



Digital residual current circuit-breaker, 40A, 4p, 300mA, type U

Part no. dRCM-40/4/03-U+
Article no. 120851
Catalog No. DRCM-40-4-03-U

Similar to illustration

Delivery program

Basic function			Residual current circuit breakers , digital
Number of poles			4 pole
Application			Switchgear for residential and commercial applications
Rated current	I_n	A	40
Rated short-circuit strength	I_{cn}	kA	10
Rated fault current	$I_{\Delta N}$	A	0.3
Type			Type U
Tripping		A	selective switch off
Product range			dRCM
Sensitivity			Frequency converter-proof
Impulse withstand current			surge-proof 5 kA

Technical data

Electrical

Standards			IEC/EN 61008, Type G and G/A according to ÖVE E 8601 Current test mark according to label
Rated operational voltage	U_e	V	
	U_e	V AC	
Rated operating voltage	U_e	V AC	230/400
Rated frequency	f	Hz	50/60
Rated frequency	f	Hz	50/60
Rated fault currents	$I_{\Delta n}$	mA	30, 300
Rated non-tripping current	$I_{\Delta no}$		$0.5 \times I_{\Delta n}$
Sensitivity			Frequency converter-proof
Sensitivity			DC and pulsed current
Rated impulse withstand voltage	U_{imp}	kV	4 (1.2/50 μ s)
Rated short-circuit strength	I_{cn}	kA	10
Maximum max. as short-circuit protective device		A gL	
Back-up fuse		A gL	Short-circuit and overload: 80 A gG/GL

Mechanical

Standard front dimension		mm	45
Enclosure height		mm	
Enclosure width		mm	80
Mounting			Quick attachment with 2 latch positions on top-hat rail IEC/EN 60715
Terminals top and bottom			Twin-purpose terminals
Terminal protection			Busbar tag shroud to BGV A3
Degree of protection			
Integrated			IP40
Terminal cross-section			
Solid		mm ²	1.5 - 33
flexible		mm ²	2 x 16
Terminal cross-section			M5 (Poqidriv PZ2)
Admissible ambient temperature range		°C	-25 ... +40
Climatic proofing			according to IEC/EN 61008
Thickness of busbar material		mm	
Material thickness		mm	0.8 - 2

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	40
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	3.8
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 6.0

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@ss8.1-27-14-22-01 [AAB906011])			
Number of poles			4
Nominal rated voltage		V	415
Nominal rated current		A	40
Rated fault current		A	0.3
Mounting method			DIN rail
Leakage current type			A
Selective protection			Yes
Short-circuit breaking capacity (I _{cn})		kA	10
Surge current capacity		kA	5
Frequency			50 Hz
Additional equipment possible			Yes
Degree of protection (IP)			IP20
Construction size (in accordance with DIN 43880)			1

Width in number of modular spacings		4
Built-in depth	mm	70.5
Short-time delayed tripping		No

Dimensions

