

Specifications



Photo is representative

Eaton 211791

Eaton Moeller series xEffect - AZ MCB.
Miniature circuit breaker (MCB) AZ, 3 pole,
Tripping characteristic: C, Rated current In: 50
A

General specifications

PRODUCT NAME	Eaton Moeller series xEffect - AZ MCB
CATALOG NUMBER	211791
MODEL CODE	AZ-3-C50
EAN	4015082117917
PRODUCT LENGTH/DEPTH	90 mm
PRODUCT HEIGHT	75 mm
PRODUCT WIDTH	81 mm
PRODUCT WEIGHT	0.678 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947-2 EN45545-2 IEC 61373



Product specifications

USED WITH

Miniature circuit breaker

Resources

	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	50 A
VOLTAGE RATING	230 V AC / 400 V AC
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.
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.

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 eaton-mcb-tripping-characteristic-xeffect-az-characteristic-curve.eps 122U020 eaton-xeffect-az-mcb-characteristic-curve-002.jpg eaton-mcb-xeffect-az-characteristic-curve-002.eps 122U021 eaton-mcb-xeffect-az-characteristic-curve.eps eaton-mcb-current-xeffect-az-characteristic-curve.eps AZ Durchlassstrom C 122U019 122U022 eaton-xeffect-az-mcb-characteristic-curve-004.jpg eaton-mcb-current-xeffect-az-characteristic-curve-002.eps 122U015 AZ i2t c
CHARACTERISTIC CURVE	
DECLARATIONS OF CONFORMITY	DA-DC-03 AZ eaton-xpole-mmct-mcb-dimensions.jpg Mas PLHT 122X061 eaton-mcb-xeffect-az-dimensions-004.eps eaton-mcb-faz-xeffect-faz-3d-drawing-003.eps 122I085 eaton-xeffect-az-mcb-3d-drawing.jpg eaton-xeffect-az-mcb-3d-drawing-002.jpg AZ UMG AZ BLOCK
DRAWINGS	
ECAD MODEL	ETN.AZ-3-C50
INSTALLATION INSTRUCTIONS	IL019148ZU
MCAD MODEL	eaton-cadenas-side view-az_3p_side.pra

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.
FRAME	45 mm
POLLUTION DEGREE	2
MOUNTING METHOD	Top-hat rail IEC/EN 60715
DEGREE OF PROTECTION	IP40 (when fitted) IP20
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	15.4 W 15.3 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
ADMISSIBLE BACK-UP FUSE - MAX	200 A gL/gG
TERMINAL PROTECTION	Finger and hand touch safe, DGUV VS3, EN 50274
TERMINALS (TOP AND BOTTOM)	Lift terminals
TRIPPING CHARACTERISTIC	C
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 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED)	2.5 mm ²

	eaton-cadenas-path-03-geo-az_3p.3db DA-CD-az_3p eaton-cadenas-front_view-az_3p_front.pra DA-CS-az_3p
SPECIFICATIONS AND DATASHEETS	Eaton Specification Sheet - 211791
WIRING DIAGRAMS	PLS_3P_122S102 eaton-mcb-xeffect-faz-wiring-diagram-003.eps eaton-xpole-mm4-6-m-mcb-wiring-diagram-005.jpg

- MIN	
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	50 mm ²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	2.5 mm ²
CURRENT LIMITING CLASS	3
ENCLOSURE WIDTH	90 mm
FREQUENCY RATING - MAX	60 Hz
FREQUENCY RATING - MIN	50 Hz
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	5.1 W
DIRECTION OF INCOMING SUPPLY	As required
WIDTH IN NUMBER OF MODULAR SPACINGS	4.5
VOLTAGE RATING AT DC	60 V DC (per pole)
VOLTAGE TYPE	AC
OVERVOLTAGE CATEGORY	III
NUMBER OF POLES	Three-pole
LIFESPAN, ELECTRICAL	10000 operations
RELEASE CHARACTERISTIC	C
MOUNTING WIDTH	27 mm
SELECTIVITY CLASS	3
MOUNTING WIDTH PER POLE	27 mm
NUMBER OF POLES (PROTECTED)	3
NUMBER OF POLES (TOTAL)	3
OPERATIONAL SWITCHING CAPACITY	20 kA
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	50 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	0 kA

(EN 60898) AT 400 V	
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
TERMINAL CAPACITY (CONTROL CABLE)	2.5 mm ² - 50 mm ²

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2025 Eaton. All Rights Reserved.

Eaton is a registered trademark. Follow us on social media to get the latest product and support information.
All other trademarks are property of their respective owners.

