

Specifications



Eaton 187165

Eaton Moeller series xPole - AFDD+ Arc Fault Detection Device, 2 poles, B10A, 10mA, type A

General specifications

PRODUCT NAME	Eaton Moeller series xPole
	- AFDD+ Arc fault detection device
CATALOG NUMBER	187165
EAN	4015081822140
PRODUCT LENGTH/DEPTH	80 mm
PRODUCT HEIGHT	73 mm
PRODUCT WIDTH	52.5 mm
PRODUCT WEIGHT	0.277 kg
COMPLIANCES	CE Marked
	RoHS conform
CERTIFICATIONS	CE
MODEL CODE	AFDD-10/2/B/001-A

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
NUMBER OF POLES (PROTECTED)	2
NUMBER OF POLES (TOTAL)	2
RELEASE CHARACTERISTIC	B
TRIPPING CHARACTERISTIC	B
RATED CURRENT	10 A
RATED CURRENT OF PRODUCT RANGE	10-40 Ampere
FAULT CURRENT RATING	0.01 A
SENSITIVITY TYPE	Pulse-current sensitive Type A
TYPE	AFDD+

Technical data - electrical

VOLTAGE RATING	230 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4
CURRENT TEST MARKS	As per inscription
IMPULSE WITHSTAND CURRENT	Partly surge-proof, 250 A
FREQUENCY	50 Hz
LEAKAGE CURRENT TYPE	A
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
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009-1)	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) 10 A

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT 6 W

AMBIENT OPERATING TEMPERATURE - MIN -25 °C

AMBIENT OPERATING TEMPERATURE - MAX 40 °C

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	Is the panel builder's responsibility.

Additional information

CURRENT LIMITING CLASS	3
ADDITIONAL EQUIPMENT ATTACHED AT DELIVERY	Fire protection switch
TYPES CONFORM TO	IEC/EN 62606 IEC/EN 61009

INSULATING MATERIAL

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.

Resources

BROCHURES	eaton-afdd-guidance-brochure-br003010en-en-us.pdf
CATALOGUES	eaton-2020-es-emea-uk-pdd-catalogue-update-july-2020.pdf
CHARACTERISTIC CURVE	eaton-xpole-afdd-characteristic-curve-002.jpg eaton-xpole-afdd-characteristic-curve.jpg
DECLARATIONS OF CONFORMITY	DA-DC-03 AFDD
DRAWINGS	eaton-xpole-afdd-dimensions.jpg eaton-xpole-afdd-3d-drawing.jpg eaton-xpole-afdd-3d-drawing-003.jpg
ECAD MODEL	ETN.AFDD-10 2 B 001-A
INSTALLATION INSTRUCTIONS	IL019126ZU IL019125ZU
INSTALLATION VIDEOS	Arc Fault Detection Device - AFDD+
MCAD MODEL	eaton-afdd-in-combination-with-rcbos-drawings-afdd.dwg eaton-afdd-in-combination-with-rcbos-3d-models-afdd.stp
TECHNICAL DATA SHEETS	eaton-afdd-catalog-tech-en-us.pdf
WIRING DIAGRAMS	eaton-xpole-afdd-wiring-diagram.jpg

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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