

# Eaton 102159

Catalog Number: 102159

Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB. FAZ-NA, 2-pole, tripping characteristic: C, rated current In: 1.5 A, Switchgear for export to North America (UL-listed)



Photo is representative

## General specifications

<b>Product Name</b>	<b>Catalog Number</b>
Eaton Moeller series xEffect - FAZ-NA, FAZ-RT MCB	102159
	<b>Model Code</b>
	FAZ-C1,5/2-NA
<b>EAN</b>	<b>Product Length/Depth</b>
4015081020355	105 mm
<b>Product Height</b>	<b>Product Width</b>
75.5 mm	35.4 mm
<b>Product Weight</b>	<b>Compliances</b>
0.246 kg	RoHS conform

## Certifications

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

## Type

FAZ-NA

Miniature circuit breaker

## Special features

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

## Application

Feeder circuits, branch circuits

Switchgear for export to North America (UL-listed)

## Amperage Rating

1.5 A

## Voltage rating

277 V AC / 480 V AC

## Features

Additional equipment possible

### 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.

## Brochures

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

## Catalogs

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

## Certification reports

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

[DA-DC-03\\_FAZ-NA](#)

## Characteristic curve

[eaton-xeffect-faz-na,-mcb-dimensions-005.jpg](#)

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

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

[eaton-xeffect-faz-na,-mcb-3d-drawing-002.jpg](#)

[eaton-xeffect-faz-na,-mcb-3d-drawing-006.jpg](#)

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

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

## Drawings

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

[eaton-mcb-xeffect-faz-na,-3d-drawing-003.eps](#)

## eCAD model

[DA-CE-ETN.FAZ-C1,5\\_2-NA](#)

## Installation instructions

[IL019133ZU](#)

## mCAD model

[faz\\_na\\_2p.stp](#)

[faz\\_na\\_2p.dwg](#)

## Wiring diagrams

[eaton-xpole-mm4-6-m-mcb-wiring-diagram-003.jpg](#)

[eaton-mcb-xeffect-faz-na,-wiring-diagram-003.eps](#)

#### 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 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.

#### Frame

45 mm

#### Pollution degree

2

#### Used with

FAZ-NA

Miniature circuit breaker

#### Mounting Method

Top-hat rail IEC/EN 60715

#### Degree of protection

IP40 (when fitted)

UL/CSA Type: -

IP20

IP20 (IEC)

#### Equipment heat dissipation, current-dependent

2.6 W

#### Rated impulse withstand voltage (U<sub>imp</sub>)

4 kV

#### Breaking capacity

10 kA (UL489)

#### Terminal protection

Finger and hand touch safe, DGUV VS3, EN 50274

#### Terminals (top and bottom)

Twin-purpose terminals

#### Tripping characteristic

C

#### Ambient operating temperature - max

75 °C

#### Ambient operating temperature - min

-25 °C

#### Built-in depth

70.5 mm

#### Connectable conductor cross section (multi-wired) - max

25 mm<sup>2</sup>

#### Connectable conductor cross section (multi-wired) - min

1 mm<sup>2</sup>

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

25 mm<sup>2</sup>

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

1 mm<sup>2</sup>

#### Current limiting class

3

Enclosure width

105 mm

Frequency rating - max

60 Hz

Frequency rating - min

50 Hz

Heat dissipation capacity

0 W

Heat dissipation per pole, current-dependent

0 W

Direction of incoming supply

As required

Width in number of modular spacings

2

Voltage rating (IEC/EN 60947-2)

440 V

Voltage rating (UL)

480Y/277 V

Voltage rating at DC

60 V DC

Voltage type

AC

Mounting position

As required

Overvoltage category

III

Number of poles

Two-pole

Functions

Current limiting circuit breaker

Lifespan, electrical

20000 operations

Release characteristic

C

Mounting width

17.7 mm

Selectivity class

3

Mounting width per pole

17.7 mm

Number of poles (protected)

2

Number of poles (total)

2

Rated insulation voltage (Ui)

440 V

Rated operational current for specified heat dissipation (In)

1.5 A

Rated operational voltage (Ue) - max

415 V

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

Rated switching capacity (IEC/EN 60947-2)

15 kA

Static heat dissipation, non-current-dependent

0 W

Tightening torque

Max. 2.4 Nm

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

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

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

Power loss

2.6 W



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