DATASHEET - DRCM-25/4/03-G/A+

No.



Digital residual current circuit-breaker, 25A, 4p, 300mA, type G/A

dRCM-25/4/03-G/A+ Part no. Catalog No. 120835 Alternate Catalog DRCM-25-4-03-G-A **EL-Nummer** 0001654972 (Norway)



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	In	А	25
Rated short-circuit strength	I _{cn}	kA	10
Rated fault current	$I_{\Delta N}$	А	0.3
Туре			Type G/A (ÖVE E 8601)
Tripping		s	Short time-delayed
Product range			dRCM
Sensitivity			AC and pulsating DC current sensitive
Impulse withstand current			Surge-proof, 3 kA

Technical data Electrical

Current test marks As per inscription Standards EC/EN 61008 Rated operational voltage Ue V Rated operating voltage Ue VAC Rated operating voltage Ue VAC Rated operating voltage Ve SoldAud Imit values of the operating voltage F SoldAud Test circuit V VAC SoldAud Test circuit V VAC SoldAud Comment for range of the test button VAC SoldAud SoldAud Rated fault currents Imit Aud Max Max SoldAud	rt allowed
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Image: constraint of the set button Image: constraint of the set button Image: constraint of the set button Image: constraint of the set button	ıt allowed
Rated operating voltage Ue V AC 20/400 Rated frequency f Hz 50/60 Limit values of the operating voltage V AC 14/40 Test circuit V AC 184 - 440 Comment for range of the test button I and the operation without N (400V AC Phase-Phase) no test button	it allowed
Rated frequency f Hz 50/60 Limit values of the operating voltage V AC 184 - 440 Comment for range of the test button Image: Comment of the test button Image: Comment of the test button	ıt allowed
Limit values of the operating voltage VAC 184 - 440 Test circuit VAC 184 - 440 Comment for range of the test button Sphase application without N (400V AC Phase-Phase) no	ıt allowed
Test circuit V AC 184 - 440 Comment for range of the test button 3-phase application without N (400V AC Phase-Phase) not	ıt allowed
Comment for range of the test button 3-phase application without N (400V AC Phase-Phase) no	nt allowed
	ot allowed
Rated fault currents $I_{\Delta n}$ mA 30, 300	
Rated non-tripping current $I\Delta no$ 0.5 x I $_{\Delta n}$	
Sensitivity AC and pulsating DC current sensitive	
Rated insulation voltage Ui V 440	
Sensitivity DC and pulsed current	
Rated impulse withstand voltage U _{imp} kV 4	
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: 63 A gG/GL	
lifespan	
Electrical Operations ≥ 4000	
Mechanical Operations ≥ 20000	
References	
Auxiliary switch for subsequent installation Z-HK 248432	
Tripping signal contact for subsequent installation Z-NHK 248434	
Remote control and automatic switching device Z-FW/LP 248296	
Compact enclosure KLV-TC-4 276241	
Sealing cover set Z-RC/AK-4MU 101062	
Mechanical	
Standard front dimension mm 45	

Standard front dimension	mm	45
Device height	mm	80
Enclosure height	mm	
Enclosure width	mm	80
Built-in width	mm	70 (4TE)
Mounting		Quick attachment with 2 latch positions on top-hat rail IEC/EN 60715
Degree of Protection		IP40, IP54 (with moisture-proof enclosure)
Terminals top and bottom		Twin-purpose terminals
Terminal protection		DGUV VS3, EN 50274
Degree of protection		
Integrated		IP40
Terminal cross-section		
Solid	mm ²	1.5 - 35
Stranded	mm ²	2 x 16
flexible	mm ²	2 x 16
Terminal cross-section		M5 (Pozidriv PZ2)
Thickness of busbar material	mm	0.8 - 2
Admissible ambient temperature range	°C	-25 +40
Permissible storage and transport temperatures	°C	-35 - +60
Climatic proofing		25-55°C/90-95% relative humidity according to IEC 60068-2
Thickness of busbar material	mm	
Material thickness	mm	0.8 - 2

Design verification as per IEC/EN 61439

besign vermeation as per indy nites			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	25
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	2.2
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
			Starting at 40 °C, the max. permissible continuous current decreases by 3% 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	0) / Residual current circu	it 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])

