

Specifications

Eaton 294299

PFIM-40/4/01-S/A. Residual current circuit breaker (RCCB), 40A, 4pole, 100mA, type S/A

General specifications

PRODUCT NAME	Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB
CATALOG NUMBER	294299
MODEL CODE	PFIM-40/4/01-S/A
EAN	4015082942991
PRODUCT LENGTH/DEPTH	76 mm
PRODUCT HEIGHT	80 mm
PRODUCT WIDTH	70 mm
PRODUCT WEIGHT	0.32 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 61008

Additional information

FEATURES

Additional equipment possible
Selective protection

SPECIAL FEATURES

Maximum operating temperature is 60 °C:
Starting at 40 °C, the max. permissible continuous current decreases by 2.5% for every 1 °C

Delivery programme

AMPERAGE RATING 40 A

FAULT CURRENT RATING 100 mA

NUMBER OF POLES Four-pole

Design verification to IEC/EN 61439

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.
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	Does not apply, since the

Design verification to IEC/EN 61439 - technical data

AMBIENT OPERATING TEMPERATURE - MAX	60 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	8.8 W
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	40 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W

AGAINST ELECTRIC SHOCK	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.

Technical data - electrical

ADMISSIBLE BACK-UP FUSE OVERLOAD - MAX	25 A gG/gL
FREQUENCY RATING	50 Hz
LEAKAGE CURRENT TYPE	A
POLLUTION DEGREE	2
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL VOLTAGE (UE) - MAX	400 V
RATED SHORT-TIME WITHSTAND CURRENT (ICW)	0.5 kA 0 kA 10 kA
SURGE CURRENT CAPACITY	5 kA

Technical data - mechanical

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
DEGREE OF PROTECTION	IP20
MOUNTING METHOD	DIN-rail (DRA) DIN rail
WIDTH IN NUMBER OF MODULAR SPACINGS	4

Resources

APPLICATION NOTES	eaton-rcd-application-guide-br019003en-en-us.pdf
CATALOGUES	eaton-xpole-protective-devices-catalog-ca019014en-en-us.pdf
DECLARATIONS OF CONFORMITY	eaton-rccb-declaration-of-conformity-uk251421en.pdf eaton-rccb-declaration-of-conformity-eu250135en.pdf
DRAWINGS	eaton-circuit-breaker-xeffect-frcmm-rccb-dimensions.jpg eaton-xpole-pf67-rccb-3d-drawing.jpg
ECAD MODEL	ETN.PFIM-40_4_01-S_A.edz
INSTALLATION INSTRUCTIONS	eaton-mcb-rccb-rcbo-g9-il019140zu.pdf
MCAD MODEL	eaton-rccb-mcad-drawings-pfi-4p.dwg eaton-residual-current-circuit-breakers-3d-models-pfi-4p.stp
WIRING DIAGRAMS	eaton-xeffect-frcmm-rccb-wiring-diagram-002.jpg

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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