Specifications





Eaton 279141

Eaton Moeller series xEffect - FAZ-DC MCB. FAZ-DC, 2-pole, tripping characteristic: C, rated current In: 20 A, Switchgear for DC applications

General specifications	
PRODUCT NAME	Eaton Moeller series xEffect - FAZ-DC MCB
CATALOG NUMBER	279141
MODEL CODE	FAZ-C20/2-DC
EAN	4015082791414
PRODUCT LENGTH/DEPTH	80 mm
PRODUCT HEIGHT	75.5 mm
PRODUCT WIDTH	36 mm
PRODUCT WEIGHT	0.222 kg
COMPLIANCES	RoHS conform
CERTIFICATIONS	IEC/EN 60947-2 EN45545-2 IEC 61373

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	Miniature circuit breaker FAZ-DC

Delivery program

AMPERAGE RATING	20 A
APPLICATION	Switchgear for DC applications
NUMBER OF POLES	Two-pole
NUMBER OF POLES (PROTECTED)	2
NUMBER OF POLES (TOTAL)	2
RELEASE CHARACTERISTIC	C
TRIPPING CHARACTERISTIC	C
TYPE	• FAZ-DC • 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	75 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	6.6 W
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	20 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W

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

ADMISSIBLE BACK-UP FUSE - MAX	100 A gL/gG
DIRECTION OF INCOMING SUPPLY	Polarity dependent
LIFESPAN, ELECTRICAL	10000 operations
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	2
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
RATED INSULATION VOLTAGE (UI)	440 V
RATED OPERATIONAL VOLTAGE (UE) - MAX	250 V
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)- ICU AT 230 V	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)- ICU AT 400 V	10 kA
RATED SWITCHING CAPACITY (IEC/EN 60947-2)	10 kA
SELECTIVITY CLASS	3
VOLTAGE RATING AT DC	250 V DC (per pole)
VOLTAGE TYPE	DC

Technical data - mechanical

BUILT-IN DEPTH	70.5 mm
BUSBAR MATERIAL THICKNESS	0.8 mm - 2 mm
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MAX	25 mm²
CONNECTABLE CONDUCTOR CROSS SECTION (MULTI-WIRED) - MIN	1 mm²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MAX	25 mm²
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) - MIN	1 mm²
DEGREE OF PROTECTION	IP20 IP40 (when fitted)
ENCLOSURE WIDTH	80 mm
FRAME	45 mm
MOUNTING METHOD	Top-hat rail IEC/EN 60715
MOUNTING POSITION	As required
MOUNTING WIDTH	17.5 mm
MOUNTING WIDTH PER POLE	17.5 mm
TERMINAL CAPACITY (CONTROL CABLE)	25 mm² (1x)
TERMINAL CAPACITY OF SCREW TERMINALS FOR MAIN CABLE	10 mm² (2x)
TERMINAL PROTECTION	Finger and hand touch safe, DGUV VS3, EN 50274
TERMINALS (TOP AND BOTTOM)	Twin-purpose terminals
WIDTH IN NUMBER OF MODULAR SPACINGS	2

Resources

BROCHURES	eaton-pdd-railrolling-stock-brochure-br011002en-en-us.pdf
DECLARATIONS OF CONFORMITY	eaton-mcb-declaration-of-conformity-eu250393en.pdf eaton-mcb-declaration-of-conformity-uk251435en.pdf
DRAWINGS	eaton-mcb-xeffect-faz-dimensions-002.eps eaton-mcb-faz-xeffect-faz-3d-drawing-002.eps
ECAD MODEL	ETN.FAZ-C20_2-DC
MCAD MODEL	eaton-non-selective-universal-mcb-mcad-3d-models-faz-xxx-2p.stp eaton-non-selective-universal-mcb-mcad-drawings-faz-xxx-2p.dwg
WIRING DIAGRAMS	eaton-mcb-xeffect-faz-dc-wiring-diagram-002.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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