

Eaton 174506

Catalog Number: 174506

Eaton Moeller series xEffect - AZ MCB. Miniature circuit breaker (MCB), 20A, 3p, type B characteristic

General specifications



Product Name	Catalog Number
Eaton Moeller series xEffect - AZ MCB	174506
EAN	Product Length/Depth
4015081709625	75 mm
Product Height	Product Width
90 mm	81 mm
Product Weight	Compliances
0.681 kg	RoHS conform
Certifications	
EN45545-2	
IEC 61373	

Product specifications

Used with

Miniature circuit breaker

AZ

Type

AZ

Miniature circuit breaker

Special features

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

Application

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

Amperage Rating

20 A

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.

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](#)

Characteristic curve

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

[eaton-xeffect-az-mcb-characteristic-curve-003.jpg](#)

Declarations of conformity

[DA-DC-03_AZ](#)

Drawings

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

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

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

eCAD model

[ETN.AZ-3-B20.edz](#)

Installation instructions

[IL019148ZU](#)

mCAD model

[eaton-az_mcb_3p-3d-model.stp](#)

[eaton-az_mcb_3p-drawing.dwg](#)

Wiring diagrams

[eaton-xpole-mm4-6-m-mcb-wiring-diagram-005.jpg](#)

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.

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.

Pollution degree

Degree of protection

IP20

Equipment heat dissipation, current-dependent

8.1 W

Rated impulse withstand voltage (Uimp)

4 kV

Tripping characteristic

B

Ambient operating temperature - max

55 °C

Ambient operating temperature - min

-25 °C

Built-in depth

75 mm

Connectable conductor cross section (multi-wired) - max

50 mm²

Connectable conductor cross section (multi-wired) - min

2.5 mm²

Connectable conductor cross section (solid-core) - max

50 mm²

Connectable conductor cross section (solid-core) - min

2.5 mm²

Current limiting class

3

Frequency rating - max

60 Hz

Frequency rating - min

50 Hz

Heat dissipation capacity

0 W

Heat dissipation per pole, current-dependent

0 W

Width in number of modular spacings

4.5

Voltage type

AC

Overvoltage category

III

Number of poles

Three-pole

Release characteristic

B

Number of poles (protected)

3

Number of poles (total)

3

Rated insulation voltage (Ui)

440 V

Rated operational current for specified heat dissipation (In)

20 A

Rated operational voltage (Ue) - max

400 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

25 kA

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

25 kA

Rated switching capacity (IEC/EN 60947-2)

25 kA

Static heat dissipation, non-current-dependent

0 W

Reserved.

owners.

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