

RCD/MCB combination switch, 20A, 30mA, miniature circuit-br. type B trip characteristic, 1-phase+N, residual current circuit-br. trip characteristic: A



Part no. Article no. Catalog No. FRBMM-B20/1N/003-G/A 170528 FRBMM-B20/1N/003-G/A

Similar to illustration

Delivery program Basic function Combined RCD/MCB devices Number of poles 1 pole+N В Tripping characteristic Switchgear for industrial and advanced commercial applications Application Rated current 20 ١_n А Rated switching capacity according to IEC/EN 61009 kA 10 Rated fault current А 0.03 $I_{\Delta N}$ Tripping А Short time-delayed Product range FRBmM Pulse-current sensitive Sensitivity Impulse withstand current Surge-proof, 3 kA Contact sequence Ν

Technical data

Electrical			
Sensitivity			Pulse-current sensitive
Rated current	In	А	20
Tripping characteristic			В

Design verification as per IEC/EN 61439

Rated operational current for specified heat dissipation In A 20 Heat dissipation per pole, current-dependent Pvid W 0 Equipment heat dissipation, current-dependent Pvid W 5.4 Static heat dissipation, non-current-dependent Pvs W 0 Heat dissipation capacity Pdiss W 0 Operating ambient temperature min. Pdiss V 0 Operating ambient temperature max. M Pdiss V 0	Design vernication as per icc/civ 01455			
Heat dissipation per pole, current-dependent Pvid W Equipment heat dissipation, current-dependent Pvid W 54 Static heat dissipation, non-current-dependent Pvs W 0 Iteat dissipation capacity Pdiss W 0 Operating ambient temperature min. °C -25 Operating ambient temperature max. °C 40 Ite2 Strength of materials and parts °C 40 10.2.3.1 Verification of thermal stability of enclosures F 6 10.2.3.2 Verification of resistance of insulating materials to abnormal heat and fire due to intermal electric effects F Meets the product standard's requirements. 10.2.3.1 Verification of resistance of insulating materials to abnormal heat and fire due to intermal electric effects Meets the product standard's requirements. 10.2.3.1 Verification of resistance of insulating materials to abnormal heat and fire due to intermal electric 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 Meets the product standard's requirements.	Technical data for design verification			
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	10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.6 Mechanical impact Does not apply, since the entire switchgear needs to be evaluated.	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 Insulation properties	
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.
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.

Technical data ETIM 6.0

Circuit breakers and fuses (EG000020) / Earth leakage circuit breaker (EC000905)

Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/RCCB combination (ecl@ss8.1-27-14-22-07 [AFZ810012])

Number of poles (total)		2
Number of protected poles		1
Nominal rated voltage	V	240
Nominal rated current	А	20
Rated fault current	А	0.03
Leakage current type		A
Current limiting class		3
Rated short-circuit breaking capacity EN 60898	kA	10
Rated short-circuit breaking capacity IEC 60947-2	kA	0
Frequency		50 Hz
Release characteristic		В
Concurrently switching N-neutral		Yes
Over voltage category		3
Pollution degree		2
Width in number of modular spacings		2
Built-in depth	mm	75.5
Suitable for flush-mounted installation		No
Degree of protection (IP)		IP20
Surge current capacity	kA	3
Voltage type		AC
Antinuisance tripping version		Yes

Dimensions

