollution degree		2
Connectable conductor cross section multi-wired	mm ²	1.5 - 16
Connectable conductor cross section solid-core	mm ²	1.5 - 35
Explosion-proof		No