

Residual current circuit breaker (RCCB), 40A, 4p, 100mA, type AC

Part no. PFIM-40/4/01-MW
235411

General specifications			
Product name		Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB	
Part no.		PFIM-40/4/01-MW	
EAN		4015082354114	
Product Length/Depth		80 millimetre	
Product height		76 millimetre	
Product width		70 millimetre	
Product weight		0.298 kilogram	
Compliances		RoHS conform	
Certifications		IEC/EN 61008	
Product Tradename		xPole - PFIM Type AC, A, U, R	
Product Type		RCCB	
Product Sub Type		None	
Delivery program			
Application		xPole - Switchgear for residential and commercial applications Residual current circuit breaker for residential and commercial applications	
Number of poles		Four-pole	
Tripping time		Non-delayed	
Amperage Rating		40 A	
Rated short-circuit strength		10 kA	
Fault current rating		100 mA	
Sensitivity type		AC current sensitive	
Impulse withstand current		Partly surge-proof 250 A	
Type		Type AC Residual current circuit breakers PFIM	
Technical Data - Electrical			
Voltage rating		230 V AC / 400 V AC	
Rated operational voltage (Ue) - max		400 V	
Rated insulation voltage (Ui)		440 V	
Rated impulse withstand voltage (Uimp)		4 kV	
Rated fault current - min		0.1 A	
Rated fault current - max		0.1 A	
Frequency rating		50 Hz	
Short-circuit rating		63 A (max. admissible back-up fuse)	
Leakage current type		AC	
Rated residual making and breaking capacity		500 A	
Admissible back-up fuse overload - max		25 A gG/gL	
Rated short-time withstand current (Icw)		10 kA	
Surge current capacity		0.25 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		DIN rail Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715	

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 protection			Finger and hand touch safe, DGUV VS3, EN 50274
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
Heat dissipation per pole, current-dependent			0 W
Equipment heat dissipation, current-dependent			8.4 W
Static heat dissipation, non-current-dependent			0 W
Heat dissipation capacity			0 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			Residual current circuit breaker Additional equipment possible
Fitted with:			Interlocking device
Special features			Tripping signal contact for subsequent installation Z-NHK 248434 Maximum operating temperature is 60 °C: Starting at 40 °C, the max. permissible continuous current decreases by 2.5% for every 1 °C
Used with			Z-RC/AK-4MU 101062 (sealing cover set) Z-FW/LP 248296 (Remote control and automatic switching device)

Technical data ETIM 9.0

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)
(ecI@ss13-27-14-22-01 [AAB906019])

Number of poles		4
Rated voltage	V	400
Rated current	A	40
Rated fault current	A	0.1
Rated insulation voltage U_i	V	440
Rated impulse withstand voltage U_{imp}	kV	4
Power loss	W	8.8
Mounting method		DIN rail
Leakage current type		AC
Selective protection		No
Short-time delayed tripping		No
Short-circuit breaking capacity (I_{cw})	kA	10
Surge current capacity	kA	0.25
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
RAL-number (similar)		7035
Explosion-proof		No