



RCD/MCB combination switch, 25A, 30mA, C-LS-Char, 3N pole, FI-Char: A



Powering Business Worldwide™

Part no. **mRB4-25/3N/C/003-A**
 Catalog No. **120678**

EL-Nummer
 (Norway) **0001654845**

Similar to illustration

Delivery program

Basic function			Combined RCD/MCB devices
Number of poles			3 pole+N
Tripping characteristic			C
Application			Switchgear for residential and commercial applications
Rated current	I_n	A	25
Rated switching capacity acc. to IEC/EN 60947-2	I_{cu}	kA	4.5
Rated switching capacity according to IEC/EN 61009		kA	4.5
Rated fault current	$I_{\Delta n}$	A	0.03
Type			Type A
Tripping		s...	non-delayed
Product range			mRB4
Sensitivity			Pulse-current sensitive
Impulse withstand current			Partly surge-proof 250 A
Contact sequence			<pre> graph TD T1 --- 1 T1 --- 2 T2 --- 3 T2 --- 4 T3 --- 5 T3 --- 6 H --- N N --- 1 N --- 3 N --- 5 N --- H </pre>

Technical data

Electrical

Standards			IEC/EN 61009
Tripping		s...	non-delayed
Rated operating voltage	U_e	V AC	230/400
Limit values of the operating voltage		V AC	0.85 x 1.1 x U_n
Rated frequency	f	Hz	50
Rated fault currents	$I_{\Delta n}$	mA	30
Rated non-tripping current	$I_{\Delta no}$		0.5 x $I_{\Delta n}$
Sensitivity			DC and pulsed current
Rated switching capacity	I_{cn}	kA	4.5
Rated current	I_e	A	25
Rated impulse withstand voltage	U_{imp}	kV	4 (1.2/50 μ s)
Characteristic			C
Maximum max. as short-circuit protective device		A gL	100
Selectivity Class			3
Lifespan		S	
Electrical		Operations	4000
Mechanical		Operations	20000

Mechanical

Standard front dimension	mm	45
Enclosure height	mm	80
Terminal protection		Busbar tag shroud to VBG4
Mounting width	mm	70 (4 SU)
Mounting		Tristable slide catch enables removal from existing combination.

Degree of protection		
Switch		IP20
Integrated		IP40
Terminals top and bottom		Twin-purpose terminals
Terminal capacities	mm ²	
Solid	mm ²	1 - 25
Thickness of busbar material	mm	0.8 ... 2
Admissible ambient temperature range	°C	-25 ... +40
Climatic proofing		according to IEC 68-2 (25 - 55 °C, 90 - 95 % Humidity)

