

Eaton 187221

Catalog Number: 187221

Eaton Moeller series xPole - AFDD+ Arc Fault Detection Device, 2 poles, C20A, 30mA, type AC

General specifications

Product Name	Catalog Number
Eaton Moeller series xPole - AFDD+ Arc fault detection device	187221
	Model Code
	AFDD-20/2/C/003
EAN	Product Length/Depth
4015081822706	80 mm
Product Height	Product Width
73 mm	52.5 mm
Product Weight	Compliances
0.277 kg	CE Marked
	RoHS conform
Certifications	
CE	

Delivery programme

Application

Switchgear for residential and commercial applications

Product range

AFDD

Basic function

Arc fault circuit interrupter

Product application

Switchgear for residential and commercial applications

Number of poles

Two-pole

Release characteristic

C

Tripping characteristic

C

Rated current

20 A

Rated current of product range

10-40 Ampere

Fault current rating

0.03 A

Sensitivity type

AC current sensitive

Type AC

Type

AFDD+

Technical data - electrical

Voltage rating

230 V

Current test marks

As per inscription

Impulse withstand current

Partly surge-proof, 250 A

Frequency

50 Hz

Leakage current type

AC

Rated switching capacity (IEC/EN 61009)

10 kA

Rated short-circuit breaking capacity

10 Kilo Ampere

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

0 kA

Rated short-circuit breaking capacity (EN 61009)

10 kA

Test circuit AC

170 - 264 Voltage AC

Tripping

Non-delayed

Control voltage type auxiliary equipment

AC

Rated voltage auxiliary device

230 V

Rated switch current auxiliary device

0 A

Overvoltage category

III

Pollution degree

2

Lifespan, electrical

4000 operations

Technical data - mechanical

Frame

45 mm

Width In Number Of Modular Spacings

3

Built-in width

54 mm

Device height

80 mm

Built-in depth

67 mm

Mounting style

Tri-stable slide catch - enables removal from existing busbar combination

Degree of protection

IP20

Degree of protection (built in)

IP40

Terminals (top and bottom)

Twin-purpose

Terminal protection

Busbar tag shroud as per VBG4, ÖVE-EN 6

Permissible Storage and Trans Temp. Min

-35 °C

Permissible Storage and Trans Temp. Max

60 °C

Contact position indicator

red / green

Thickness of busbar material

0.8 - 2 Square Millimeter

Climatic proofing

IEC/EN 61009

Lifespan, mechanical

20000 operations

Design verification as per IEC/EN 61439 - technical data

Rated operational current for specified heat dissipation (In)

20 A

Equipment heat dissipation, current-dependent

8.5 W

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.

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.

Additional information

Current limiting class

3

Additional equipment attached at delivery

Fire protection switch

Types conform to

IEC/EN 61009

IEC/EN 62606

Resources

Brochures

[eaton-afdd-guidance-brochure-br003010en-en-us.pdf](#)

Catalogues

[eaton-2020-es-emea-uk-pdd-catalogue-update-july-2020.pdf](#)

Certification reports

[DA-DC-03_AFDD](#)

Characteristic curve

[eaton-xpole-afdd-characteristic-curve-002.jpg](#)

[eaton-xpole-afdd-characteristic-curve.jpg](#)

Drawings

[eaton-xpole-afdd-dimensions.jpg](#)

[eaton-xpole-afdd-3-d-drawing-002.jpg](#)

[eaton-xpole-afdd-3-d-drawing-004.jpg](#)

eCAD model

[ETN.AFDD-20_2_C_003](#)

Installation instructions

[IL019126ZU](#)

[IL019125ZU](#)

Installation videos

[Arc Fault Detection Device - AFDD+](#)

mCAD model

[afdd.stp](#)

[afdd.dwg](#)

Technical data sheets

[eaton-afdd-catalog-tech-en-us.pdf](#)

Wiring diagrams



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Eaton House
30 Pembroke Road
Dublin 4, Ireland
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