

Eaton 102153

Catalog Number: 102153

Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB. FAZ-RT, 1-pole, tripping characteristic: D, rated current In: 30 A

General specifications



Product Name

Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB

Catalog Number

102153

EAN

4015081020294

Product Length/Depth

105 mm

Product Height

75.5 mm

Product Width

17.7 mm

Product Weight

0.13 kg

Compliances

RoHS conform

Certifications

CSA-C22.2 No. 5-09
Specially designed for North America, suitable as BCPD
North America (UL listed, CSA certified)
UL (File No. E235139)
IEC 60947-2
IEC/EN 60947-2
UL (Category Control Number DIVQ)
UL 489
CSA (File No. 204453)
CE marking
CSA (Class No. 1432-01)
UL 489, CSA C22.2 No. 5
EN45545-2
IEC 61373

Delivery program

Application

Feeder circuits, branch circuits
Switchgear for industrial and advanced commercial applications
xEffect - Switchgear for industrial and advanced commercial applications

Number of poles

Single-pole

Number of poles (total)

1

Number of poles (protected)

1

Tripping characteristic

D

Release characteristic

D

Amperage Rating

30 A

Type

FAZ-RT
Miniature circuit breaker

Technical data - electrical

Voltage type

AC

Voltage rating

277 V AC / 480 V AC

Voltage rating at DC

60 V DC

Voltage rating (IEC/EN 60947-2)

240 V AC / 415 V AC

Voltage rating (UL)

277 V

Rated operational voltage (Ue) - max

240 V

Rated insulation voltage (Ui)

440 V

Rated impulse withstand voltage (Uimp)

4 kV

Frequency rating - min

50 Hz

Frequency rating - max

60 Hz

Rated switching capacity (IEC/EN 60947-2)

15 kA

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

0 kA

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

0 kA

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

15 kA

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

15 kA

Selectivity class

3

Overvoltage category

III

Pollution degree

[Lifespan, electrical](#)

20000 operations

[Direction of incoming supply](#)

As required

Technical data - mechanical[Frame](#)

45 mm

[Enclosure width](#)

105 mm

[Width in number of modular spacings](#)

1

[Built-in depth](#)

70.5 mm

[Mounting width per pole](#)

17.7 mm

[Mounting width](#)

17.7 mm

[Mounting Method](#)

Top-hat rail IEC/EN 60715

[Mounting position](#)

As required

[Degree of protection](#)

UL/CSA Type: -

IP20

IP40 (when fitted)

IP20 (IEC)

[Terminals \(top and bottom\)](#)

Twin-purpose terminals

[Connectable conductor cross section \(solid-core\) - min](#)1 mm²[Connectable conductor cross section \(solid-core\) - max](#)25 mm²[Connectable conductor cross section \(multi-wired\) - min](#)1 mm²[Connectable conductor cross section \(multi-wired\) - max](#)25 mm²[Terminal protection](#)

Finger and hand touch safe, DGUV VS3, EN 50274

[Tightening torque](#)

UL: 2.4 Nm (21 lb-in) for AWG 18 - AWG 12

UL: 2.8 Nm (25 lb-in) for AWG 10 - AWG 8

Max. 2.4 Nm
UL: 4 Nm (36 lb-in) for AWG 6

Design verification as per IEC/EN - technical data

Rated operational current for specified heat dissipation (I_n)

30 A

Heat dissipation per pole, current-dependent

0 W

Equipment heat dissipation, current-dependent

2.7 W

Static heat dissipation, non-current-dependent

0 W

Heat dissipation capacity

0 W

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

75 °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.

Additional information

Current limiting class

3

Features

Additional equipment possible

Functions

Current limiting circuit breaker

Special features

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

Used with

FAZ-RT

Miniature circuit breaker

Resources

Brochures

[eaton-pdd-railrolling-stock-brochure-br011002en-en-us.pdf](#)

Catalogs

[eaton-xeffect-faz-na-rt-mcb-catalog-ca003032en-en-us.pdf](#)

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.

Characteristic curve

[eaton-mcb-xeffect-faz-na,-characteristic-curve-004.eps](#)

[eaton-mcb-xeffect-faz-na,-characteristic-curve-003.eps](#)

[eaton-xeffect-faz-na,-mcb-dimensions-002.jpg](#)

[eaton-xeffect-faz-na,-mcb-characteristic-curve.jpg](#)

[eaton-xeffect-faz-na,-mcb-characteristic-curve-002.jpg](#)

[eaton-xeffect-faz-na,-mcb-3d-drawing-010.jpg](#)

[eaton-xeffect-faz-na,-mcb-3d-drawing-009.jpg](#)

Declarations of conformity

[DA-DC-03_FAZ-B-C-D](#)

[DA-DC-03_FAZ-RT](#)

[DA-DC-03_FAZ-DU](#)

Drawings

[eaton-xeffect-faz-na,-mcb-dimensions.jpg](#)

[eaton-mcb-xeffect-faz-na,-3d-drawing.eps](#)

eCAD model

[DA-CE-ETN.FAZ-D30_1-RT](#)

Installation instructions

[IL019133ZU](#)

mCAD model

[faz_na_1p.dwg](#)

[faz_na_1p.stp](#)

Wiring diagrams

[eaton-xpole-mm4-6-m-mcb-wiring-diagram-002.jpg](#)

[eaton-mcb-xeffect-faz-na,-wiring-diagram.eps](#)



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30 Pembroke Road
Dublin 4, Ireland
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