



**Residual current circuit breaker (RCCB), 25A, 2p, 30mA, type G/F**

**Part no. PFIM-25/2/003-G/F**  
**Catalog No. 187449**



Similar to illustration

**Delivery program**

Basic function			Residual current circuit-breakers
Number of poles			2 pole
Application			Residual current circuit-breaker for residential and commercial applications
Rated current	$I_n$	A	25
Rated short-circuit strength	$I_{cn}$	kA	10 with back-up fuse
Rated fault current	$I_{\Delta N}$	A	0.03
Type			Typ G/F (ÖVE E 8601)
Tripping		s...	Short time-delayed
Product range			PFIM-F
Sensitivity			pulse-current sensitive - frequency composition (10 Hz, 50 Hz, 1000 Hz)
Impulse withstand current			Surge-proof, 3 kA

**Technical data**

**Electrical**

Types conform to			IEC/EN 62423
Current test marks			As per inscription
Standards			IEC/EN 61008
Rated operational voltage	$U_e$	V	
	$U_e$	V AC	
Rated operating voltage	$U_e$	V AC	230
Rated voltage according to IEC/EN 60947-2	$U_n$	V AC	230
Rated frequency	f	Hz	50
Limit values of the operating voltage			
Test circuit		V AC	196 - 264
Sensitivity			pulse-current sensitive - frequency composition (10 Hz, 50 Hz, 1000 Hz)
Rated insulation voltage	$U_i$	V	440
Rated impulse withstand voltage	$U_{imp}$	kV	4
Rated short-circuit strength	$I_{cn}$	kA	10 with back-up fuse
Max. admissible back-up fuse			
Short-circuit	gG/gL	A	63
Overload	gG/gL	A	16
Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m / I_{\Delta m}$	A	500
lifespan			
Electrical	Operations		$\geq 4000$
Mechanical	Operations		$\geq 20000$

**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-2 276240
Sealing cover set			Z-RC/AK-2MU 285385

**Mechanical**

Standard front dimension		mm	45
Device height		mm	80

Built-in width	mm	35 (2TE)
Mounting		Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715
Degree of Protection		IP20, IP40 with suitable enclosure
Terminals top and bottom		Open mouthed/lift terminals
Terminal protection		DGUV VS3, EN 50274
Terminal cross-section		
Solid	mm <sup>2</sup>	1.5 - 35
Stranded	mm <sup>2</sup>	2 x 16
Terminal cross-section		M5 (with cross-recessed screw as defined in EN ISO 4757-Z2, Pozidriv PZ2)
Tightening torque of fixing screws	N/m	2 - 2.4
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
Mounting position		As required
Contact position indicator		red / green
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 <sub>n</sub>	A	25
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	2
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
			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) / Residual current circuit breaker (RCCB) (EC000003)		
Electric engineering, automation, process control engineering / Electrical installation, device / Residual current protection system / Residual current circuit breaker (RCCB) (ecI@ss10.0.1-27-14-22-01 [AAB906014])		
Number of poles		2
Rated voltage	V	230
Rated current	A	25
Rated fault current	mA	30
Rated insulation voltage $U_i$	V	440
Rated impulse withstand voltage $U_{imp}$	kV	4
Mounting method		DIN rail
Leakage current type		Other
Selective protection		No
Short-time delayed tripping		Yes
Short-circuit breaking capacity ( $I_{cw}$ )	kA	10
Surge current capacity	kA	3
Frequency		50 Hz
Additional equipment possible		Yes
With interlocking device		Yes
Degree of protection (IP)		IP20
Width in number of modular spacings		2
Built-in depth	mm	70.5
Ambient temperature during operating	°C	-25 - 55
Pollution degree		2
Connectable conductor cross section multi-wired	mm <sup>2</sup>	1.5 - 16
Connectable conductor cross section solid-core	mm <sup>2</sup>	1.5 - 35