

## Eaton 170708

Eaton Moeller series xEffect - FRBm6/M RCBO - residual-current circuit breaker with overcurrent protection. RCD/MCB, 32A, 30mA, MCB trip type B, 1-phase+N, RCCB trip type: A, G

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PRODUCT NAME	Eaton Moeller series xEffect - FRBmM RCBO - residual-current circuit breaker with overcurrent protection		
CATALOG NUMBER	170708		
PRODUCT LENGTH/DEPTH	80 mm		
PRODUCT HEIGHT	75 mm		
PRODUCT WIDTH	35 mm		
PRODUCT WEIGHT	0.213 kg		
COMPLIANCES	CE Marked RoHS conform		
CERTIFICATIONS	CE EN45545-2 IEC 61373		



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VOLTAGE RATING	240 V - 240 V		
SURGE CURRENT CAPACITY	0.25 kA		
VOLTAGE TYPE	AC		
WIDTH IN NUMBER OF MODULAR SPACINGS	2		
FEATURES	Concurrently switching N- neutral		
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.		

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00	eaton-xeffect-frbm6m-wiring- diagram.jpg
	eaton-xeffect-frbm6m-3d- drawing-005.jpg
	eaton-xeffect-frbm6m- dimensions.jpg
	eaton-xeffect-frbm6m- characteristic-curve.jpg

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	ls the panel builder's responsibility.			
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	ls the panel builder's responsibility.			
10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH	ls the panel builder's responsibility.			
10.9.3 IMPULSE WITHSTAND VOLTAGE	ls the panel builder's responsibility.			
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	ls the panel builder's responsibility.			
OPERATING AMBIENT TEMPERATURE - MAX	40 °C			
OPERATING AMBIENT TEMPERATURE - MIN	-25 °C			
PRODUCT RANGE	FRBmM			
RATED CURRENT	32 A			
RATED FAULT CURRENTS OF PRODUCT RANGE	10, 30, 100, 300 MilliAmpere			
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	32 A			
RATED SWITCHING CAPACITY (IEC/EN 61009)	10 kA			
STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT	0 W			
TRIPPING CHARACTERISTIC	В			
BUILT-IN DEPTH	75.5 mm			
CURRENT LIMITING CLASS	3			
RATED SHORT-CIRCUIT BREAKING CAPACITY (EN 60947-2)	10 kA			
AMBIENT OPERATING	40 °C			

TEMPERATURE - MAX					
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C				
FAULT CURRENT RATING	0.03 A				
HEAT DISSIPATION CAPACITY	0 W				
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT	0 W				
NUMBER OF POLES (PROTECTED)	1				
NUMBER OF POLES (TOTAL)	2				
RATED OPERATIONAL VOLTAGE (UE) - MAX	240 V				
RATED SHORT-CIRCUIT BREAKING CAPACITY (IEC 60947-2)	10 kA				
RATED SWITCHING CAPACITY	10 kA				
BASIC FUNCTION	Combined RCD/MCB devices				
MOUNTING METHOD	DIN rail				
EQUIPMENT HEAT DISSIPATION, CURRENT- DEPENDENT	6.1 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	A				
RELEASE CHARACTERISTIC	В				
SENSITIVITY TYPE	Pulse-current sensitive				
FREQUENCY RATING	50 Hz				
RATED INSULATION VOLTAGE (UI)	500 V				
CONNECTABLE CONDUCTOR CROSS SECTION (SOLID-CORE) -	1 mm²				

MIN **CONNECTABLE CONDUCTOR CROSS** 25 mm<sup>2</sup> **SECTION (SOLID-CORE) -**MAX **CONNECTABLE CONDUCTOR CROSS**  $1 \text{ mm}^2$ **SECTION (MULTI-WIRED)** - MIN **CONNECTABLE CONDUCTOR CROSS** 25 mm<sup>2</sup> **SECTION (MULTI-WIRED)** - MAX **RATED SHORT-CIRCUIT BREAKING CAPACITY (EN** 10 kA 61009) **RATED SHORT-CIRCUIT BREAKING CAPACITY (EN** 10 kA

Single-pole + N

Switchgear for industrial

and advanced commercial

Undelayed

applications

**RCBO** 

61009-1)

**TYPE** 

**NUMBER OF POLES** 

**DISCONNECTION** 

**CHARACTERISTIC** 

**APPLICATION** 

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