Specifications



Photo is representative





Eaton 211801

Eaton Moeller series xEffect - AZ MCB. Miniature circuit breaker (MCB) AZ, 3 pole, Tripping characteristic: C, Rated current In: 80 A

General specifications	
PRODUCT NAME	Eaton Moeller series xEffect - AZ MCB
CATALOG NUMBER	211801
MODEL CODE	AZ-3-C80
EAN	4015082118013
PRODUCT LENGTH/DEPTH	90 mm
PRODUCT HEIGHT	75 mm
PRODUCT WIDTH	81 mm
PRODUCT WEIGHT	0.64 kg
COMPLIANCES	RoHS compliant
CERTIFICATIONS	IEC/EN 60947-2 EN45545-2 IEC 61373

Additional information

CURRENT LIMITING CLASS	3
FEATURES	Can be fitted with auxiliary accessories Suitable for Isolation Suitable for IT systems Suitable for Rolling Stock applications Neutral conductor switches concurrently with the phase conductors
FUNCTIONAL GROUP	Overcurrent protection
INTERNAL RESISTANCE AT ROOM TEMPERATURE (SINGLE-POLE, 50 HZ)	0.9 mΩ
USED WITH	AZ Miniature circuit breaker

Delivery program

AMPERAGE RATING	80 A
APPLICATION	• ! • ! • Industrial and commercial installations, utilities, OEM control panels, renewable energy installations, IT and data centre auxiliary circuits, railway and transportation systems etc.
NOMINAL CURRENT	80 A
NUMBER OF POLES	Three-pole
NUMBER OF POLES (PROTECTED)	3
NUMBER OF POLES (TOTAL)	3
RELEASE CHARACTERISTIC	C
TRIPPING CHARACTERISTIC	C
TYPE	• AZ • Miniature circuit breaker

Design verification as per IEC/EN 61439

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.
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.

Design verification as per IEC/EN 61439 - technical data

AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	80 A

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.

Technical data - electrical

DIRECTION OF INCOMING SUPPLY	Bidirectional
FREQUENCY RATING - MAX	60 Hz
FREQUENCY RATING - MIN	50 Hz
LIFESPAN, ELECTRICAL	10000 operations
OPERATIONAL VOLTAGE (IEC/EN 60947-2) - MAX	400 VAC
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	2 3
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL VOLTAGE (UE) - MAX	400 V
RATED SERVICE SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60947-2) - ICS	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)- ICU AT 400 V	20 kA
RATED SWITCHING CAPACITY (IEC/EN 60947-2)	20 kA
VOLTAGE RATING	230 V AC / 400 V AC
VOLTAGE RATING (IEC/EN 60947-2)	230/400 V AC
VOLTAGE RATING AT DC	60 V DC (per pole)
VOLTAGE TYPE	AC

Technical data - mechanical

BUILT-IN DEPTH	65.5 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
CONTACT POSITION INDICATOR COLOR	Red = ON Green = OFF
DEGREE OF PROTECTION	IP20 (With terminal cover) IP40 (in Enclosure)
ENCLOSURE WIDTH	90 mm
FRAME	45 mm
MOUNTING METHOD	Two lock-in position on DIN rail (EN/IEC 60715)
MOUNTING POSITION	As required
MOUNTING WIDTH	27 mm
MOUNTING WIDTH PER POLE	27 mm
TERMINAL CAPACITY	2.5 mm² - 50 mm²
TERMINALS (TOP AND BOTTOM)	Screw-type with pressure plate
WIDTH IN NUMBER OF MODULAR SPACINGS	4.5

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
DECLARATIONS OF CONFORMITY	eaton-mcb-declaration-of-conformity-eu250431en.pdf
ECAD MODEL	ETN.AZ-3-C80
INSTALLATION INSTRUCTIONS	eaton-xeffect-iec-mcb-faz-az-il019148zu.pdf
MCAD MODEL	eaton-non-selective-mcb-mcad-drawings-az-3p.dwg DA-CS-az_3p eaton-non-selective-universal-mcb-mcad-3d-models-az-plht-3p.stp
PEP ECO-PASSPORT	eaton-non-selective-universal-mcb-pep-eato-00259-v0101-en.pdf

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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