

Specifications

Photo is representative

Eaton 211771

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

General specifications

PRODUCT NAME	Eaton Moeller series xEffect - AZ MCB
CATALOG NUMBER	211771
EAN	4015082117719
PRODUCT LENGTH/DEPTH	90 mm
PRODUCT HEIGHT	75 mm
PRODUCT WIDTH	81 mm
PRODUCT WEIGHT	0.681 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947-2 EN45545-2 IEC 61373
MODEL CODE	AZ-3-C20



Powering Business Worldwide

Product specifications

USED WITH	Miniature circuit breaker AZ
AMPERAGE RATING	20 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

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 eaton-mcb-xeffect-az-characteristic-curve.eps eaton-mcb-current-xeffect-az-characteristic-curve-002.eps eaton-xeffect-az-mcb-characteristic-curve-004.jpg eaton-mcb-current-xeffect-az-characteristic-curve.eps eaton-xeffect-az-mcb-characteristic-curve-002.jpg eaton-mcb-tripping-characteristic-xeffect-az-characteristic-curve.eps eaton-mcb-xeffect-az-characteristic-curve-002.eps
CHARACTERISTIC CURVE	
DECLARATIONS OF CONFORMITY	DA-DC-03_AZ
DRAWINGS	eaton-xpole-mmct-mcb-dimensions.jpg eaton-mcb-xeffect-az-dimensions-004.eps eaton-xeffect-az-mcb-3d-drawing-002.jpg eaton-mcb-faz-xeffect-faz-3d-drawing-003.eps eaton-xeffect-az-mcb-3d-drawing.jpg
ECAD MODEL	DA-CE-ETN.AZ-3-C20

	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.
FRAME	45 mm
POLLUTION DEGREE	2
MOUNTING METHOD	Top-hat rail IEC/EN 60715
DEGREE OF PROTECTION	IP20 IP40 (when fitted)
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	16.3 W 8.1 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

INSTALLATION INSTRUCTIONS	IL019148ZU
MCAD MODEL	DA-CS-az_3p DA-CD-az_3p eaton-mcb-xeffect-faz-wiring-diagram-003.eps
WIRING DIAGRAMS	eaton-xpole-mmc4-6-mcb-wiring-diagram-005.jpg

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) - MIN	2.5 mm ²
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	2.7 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
TYPE	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none">• Switchgear for industrial and advanced commercial applications• xEffect - Switchgear for industrial and advanced commercial applications
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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) 20 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 (EN 60898) AT 400 V 0 kA

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 mm² - 50 mm²

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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