# **Product specifications**

# Eaton 278666

# Catalog Number: 278666

Eaton Moeller series xEffect - FAZ MCB. FAZ, 1-pole+N, tripping characteristic: C, rated current ln: 4 A

# General specifications

Product Name Catalog Number

Eaton Moeller series xEffect - FAZ MCB 278666

Model Code EAN

FAZ-C4/1N 4015082786663

Product Length/Depth Product Height

80 mm 75.5 mm

Product Width Product Weight

36 mm 0.2 kg

Compliances Certifications

RoHS conform IEC/EN 60947-2

EN45545-2 IEC 61373

IEC/EN 60898



# **Product specifications**

Rated operational current for specified heat dissipation (In)

4 A

10.11 Short-circuit rating

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

Voltage rating (IEC/EN 60898-1)

240 VAC

10.4 Clearances and creepage distances

Meets the product standard's requirements.

Rated short-circuit breaking capacity (EN 60898) at 230 V

10 kA

10.12 Electromagnetic compatibility

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

Mounting Method

Top-hat rail IEC/EN 60715

**Current limiting class** 

3

Rated short-circuit breaking capacity (EN 60898) at 400 V

10 kA

Amperage Rating

4 A

10.2.5 Lifting

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

Terminal capacity of screw terminals for main cable

10 mm<sup>2</sup> (2x)

Frequency rating - max

60 Hz

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.8 Connections for external conductors

Is the panel builder's responsibility.

Rated short-circuit breaking capacity (IEC 60947-2) at 400 V

15 kA

Number of poles (total)

#### Resources

Catalogs

eaton-xeffect-industrial-switchgear-range-catalog-ca003002en-en-us.pdf

Certification reports

DA-DC-03\_FAZ-B-C-D

Characteristic curve

eaton-mcb-xeffect-faz-characteristic-curve-002.eps

eaton-mcb-tripping-characteristic-xeffect-faz-characteristic-curve-002.eps

eaton-mcb-current-xeffect-faz-characteristic-curve.eps

eaton-xeffect-faz-mcb-characteristic-curve.jpg

eaton-mcb-xeffect-faz-characteristic-curve.eps

eaton-mcb-current-xeffect-faz-characteristic-curve-002.eps

**Drawings** 

eaton-mcb-xeffect-faz-dimensions-002.eps

eaton-xeffect-faz-mcb-dimensions-002.jpg

eaton-xeffect-faz-mcb-3d-drawing-010.jpg

eaton-mcb-faz-xeffect-faz-3d-drawing-002.eps

eaton-xeffect-faz-mcb-3d-drawing-002.jpg

eaton-xeffect-faz-mcb-3d-drawing-009.jpg

eCAD model

DA-CE-ETN.FAZ-C4\_1N

Installation instructions

IL019140ZU

mCAD model

DA-CS-faz\_1pn\_2p

DA-CD-faz\_lpn\_2p

PEP Eco-passport

EATO-00047-V01.01-EN

Specifications and datasheets

Eaton Specification Sheet - 278666

Wiring diagrams

eaton-xpole-mmc4-6-m-mcb-wiring-diagram.jpg

eaton-mcb-xeffect-faz-wiring-diagram-005.eps

# Terminal protection

Finger and hand touch safe, DGUV VS3, EN 50274

Rated short-circuit breaking capacity (IEC 60947-2) at 230 V

15 kA

# Special features

Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity

Ambient operating temperature - max

75 °C

Heat dissipation per pole, current-dependent

0 W

Built-in depth

70.5 mm

Rated switching capacity (IEC/EN 60898-1)

10 kA

#### **Features**

Concurrently switching N-neutral Additional equipment possible

Lifespan, electrical

10000 operations

Rated switching capacity (IEC/EN 60947-2) at max voltage rating

10 kA

Connectable conductor cross section (solid-core) - min

1 mm<sup>2</sup>

# 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Number of poles

Single-pole + N

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.

Selectivity class

3

#### 10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be

evaluated. Terminal capacity (control cable) 25 mm<sup>2</sup> (1x) Used with Miniature circuit breaker FAZ Mounting position As required Equipment heat dissipation, current-dependent 1.6 W Tripping characteristic С Frequency rating - min 50 Hz 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 Switchgear for industrial and advanced commercial applications xEffect - Switchgear for industrial and advanced commercial applications 10.3 Degree of protection of assemblies Does not apply, since the entire switchgear needs to be evaluated. Voltage type AC Number of poles (protected) Frame 45 mm

Terminals (top and bottom)

Twin-purpose terminals

Heat dissipation capacity 0 W
Release characteristic C
Width in number of modular spacings 2
Busbar material thickness 0.8 mm - 2 mm
Power loss 1.6 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.
Enclosure width 80 mm
Voltage rating 240 V AC / 415 V AC
10.9.2 Power-frequency electric strength Is the panel builder's responsibility.
Connectable conductor cross section (solid-core) - max 25 mm <sup>2</sup>
Degree of protection IP20 IP40 (when fitted)
ir 40 (wilen illed)
Overvoltage category  III
Pollution degree 2
10.7 Internal electrical circuits and connections Is the panel builder's responsibility.
Connectable conductor cross section (multi-wired) - min 1 mm²
Rated impulse withstand voltage (Uimp) 4 kV
Operational voltage (IEC/EN 60947-2) - max

# 10.10 Temperature rise

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

Voltage rating at DC

60 V DC (per pole)

Admissible back-up fuse - max

125 A gL/gG

Voltage rating (UL)

277 V

Rated switching capacity (IEC/EN 60947-2)

15 kA

Connectable conductor cross section (multi-wired) - max

25 mm<sup>2</sup>

Mounting width per pole

17.5 mm

Type

FAZ

Miniature circuit breaker

# 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.

Operational switching capacity

7.5 kA

Breaking capacity

10 kA (UL1077)

Direction of incoming supply

As required

Rated operational voltage (Ue) - max

230 V

Rated service short-circuit breaking capacity (IEC/EN 60898-1)

7.5 kA

Mounting width

17.5 mm

Rated service short-circuit breaking capacity (IEC/EN 60947-2)

7.5 kA

Rated insulation voltage (Ui)

440 V



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