



## Digital residual current circuit-breaker, 40A, 4p, 30mA, type G/B, 60Hz

Part no. **FRCDM-40/4/003-G/B/60HZ**  
Article no. **180421**

### Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	$I_n$	A	40
Equipment heat dissipation, current-dependent	$P_{vid}$	W	6.2
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
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) (ec1@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	0.03
Mounting method			DIN rail
Leakage current type			B
Selective protection			No
Short-circuit breaking capacity ( $I_{cw}$ )		kA	10
Surge current capacity		kA	3
Frequency			60 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			Yes