DATASHEET - FRCMM-125/2/03-S/A



Residual current circuit breaker (RCCB), 125A, 2p, 300mA, type S/A

Powering Business Worldwide

Part no. FRCMM-125/2/03-S/A Catalog No. 171172

Alternate Catalog FRCMM-125/2/03-S/A

No.

EL-Nummer (Norway) 1605235

Similar to illustration

Delivery program

Delivery program			
Basic function			Residual current circuit-breakers
Number of poles			2 pole
Application			Switchgear for industrial and advanced commercial applications
Rated current	In	Α	125
Rated short-circuit strength	I _{cn}	kA	10 with back-up fuse
Rated fault current	$I_{\Delta N}$	Α	0.3
Туре			Type S/A
Tripping		s	selective switch off
Product range			FRCmM-125
Sensitivity			Pulse-current sensitive
Impulse withstand current			surge-proof 5 kA
Contact sequence			

Technical data

Electrical IEC/EN 61008 Types conform to Current test marks As per inscription Tripping s... 50 ms delay - selective switch off Rated voltage according to IEC/EN 60947-2 U_{n} V AC 240 50 f Rated frequency Hz Limit values of the operating voltage V AC 184 - 250 Test circuit Rated fault current mΑ 300 $I_{\Delta n}\,$ Sensitivity Pulse-current sensitive Rated insulation voltage Ui ٧ 440 $\,U_{imp}\,$ Rated impulse withstand voltage kV 4 (1.2/50µs) Rated short-circuit strength kA 10 with back-up fuse I_{cn} Impulse withstand current 5 kA (8/20 μs) surge-proof Max. admissible back-up fuse Short-circuit Α 125 gG/gL Overload gG/gL Α 80 Α 1250 Rated making and breaking capacity / Rated residual making and breaking $I_m / \, I_{\Delta m}$ capacity lifespan Electrical Operations ≧ 4000 Operations ≧ 10000 Mechanical

Mechanical

in contain our		
Standard front dimension	mm	45
Device height	mm	80
Built-in width	mm	35 (2TE)
Mounting		Quick attachment for DIN-rail EN 50022
Degree of Protection		IP40, IP54 (with moisture-proof enclosure)
Terminals top and bottom		Twin-purpose terminals
Terminal protection		Busbar tag shroud to BGV A3, ÖVE-EN 6
Terminal cross-section		
Solid	mm ²	1.5 - 50 2 x (1.5 - 16)
Stranded	mm ²	1.5 - 50 2 x (1.5 - 16)
Thickness of busbar material	mm	0.8 - 2
Admissible ambient temperature range	°C	-25 - +40
Permissible storage and transport temperatures	°C	-25 - +60
Climatic proofing		25-55°C/90-95% relative humidity according to IEC 60068-2
Mounting position		As required
Contact position indicator		red / green
Trip indication		toggle-center postition

Design verification as per IEC/EN 61439

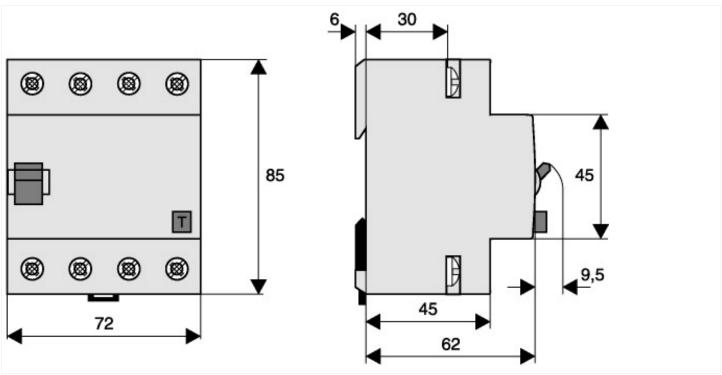
Design vermeation as per 120/214 01733			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	125
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	18
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	60
			Starting at 40 °C, the max. permissible continuous current decreases by 2.2% for every 1 °C
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal 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			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 7.0 Circuit breakers and fuses (EG000020) / Residual current circuit breaker (RCCB) (EC000003) Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ecl@ss10.0.1-27-14-22-01 [AAB906014]) 2 Number of poles ٧ Rated voltage 240 Rated current Α 125 Rated fault current mΑ 300 Rated insulation voltage Ui 440 Rated impulse withstand voltage Uimp kV 4 DIN rail Mounting method Leakage current type Α Selective protection Yes Short-time delayed tripping No Short-circuit breaking capacity (Icw) kΑ 10 kA 5 Surge current capacity Frequency 50 Hz Additional equipment possible Yes With interlocking device Yes Degree of protection (IP) IP20 Width in number of modular spacings 2 70.5 Built-in depth mm °C Ambient temperature during operating -25 - 40 Pollution degree 2 Connectable conductor cross section multi-wired mm^2 1.5 - 16

Dimensions

Connectable conductor cross section solid-core



1.5 - 50