

# Eaton 187222

Catalog Number: 187222

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



## General specifications

Product Name	Catalog Number
Eaton Moeller series xPole - AFDD+ Arc fault detection device	187222
Model Code	AFDD-20/2/C/003-A
EAN	Product Length/Depth
4015081822713	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

## Technical data - electrical

Application	Voltage rating
Switchgear for residential and commercial applications	230 V
Product range	Current test marks
AFDD	As per inscription
Basic function	Impulse withstand current
Arc fault circuit interrupter	Partly surge-proof, 250 A
Product application	Frequency
Switchgear for residential and commercial applications	50 Hz
Number of poles	Leakage current type
Two-pole	A
Release characteristic	Rated switching capacity (IEC/EN 61009)
C	10 kA
Tripping characteristic	Rated short-circuit breaking capacity
C	10 Kilo Ampere
Rated current	Rated short-circuit breaking capacity (EN 60947-2)
20 A	0 kA
Rated current of product range	Rated short-circuit breaking capacity (EN 61009)
10-40 Ampere	10 kA
Fault current rating	Test circuit AC
0.03 A	170 - 264 Voltage AC
Sensitivity type	Tripping
Pulse-current sensitive	Non-delayed
Type A	Control voltage type auxiliary equipment
Type	AC
AFDD+	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 62606

IEC/EN 61009

### 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-3d-drawing-004.jpg](#)

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

#### eCAD model

[EPLAN P8 file xPole AFDD+](#)

[ETN.AFDD-20\\_2\\_C\\_003-A](#)

#### Installation instructions

[IL019125ZU](#)

[IL019126ZU](#)

#### Installation videos

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

#### mCAD model

[afdd.dwg](#)

[afdd.stp](#)

#### Technical data sheets

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

Wiring diagrams

eaton-xpole-afdd-wiring-diagram.jpg



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