

Eaton 102824

Catalog Number: 102824

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



General specifications

Product Name	Catalog Number
Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB	102824
EAN	Model Code
4015081026692	PFIM-100/4/01
Product Height	Product Length/Depth
76 mm	80 mm
Product Weight	Product Width
0.368 kg	70 mm
Certifications	Compliances
IEC/EN 61008	RoHS conform

Product specifications

Rated operational current for specified heat dissipation (In)
100 A

10.11 Short-circuit rating

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

RAL-number

7035

Permitted storage and transport temperature - min

-35 °C

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.12 Electromagnetic compatibility

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

Mounting Method

Quick attachment with 2 latch positions for DIN-rail IEC/EN

60715

DIN rail

Amperage Rating

100 A

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

Rated fault current - max

0.1 A

Test circuit range

196 V AC - 456 V AC

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

Tripping time

Non-delayed

Fitted with:

Interlocking device

Rated residual making and breaking capacity

1000 A

Frequency rating

Resources

Application notes

[eaton-rcd-application-guide-br019003en-en-us.pdf](#)

Catalogs

[eaton-xpole-pfim-x-rccb-catalog-ca019029en-en-us.pdf](#)

[eaton-xpole-pfim-u-rccb-catalog-ca019028en-en-us.pdf](#)

Certification reports

[DA-DC-03_PFI](#)

Drawings

[eaton-xpole-pf6/7-rccb-3d-drawing.jpg](#)

Installation instructions

[IL019172ZU](#)

[IL019140ZU](#)

Wiring diagrams

[eaton-xeffect-frcmm-rccb-wiring-diagram-002.jpg](#)

[Mas_PFIM](#)

50 Hz

10.8 Connections for external conductors

Is the panel builder's responsibility.

Fault current rating

100 mA

Terminal protection

Finger and hand touch safe, DGUV VS3, EN 50274

Special features

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

Sensitivity type

AC current sensitive

Ambient operating temperature - max

60 °C

Heat dissipation per pole, current-dependent

0 W

Climatic proofing

25-55 °C / 90-95% relative humidity according to IEC 60068-2

Built-in depth

70.5 mm

Short-circuit rating

100 A (max. admissible back-up fuse)

Features

Residual current circuit breaker
Additional equipment possible

Lifespan, electrical

4000 operations

Connectable conductor cross section (solid-core) - min

1.5 mm²

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Number of poles

Four-pole

Terminal capacity (solid wire)

1.5 mm² - 35 mm²

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

Rated short-circuit strength

10 kA

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

Used with

Residual current circuit breakers

PFIM

Type AC

KLV-TC-4 276241 (Compact enclosure)

Z-FW/LP 248296 (Remote control and automatic switching device)

Z-RC/AK-4MU 101062 (sealing cover set)

Equipment heat dissipation, current-dependent

18.8 W

10.13 Mechanical function

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

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

Static heat dissipation, non-current-dependent

0 W

Application

Residual current circuit breaker for residential and commercial applications

xPole - Switchgear for residential and commercial applications

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

Voltage type

AC

Terminal capacity (stranded cable)

16 mm² (2x)

Leakage current type

AC

Frame

45 mm

Built-in width (number of units)

70 mm (4 SU)

Terminals (top and bottom)

Open mouthed/lift terminals

Heat dissipation capacity

0 W

Impulse withstand current

Partly surge-proof 250 A

Width in number of modular spacings

4

Busbar material thickness

0.8 mm - 2 mm

Power loss

18.8 W

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.

Lifespan, mechanical

20000 operations

Voltage rating

230 V AC / 400 V AC

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

Connectable conductor cross section (solid-core) - max

35 mm²

Degree of protection

IP20, IP40 with suitable enclosure

IP20

Rated short-time withstand current (Icw)

10 kA

Accessories required

Z-HK 248432

Pollution degree

2

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

Connectable conductor cross section (multi-wired) - min

1.5 mm²

Rated impulse withstand voltage (U_{imp})

4 kV

10.10 Temperature rise

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

Connectable conductor cross section (multi-wired) - max

16 mm²

Type

PFIM

Residual current circuit breakers

Type AC

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.7 Inscriptions

Meets the product standard's requirements.

Surge current capacity

0.25 kA

Permitted storage and transport temperature - max

60 °C

Admissible back-up fuse overload - max

80 A gG/gL

Rated fault current - min

0.1 A

Rated operational voltage (U_e) - max

400 V

Rated insulation voltage (U_i)

440 V



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com
© 2023 Eaton. All Rights Reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.



[Eaton.com/socialmedia](https://www.eaton.com/socialmedia)