Rated voltage V is Rated voltage A 5 Rated fault current mA 30 Rated insulation voltage Uin V 40 Rated insulation voltage Uinp V 40 Mounting method V 40 Leakage current type No No Selective protection V 40 Short-circuit breaking capacity (lew) V No Suge current capacity V No Suge current possible V Sold Muitinin number of modular spacings V Sold Built-in depth Mm 0.5 Anbient temperature during operating V Sold Pollution degree V Sold Pollution degree Sold Sold Rutent port modular spacings Mm Sold Built-in depth Mm Sold Anbient temperature during operating Sold Sold Pollution degree Sold Sold Pollution degree				
Rated current A B Rated faut current 0 00 Rated insulation voltage Uin V 40 Rated insulation voltage Uinp V 40 Mounting method V 40 Selective protection V 40 Selective protection V 40 Surg current type V 40 Selective protection V V Short-circuit breaking capacity (lew) V V Surg current capacity V V Yeige current propolitie V V Additional equipment possible V V Vith interlocking device V V Degree of protection (IP) V V With in number of modular spacings V V Built-in depth V V Anbient temperature during operating V V Pollution degre V V V Connectable conductor cross section multi-wired N N S	Number of poles			4
Rated fault current mA 0 Rated insulation voltage Uim K 40 Rated insulation voltage Uimp K 40 Mounting method K 40 Leakage current type IN rail IN rail Selective protection K 40 Short-tircuit breaking capacity (low) K 8 Surge current capacity K 9 Kettion under possible K 9 Vith interlocking device K 9 Vith interlocking device K 9 Built-in depth M 10 Mith innumber of modular spacings K 9 Built-in depth M 10 Anbient temperature during operating M 10 Pollution degree M 10 Pollution degree M 10 Rotiettemperature during operating M 10 Rotiettemperature during operating M 10 Pollution degree M 10 Pollution degree	Rated voltage	V		415
Rate insulation voltage Uin V 40 Rate insulation voltage Uinp K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K K	Rated current	А		25
Rada impulse withstand voltage Uimp kV 4 Mounting method IN rail Leakage current type A A Selective protection KV 4 Short-time delayed tripping KA No Short-time capacity (Icw) KA 0 Surge current capacity (Icw) KA 0 Frequency KA 0 Additional equipment possible KA 0 With interlocking device KA Selective Digree of protection (IP) KA Selective With interlocking device mm 0 Built-in depth mm 0.5 Anbient temperature during operating mm 0.5 Pollution degree mm 0.5 Pollution degree mm 0.5	Rated fault current	m	A	300
Monting method IN rail Leakage current type A Selective protection No Short-time delayed tripping Ve Short-circuit breaking capacity (lcw) KA Surge current capacity KA Frequency 0Hz Additional equipment possible Ve With interlocking device Ve Built-in depth Ve Muthin number of modular spacings Mem Anbient temperature during operating C Pollution degree C Pollution degree C Pollution degree S Pollution degree S	Rated insulation voltage Ui	V		440
Leakage current type A A Selective protection No No Short-time delayed tripping Yes No Short-circuit breaking capacity (lcw) KA 10 Surge current capacity (lcw) KA 3 Strip eduring protection (lpw) KA 50 HZ With interlocking device Yes Yes Degree of protection (lP) Yes Yes With in number of modular spacings Yes Yes Built-in depth Yes Yes Anbient temperature during operating Yes Yes Pollution degree Yes <td>Rated impulse withstand voltage Uimp</td> <td>kV</td> <td>/</td> <td>4</td>	Rated impulse withstand voltage Uimp	kV	/	4
Selective protection Selective protective protective Selective protective protective protective protective protective protective protec	Mounting method			DIN rail
Short-tire delayed tripping Yes Short-circuit breaking capacity (lcw) KA 0 Surge current capacity (lcw) KA 3 Frequency KA 0 Additional equipment possible 50 Hz 50 Hz With interlocking device Yes 50 Hz Degree of protection (IP) Yes 50 Hz With in number of modular spacings mm 70 S Built-in depth mm 70 S Anbient temperature during operating °C 25 40 Pollution degree mm 15 16	Leakage current type			Α
Short-circuit breaking capacity (lcw) KA 1 Surge current capacity KA 3 Frequency KA 0 Hz Additional equipment possible 50 Hz 50 Hz With interlocking device Frequency Yes Degree of protection (IP) Yes 100 With in number of modular spacings Mom 7.0 Anbient temperature during operating Mom 7.5 Pollution degree 2 2 2 Pollution degree mm 1.5 1.5	Selective protection			No
Surge current capacity KA 3 Frequency 50 Hz Additional equipment possible Yes With interlocking device 120 Degree of protection (IP) 120 Width in number of modular spacings mm Built-in depth 70 Anbient temperature during operating °C Pollution degree 2 Pollution degree mm State 120 Surge conductor cross section multi-wired mm²	Short-time delayed tripping			Yes
Frequency 50 Hz Additional equipment possible Yes With interlocking device 120 Degree of protection (IP) 120 With in number of modular spacings mm Built-in depth 70.5 Ambient temperature during operating 120 Pollution degree 12 Pollution degree 15 State 15	Short-circuit breaking capacity (Icw)	kΔ	4	10
Additional equipment possible Meditional equipment possible With interlocking device Meditional equipment possible Degree of protection (IP) Meditional equipment possible With in number of modular spacings Meditional equipment possible Built-in depth mm Anbient temperature during operating Meditional equipment Pollution degree mm State 15 16	Surge current capacity	kΑ	4	3
With interlocking device Yes Degree of protection (IP) IP20 With in number of modular spacings mm 7.5 Built-in depth C 25 - 40 Pollution degree mm ² 15 - 16	Frequency			50 Hz
Degree of protection (IP) IPD Width in number of modular spacings IPD Built-in depth mm Ambient temperature during operating C Pollution degree IPD Connectable conductor cross section multi-wired mm ²	Additional equipment possible			Yes
Width in number of modular spacings mm 70.5 Built-in depth mm 25 - 40 Ambient temperature during operating e e Pollution degree mm ² 15 - 16	With interlocking device			Yes
Built-in depth mm 70.5 Ambient temperature during operating °C 25 - 40 Pollution degree 2 2 Connectable conductor cross section multi-wired mm² 1.5 - 16	Degree of protection (IP)			IP20
Ambient temperature during operating Pollution degree -25 - 40 Pollution degree 2 Connectable conductor cross section multi-wired mm² 15 - 16	Width in number of modular spacings			4
Pollution degree 2 Connectable conductor cross section multi-wired mm ²	Built-in depth	mi	m	70.5
Connectable conductor cross section multi-wired mm ² 1.5 - 16	Ambient temperature during operating	°C	2	-25 - 40
	Pollution degree			2
Connectable conductor cross section solid-core mm ² 1.5 - 35	Connectable conductor cross section multi-wired	mi	m²	1.5 - 16
	Connectable conductor cross section solid-core	mi	m²	1.5 - 35

Dimensions



