Product specifications

# Eaton 170930

## Catalog Number: 170930

Eaton Moeller series xEffect - FRBm4 RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 20A, 100mA, MCB trip type C, 3-phase+N, RCCB trip type: A




Photo is representative

## General specifications

**Product Name**
Eaton Moeller series xEffect - FRBm4 RCBO - residual-current circuit breaker with overcurrent protection

**Catalog Number**
170930

**Model Code**
FRBM4-C20/3N/01-A

**EAN**
4015081670611

**Product Length/Depth**
80 mm

**Product Height**
75.5 mm

**Product Width**
70 mm

**Product Weight**
0.446 kg

**Compliances**
CE Marked
RoHS conform

**Certifications**
CE
EN45545-2
IEC 61373

Powering Business Worldwide

## defaultTaxonomyAttributeLabel

### Type
RCBO

### Application
Switchgear for industrial and advanced commercial applications

### Voltage rating
415 V - 415 V

### Surge current capacity
0.25 kA

### Voltage type
AC

### Width in number of modular spacings
4

### Features
Concurrently switching N-neutral

### Operating ambient temperature - max
40 °C

### Operating ambient temperature - min
-25 °C

### Product range
FRBm4

### Rated current
20 A

### Rated fault currents of product range
30, 100, 300 MilliAmpere

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

### Rated switching capacity (IEC/EN 61009)
4.5 kA

### Static heat dissipation, non-current-dependent
0 W

### Tripping characteristic
C

### Built-in depth
75.5 mm

### Current limiting class

## Resources

### Brochures
eaton-pdd-railrolling-stock-brochure-br011002en-en-us.pdf

### Catalogs
eaton-xeffect-frbm4-rcbo-catalog-ca003016en-en-us.pdf

### Certification reports
DA-DC-03_FRBM-3

03_FRBM-3_191119

DA-DC-03_FRBm-3N

### Drawings
Dimension xEffect FRBm4/FRBm6 3N

eaton-xeffect-frbm6m-dimensions-004.jpg

eaton-xeffect-frbm6m-characteristic-curve-002.jpg

eaton-xeffect-frbm6m-wiring-diagram-002.jpg

### Installation instructions
IL019140ZU

### mCAD model
eaton-cadenas-side_view-frbm_3n_rcbo_side.pra

eaton-cadenas-front_view-frbm_3n_rcbo_front.pra

eaton-cadenas-path-rail_digital_2-frbm_3n_rcbo.prj

### Wiring diagrams
Contact Sequence xEffect FRBm4/FRBm6 3N

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

0.1 A

Heat dissipation capacity

0 W

Heat dissipation per pole, current-dependent

0 W

Number of poles (protected)

4

Number of poles (total)

4

Rated operational voltage (Ue) - max

415 V

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

0 kA

Rated switching capacity

4.5 kA

Basic function

Combined RCD/MCB devices

Equipment heat dissipation, current-dependent

11.8 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

Non-delayed

Overvoltage category

III

Pollution degree

2

Impulse withstand current

Partly surge-proof, 250 A

Leakage current type

A

Release characteristic

C

Sensitivity type

Pulse-current sensitive

Frequency rating

50 Hz

Rated insulation voltage (Ui)

500 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)

4.5 kA

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

4.5 kA

Number of poles

Three-pole + N

Disconnection characteristic

Undelayed




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