## 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 <sub>cn</sub>	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
Rated operational voltage       Ue       V         Ue       VAC       VAC         Rated operating voltage       Ue       VAC         Rated frequency       f       Hz       50/60         Limit values of the operating voltage       VAC       VAC         Test circuit       V       VAC       VAC         Comment for range of the test button       VAC       Sphase application without N (400V AC Phase-Phase) or the operation without N (400V AC	t allowed
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 <sub>imp</sub> kV 4	
Rated short-circuit strength I <sub>cn</sub> 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 <sup>2</sup>	1.5 - 35
Stranded	mm <sup>2</sup>	2 x 16
flexible	mm <sup>2</sup>	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 <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2.2
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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	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 <sup>2</sup> 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 <sup>2</sup>	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 <sup>2</sup> 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 <sup>2</sup>	Built-in depth	mi	m	70.5
Connectable conductor cross section multi-wired mm <sup>2</sup> 1.5 - 16	Ambient temperature during operating	°C	2	-25 - 40
	Pollution degree			2
Connectable conductor cross section solid-core mm <sup>2</sup> 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



