Specifications

Photo is representative

Eaton 278757

Eaton Moeller series xEffect - FAZ MCB. FAZ, 2-pole, tripping characteristic: C, rated current In: 12 A

General specifications	
PRODUCT NAME	Eaton Moeller series xEffect - FAZ MCB
CATALOG NUMBER	278757
MODEL CODE	FAZ-C12/2
EAN	4015082787578
PRODUCT LENGTH/DEPTH	80 mm
PRODUCT HEIGHT	75.5 mm
PRODUCT WIDTH	36 mm
PRODUCT WEIGHT	0.222 kg
COMPLIANCES	UL CSA09 (with supplementary protector only) RoHS conform
CERTIFICATIONS	CSA-C22.2 No. 235 IEC/EN 60947-2 UL (File No. E177451) UL 1077 CSA (File No. 204453) IEC/EN 60898 UL (Category Control Number QVNU2, QVNU8) CE marking North America (UL recognized, CSA certified) CSA (Class No. 3215-30) EN45545-2 IEC 61373

Powering Business Worldwide

Delivery Programme

APPLICATION	• Branch circuits, not as BCPD • Switchgear for industrial and advanced commercial applications • xEffect - Switchgear for industrial and advanced commercial applications
NUMBER OF POLES	Two-pole
NUMBER OF POLES (TOTAL)	2
NUMBER OF POLES (PROTECTED)	2
TRIPPING CHARACTERISTIC	C
RELEASE CHARACTERISTIC	C
AMPERAGE RATING	12 A
TYPE	• FAZ • Miniature circuit breaker

Technical data - electrical

VOLTAGE TYPE	AC
VOLTAGE RATING	240 V AC / 415 V AC
VOLTAGE RATING (IEC/EN 60898-1)	415 VAC
VOLTAGE RATING (UL)	480Y/277 V
VOLTAGE RATING (UL CSA 13)	480 Y/277 V AC; 96 V DC
RATED OPERATIONAL VOLTAGE (UE) - MAX	400 V
OPERATIONAL VOLTAGE (IEC/EN 60947-2) - MAX	440 VAC
RATED INSULATION VOLTAGE (UI)	440 V
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
FREQUENCY RATING - MIN	50 Hz
FREQUENCY RATING - MAX	60 Hz
RATED SWITCHING CAPACITY (IEC/EN 60947-2) AT MAX VOLTAGE RATING	10 kA
RATED SWITCHING CAPACITY (IEC/EN 60947-2)	15 kA
RATED SWITCHING CAPACITY (IEC/EN 60898-1)	10 kA
BREAKING CAPACITY	10 kA (UL1077)
RATED SERVICE SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60898-1)	7.5 kA
RATED SERVICE SHORT-CIRCUIT BREAKING CAPACITY (IEC/EN 60947-2)	7.5 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 230 V	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60898) AT 400 V	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC	15 kA

60947-2) AT 230 V	
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2) AT 400 V	15 kA
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	2

Technical data - mechanical

WIDTH IN NUMBER OF MODULAR SPACINGS	2
BUILT-IN DEPTH	70.5 mm
DEGREE OF PROTECTION	IP20 (IEC) IP20 UL/CSA Type: -
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1 mm^2
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	25 mm^2
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1 mm^2
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	25 mm^2

Design verification as per IEC/EN 61439 - technical data

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	12 A
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	4.4 W
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W
HEAT DISSIPATION CAPACITY	0 W
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE - MAX	75 °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
FEATURES	Additional equipment possible
SPECIAL FEATURES	Ambient temperature hint: a 1 °C increase results in a 0.5% linear reduction of current carrying capacity
USED WITH	FAZ Miniature circuit breaker

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

CATALOGUES	eaton-xeffect-industrial-switchgear-range-catalog-ca003002en-en-us.pdf
CHARACTERISTIC CURVE	eaton-xeffect-faz-mcb-characteristic-curve.jpg
DECLARATIONS OF CONFORMITY	DA-DC-03_FAZ-B-C-D
DRAWINGS	eaton-xeffect-faz-mcb-dimensions-002.jpg eaton-xeffect-faz-mcb-3d-drawing-009.jpg eaton-xeffect-faz-mcb-3d-drawing-010.jpg eaton-xeffect-faz-mcb-3d-drawing-002.jpg eaton-mcb-faz-xeffect-faz-3d-drawing-002.eps
ECAD MODEL	ETN.FAZ-C12_2.edz
INSTALLATION INSTRUCTIONS	eaton-rccb-rcbo-g9-il019140zu.pdf
MCAD MODEL	eaton-faz_mcb_2p-3d-model.stp eaton-faz_mcb_2p-drawing.dwg
PEP ECO-PASSPORT	EATO-00047-V01.01-EN
WIRING DIAGRAMS	eaton-xpole-mmc4-6-m-mcb-wiring-diagram-003.jpg eaton-mcb-xeffect-faz-wiring-diagram-002.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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