# Eaton 102825

# Catalog Number: 102825

Eaton Moeller series xPole - PFIM Type AC, A, U, R RCCB. Residual current circuit breaker (RCCB), 100A, 4p, 300mA, type AC



# General specifications

**Product Name** 

Eaton Moeller series xPole - PFIM Type 102825

AC, A, U, R RCCB

**EAN** 

4015081027101

**Product Height** 

76 mm

**Product Weight** 

0.362 kg

Certifications

IEC/EN 61008

Catalog Number

Model Code

PFIM-100/4/03

Product Length/Depth

80 mm

**Product Width** 

70 mm

Compliances

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

0.3 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-u-rccb-catalog-ca019028en-en-us.pdf eaton-xpole-pfim-x-rccb-catalog-ca019029en-en-us.pdf

#### Certification reports

DA-DC-03\_PFI

#### **Drawings**

eaton-circuit-breaker-xeffect-frcmm-rccb-dimensions.jpg eaton-xpole-pf6/7-rccb-3d-drawing.jpg

#### Installation instructions

IL019140ZU

IL019172ZU

#### Wiring diagrams

eaton-xeffect-frcmm-rccb-wiring-diagram-002.jpg

#### 10.8 Connections for external conductors

Is the panel builder's responsibility.

#### Fault current rating

300 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**

Additional equipment possible

Residual current circuit breaker

#### Lifespan, electrical

4000 operations

#### Connectable conductor cross section (solid-core) - min

1.5 mm<sup>2</sup>

### 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

#### Number of poles

Four-pole

#### Terminal capacity (solid wire)

1.5 mm<sup>2</sup> - 35 mm<sup>2</sup>

#### 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

PFIM

Type AC

Residual current circuit breakers

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 mm<sup>2</sup> (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 mm<sup>2</sup> Degree of protection IP20 IP20, IP40 with suitable enclosure 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 mm<sup>2</sup> Rated impulse withstand voltage (Uimp) 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 mm<sup>2</sup> 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

0.3 A

# Rated operational voltage (Ue) - max

400 V

# Rated insulation voltage (Ui)

440 V



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