Eaton 170857

Eaton Moeller series xEffect - FRBmM RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 20A, 300mA, MCB trip type C, 2p, RCCB trip type: AC

PRODUCT NAME	Eaton Moeller series xEffect - FRBm6/M RCBO - residual-current circuit breaker with overcurrent protection
CATALOG NUMBER	170857
PRODUCT LENGTH/DEPTH	80 mm
PRODUCT HEIGHT	75.5 mm
PRODUCT WIDTH	35 mm
PRODUCT WEIGHT	0.25 kg
COMPLIANCES	CE Marked RoHS conform
CERTIFICATIONS	CE EN45545-2 IEC 61373

Powering Business Worldwide

AMPERAGE RATING	20 A
VOLTAGE RATING	240 V - 240 V
SURGE CURRENT CAPACITY	0.25 kA
VOLTAGE TYPE	AC
WIDTH IN NUMBER OF MODULAR SPACINGS	2
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	Does not apply, since the

CHARACTERISTIC CURVE	eaton-xeffect-frbm6m-characteristic-curve-003.jpg
	xEffect_FR_RCCB_FAZ%20MCB.pdf
	eaton-xeffect-frbm6-rcbo-catalog-ca003015en-en-us.pdf
	eaton-xeffect-frbm6m-3d-drawing-009.jpg eaton-xeffect-frbm6m-dimensions-002.jpg eaton-xeffect-frbm6m-3d-drawing-017.jpg eaton-xeffect-frbm6m-wiring-diagram-003.jpg

IMPACT	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 INSULATING MATERIAL	Is the panel builder's responsibility.
OPERATING AMBIENT TEMPERATURE - MAX	40 °C
OPERATING AMBIENT TEMPERATURE - MIN	-25 °C
PRODUCT RANGE	FRBmM
RATED CURRENT	20 A
RATED FAULT CURRENTS OF PRODUCT RANGE	10, 30, 100, 300 MilliAmpere
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	20 A
RATED SWITCHING CAPACITY (IEC/EN 61009)	10 kA
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT	0 W
TRIPPING CHARACTERISTIC	C
BUILT-IN DEPTH	75.5 mm
CURRENT LIMITING	3

CLASS	
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60947-2)	0 kA
AMBIENT OPERATING TEMPERATURE - MAX	40 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
FAULT CURRENT RATING	0.3 A
HEAT DISSIPATION CAPACITY	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W
NUMBER OF POLES (PROTECTED)	2
NUMBER OF POLES (TOTAL)	2
RATED OPERATIONAL VOLTAGE (UE) - MAX	240 V
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)	0 kA
RATED SWITCHING CAPACITY	10 kA
BASIC FUNCTION	Combined RCD/MCB devices
MOUNTING METHOD	DIN rail
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT	5.9 W
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4 kV
DEGREE OF PROTECTION	IP20
OPERATING AMBIENT TEMPERATURE HINT	Keep in mind the derating at temperatures higher than 40 °C
TRIPPING	Non-delayed
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	2
IMPULSE WITHSTAND CURRENT	Partly surge-proof, 250 A
LEAKAGE CURRENT TYPE	AC
RELEASE CHARACTERISTIC	C

SENSITIVITY TYPE	AC current sensitive
FREQUENCY RATING	50 Hz
RATED INSULATION VOLTAGE (UI)	500 V
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
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009)	10 kA
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 61009-1)	10 kA
NUMBER OF POLES	Two-pole
DISCONNECTION CHARACTERISTIC	Undelayed
TYPE	RCBO
APPLICATION	Switchgear for industrial and advanced commercial applications

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
:	

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