

Eaton 168267

Catalog Number: 168267

Eaton Moeller series xEffect - FRBdM RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 6A, 30mA, MCB trip type C, 1-phase+N, RCCB trip type: A



General specifications

| Product Name | Catalog Number |
|--|---------------------------|
| Eaton Moeller series xEffect - FRBdM RCBO - residual-current circuit breaker with overcurrent protection | 168267 |
| Model Code | FRBDM-C6/1N/003-G/A |
| EAN | 4015081648467 |
| Product Length/Depth | 86 mm |
| Product Height | 75 mm |
| Product Width | 37 mm |
| Product Weight | 0.25 kg |
| Compliances | CE Marked RoHS conform |
| Certifications | CE |

Product specifications

Type

RCBO

Application

Switchgear for industrial and advanced commercial applications

Amperage Rating

6 A

Voltage rating

240 V - 240 V

Surge current capacity

3 kA

Voltage type

AC

Width in number of modular spacings

2

Features

Anti-nuisance tripping version

Concurrently switching N-neutral

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.

Resources

Brochures

[eaton-xeffect-digital-switchgear-brochure-br003004en-en-us.pdf](#)

[eaton-xeffect-digital-circuit-breaker-brochure-br003004en-en-us.pdf](#)

Catalogs

[eaton-xeffect-frbdm-rcbo-catalog-ca003013en-en-us.pdf](#)

Characteristic curve

[eaton-xeffect-frbdm-characteristic-curve.jpg](#)

Declarations of conformity

[DA-DC-03_FRBdM](#)

Drawings

[eaton-xeffect-frbdm-dimensions.jpg](#)

[Dimension xEffect FRBdM 1N/2-pole](#)

[eaton-xeffect-frbdm-3d-drawing-002.jpg](#)

[eaton-xeffect-frbdm-3d-drawing-005.jpg](#)

Installation instructions

[MA120500739.pdf](#)

[MA120500739_2019_04.pdf](#)

mCAD model

[eaton-frbdm_2p_digi_rcbo-drawing.dwg](#)

[eaton-frbdm_2p_digi_rcbo-3d-model.stp](#)

Specifications and datasheets

[Eaton Specification Sheet - 168267](#)

Wiring diagrams

[Contact Sequence xEffect FRBdM 1N](#)

[eaton-xeffect-frbdm-wiring-diagram.jpg](#)

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.

Operating ambient temperature - max

40 °C

Operating ambient temperature - min

-25 °C

Product range

FRBdM

Rated current

6 A

Rated fault currents of product range

10, 30, 100 MilliAmpere

Rated operational current for specified heat dissipation (In)

6 A

Rated switching capacity (IEC/EN 61009)

10 kA

Static heat dissipation, non-current-dependent

0 W

Tripping characteristic

C

Built-in depth

70 mm

Current limiting class

3

Rated short-circuit breaking capacity (EN 60947-2)

0 kA

Ambient operating temperature - max

40 °C

Ambient operating temperature - min

-25 °C

Fault current rating

0.03 A

Heat dissipation capacity

0 W

Heat dissipation per pole, current-dependent

0 W

Number of poles (protected)

1

Number of poles (total)

2

Rated operational voltage (Ue) - max

240 V

Rated short-circuit breaking capacity (IEC 60947-2)

0 kA

Rated switching capacity

10 kA

Basic function

Combined RCD/MCB devices

Equipment heat dissipation, current-dependent

2.1 W

Rated impulse withstand voltage (Uimp)

4 kV

Degree of protection

IP20

Operating ambient temperature hint

Keep in mind the derating at temperatures higher than 40 °C

Tripping

Short time-delayed

Overvoltage category

III

Pollution degree

2

Impulse withstand current

Surge-proof, 3 kA

Leakage current type

A

Release characteristic

C

Sensitivity type

Pulse-current sensitive

Frequency rating

50 Hz

Rated insulation voltage (Ui)

250 V

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

Rated short-circuit breaking capacity (EN 61009)
10 kA

Rated short-circuit breaking capacity (EN 61009-1)
10 kA

Number of poles
Single-pole + N

Disconnection characteristic
Short-time delayed

Power loss
2.5 W



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