

# Eaton 176067

Catalog Number: 176067

Eaton Moeller series xEffect - FAZ-DC MCB. Miniature circuit breaker (MCB), 10 A, 1p, characteristic: B, DC

### General specifications



| Product Name                              | Catalog Number |
|-------------------------------------------|----------------|
| Eaton Moeller series xEffect - FAZ-DC MCB | 176067         |
|                                           | EAN            |
|                                           | 4015081712632  |
| Product Length/Depth                      | Product Height |
| 80 mm                                     | 75.5 mm        |
| Product Width                             | Product Weight |
| 17.7 mm                                   | 0.11 kg        |
| Compliances                               | Certifications |
| RoHS conform                              | EN45545-2      |
|                                           | IEC 61373      |

## Delivery program

### Application

Switchgear for DC applications

### Number of poles

Single-pole

### Number of poles (total)

1

### Number of poles (protected)

1

### Tripping characteristic

B

### Release characteristic

B

### Amperage Rating

10 A

### Type

FAZ-DC

Miniature circuit breaker

## Technical data - electrical

### Voltage type

DC

### Rated operational voltage (Ue) - max

250 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)

10 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

10 kA

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

10 kA

### Overvoltage category

III

### Pollution degree

2

## Technical data - mechanical

### Width in number of modular spacings

1

### Built-in depth

70.5 mm

### Degree of protection

IP20

## Design verification as per IEC/EN 61439 - technical data

### Rated operational current for specified heat dissipation (In)

10 A

### Heat dissipation per pole, current-dependent

0 W

### Equipment heat dissipation, current-dependent

1.9 W

Connectable conductor cross section (solid-core) - min

1 mm<sup>2</sup>

Connectable conductor cross section (solid-core) - max

25 mm<sup>2</sup>

Connectable conductor cross section (multi-wired) - min

1 mm<sup>2</sup>

Connectable conductor cross section (multi-wired) - max

25 mm<sup>2</sup>

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.

### 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.

## Additional information

### Current limiting class

3

### Features

Additional equipment possible

### Special features

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

### Used with

Miniature circuit breaker

FAZ-DC

## Resources

### Brochures

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

### Catalogs

[eaton-xeffect-faz-dc-mcb-catalog-ca003030en-en-us.pdf](#)

### Characteristic curve

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

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

### Declarations of conformity

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

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

### Drawings

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

### eCAD model

[ETN.FAZ-B10\\_1-DC.edz](#)

#### 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.

#### Installation instructions

[IL019140ZU](#)

#### mCAD model

[eaton-faz\\_mcb\\_1p\\_dc-drawing.dwg](#)

[eaton-faz\\_mcb\\_1p\\_dc-3d-model.stp](#)

#### Wiring diagrams

[eaton-xeffect-faz-dc-mcb-wiring-diagram.jpg](#)