Design verification as per IEC/EN 61439

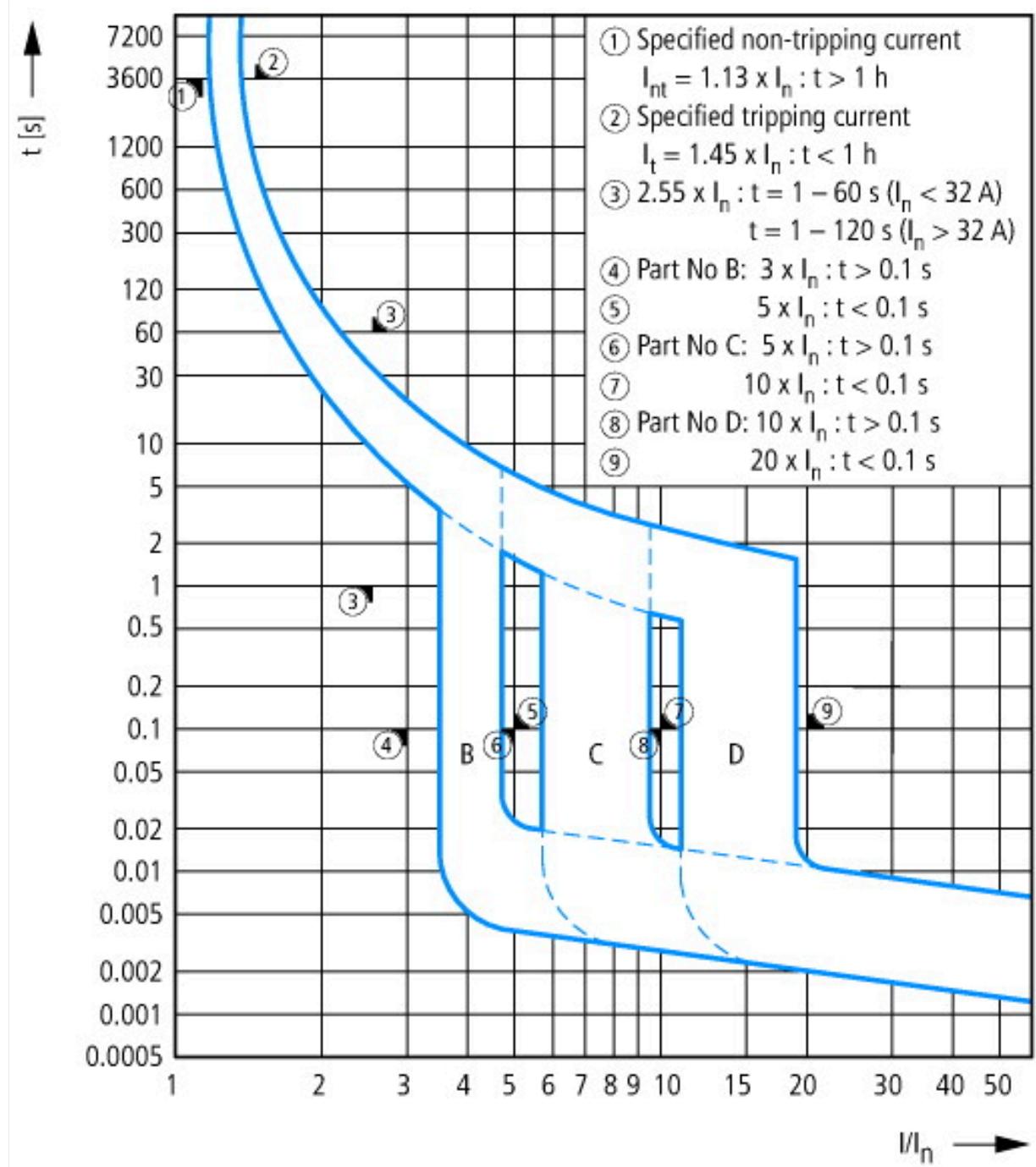
Technical data for design verification		
Rated operational current for specified heat dissipation	I _n	A 25
Heat dissipation per pole, current-dependent	P _{vid}	W 0
Equipment heat dissipation, current-dependent	P _{vid}	W 11.6
Static heat dissipation, non-current-dependent	P _{vs}	W 0
Heat dissipation capacity	P _{diss}	W 0
Operating ambient temperature min.	°C	-25
Operating ambient temperature max.	°C	40
		0
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) / Earth leakage circuit breaker (EC000905)		
Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / MCB/RCCB combination (ecl@ss10.0.1-27-14-22-07 [AFZ81015])		
Number of poles (total)		4
Number of protected poles		3
Rated voltage	V	400

Rated insulation voltage Ui	V	500
Rated impulse withstand voltage Uimp	kV	4
Rated current	A	25
Rated fault current	A	0.03
Leakage current type		A
Current limiting class		3
Rated short-circuit breaking capacity acc. EN 61009	kA	4.5
Rated short-circuit breaking capacity IEC 60947-2	kA	0
Rated short-circuit breaking capacity Icn acc. EN 61009-1	kA	4.5
Disconnection characteristic		
Surge current capacity	kA	0.25
Voltage type		AC
Frequency		50 Hz
Release characteristic		C
Concurrently switching N-neutral		Yes
With interlocking device		No
Over voltage category		3
Pollution degree		2
Ambient temperature during operating	°C	-25 - 40
Width in number of modular spacings		4
Built-in depth	mm	70
Suitable for flush-mounted installation		No
Anti-nuisance tripping version		No
Degree of protection (IP)		IP20
Connectable conductor cross section solid-core	mm ²	1 - 25
Connectable conductor cross section multi-wired	mm ²	1 - 25

Characteristics



Dimensions

