

Eaton 211803

Catalog Number: 211803

Eaton Moeller series xEffect - AZ MCB. Miniature circuit breaker (MCB) AZ, 3 pole+N, Tripping characteristic: C, Rated current In: 80 A

General specifications



Product Name	Catalog Number
Eaton Moeller series xEffect - AZ MCB	211803
EAN	Model Code
4015082118037	AZ-3N-C80
Product Length/Depth	Product Height
90 mm	75 mm
Product Width	Product Weight
108 mm	0.858 kg
Warranty	Compliances
1 year	RoHS conform
Certifications	Catalog Notes
IEC/EN 60947-2 EN45545-2 IEC 61373	Positioned for medium inrush startup currents to provide protection for small transformers and pilot devices.

Product specifications

Rated operational current for specified heat dissipation (In)

80 A

10.11 Short-circuit rating

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

10.4 Clearances and creepage distances

Meets the product standard's requirements.

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

0 kA

10.12 Electromagnetic compatibility

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

Mounting Method

Top-hat rail IEC/EN 60715

Current limiting class

3

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

0 kA

Amperage Rating

80 A

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

Frequency rating - max

60 Hz

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.8 Connections for external conductors

Is the panel builder's responsibility.

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

20 kA

Number of poles (total)

4

Terminal protection

Finger and hand touch safe, DGVV VS3, EN 50274

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

Resources

Application notes

[eaton-quality-standards-for-railway-applications-application-paper-ap003005en-en-us.pdf](#)

[eaton-maximum-cable-lengths-for-eatons-protective-devices-brochure-br034006en-en-us.pdf](#)

Brochures

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

Industrial miniature circuit breakers UL 489

Catalogs

Eaton's Volume 4—Circuit Protection

Certification reports

[DA-DC-03_AZ](#)

Characteristic curve

[eaton-mcb-current-xeffect-az-characteristic-curve.eps](#)

[eaton-mcb-xeffect-az-characteristic-curve.eps](#)

[eaton-mcb-xeffect-az-characteristic-curve-002.eps](#)

[eaton-mcb-tripping-characteristic-xeffect-az-characteristic-curve.eps](#)

[eaton-mcb-current-xeffect-az-characteristic-curve-002.eps](#)

[eaton-xeffect-az-mcb-characteristic-curve-004.jpg](#)

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

Drawings

[eaton-xpole-mmct-mcb-dimensions.jpg](#)

[eaton-mcb-xeffect-az-dimensions-004.eps](#)

[eaton-mcb-xeffect-az-dimensions-002.eps](#)

[eaton-mcb-faz-xeffect-faz-3d-drawing-004.eps](#)

[eaton-xeffect-az-mcb-3d-drawing.jpg](#)

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

eCAD model

[ETN.AZ-3N-C80](#)

Installation instructions

[IL019148ZU](#)

mCAD model

[DA-CD-az_3pn_4p](#)

[DA-CS-az_3pn_4p](#)

Specifications and datasheets

[Product Data Sheet - FAZ-C10/3N](#)

20 kA

Special features

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

Ambient operating temperature - max

55 °C

Heat dissipation per pole, current-dependent

0 W

Built-in depth

75 mm

Features

Additional equipment possible
Concurrently switching N-neutral

Lifespan, electrical

10000 operations

Connectable conductor cross section (solid-core) - min

2.5 mm²

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

Number of poles

Three-pole + N

Ambient operating temperature - min

-25 °C

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

Selectivity class

3

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

Terminal capacity (control cable)

2.5 mm² - 50 mm²

Used with

AZ
Miniature circuit breaker

Equipment heat dissipation, current-dependent

22.13 W

Wiring diagrams

[eaton-xpole-mmc4-6-m-mcb-wiring-diagram-004.jpg](#)

[eaton-mcb-xeffect-faz-wiring-diagram-006.eps](#)

Tripping characteristic

C

Frequency rating - min

50 Hz

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

Static heat dissipation, non-current-dependent

0 W

Application

Switchgear for industrial and
advanced commercial
applications
xEffect - Switchgear for
industrial and advanced
commercial applications

10.3 Degree of protection of assemblies

Does not apply, since the entire switchgear needs to be evaluated.

Voltage type

AC

Number of poles (protected)

3

Frame

45 mm

Terminals (top and bottom)

Lift terminals

Heat dissipation capacity

0 W

Release characteristic

C

Width in number of modular spacings

6

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.

Enclosure width

90 mm

Voltage rating

230 V AC / 400 V AC

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

Connectable conductor cross section (solid-core) - max

50 mm²

Degree of protection

IP40 (when fitted)

IP20

Overvoltage category

III

Pollution degree

2

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

Connectable conductor cross section (multi-wired) - min

2.5 mm²

Rated impulse withstand voltage (Uimp)

4 kV

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

Voltage rating at DC

60 V DC (per pole)

Admissible back-up fuse - max

200 A gL/gG

Rated switching capacity (IEC/EN 60947-2)

20 kA

Connectable conductor cross section (multi-wired) - max

50 mm²

Mounting width per pole

27 mm

Type

AZ

Miniature circuit breaker

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.7 Inscriptions

Meets the product standard's requirements.

Operational switching capacity

20 kA

Direction of incoming supply

As required

Rated operational voltage (Ue) - max

400 V

Mounting width

27 mm

Rated insulation voltage (Ui)

440 V



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