DATASHEET - PFGM-25/2/003-A

Part no. Catalog No.



Residual current circuit breaker (RCCB), 25A, 2pole, 30mA, type A

PFGM-25/2/003-A 267441



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	In	Α	25
Rated short-circuit strength	I _{cn}	kA	10
Rated fault current	$I_{\Delta N}$	Α	0.03
Туре			Туре А
Tripping		s	non-delayed
Product range			PFGM
Sensitivity			Pulse-current sensitive
Impulse withstand current			Partly surge-proof 250 A

	Technical data			
	Electrical			
Rated operating voltage	Types conform to			IEC/EN 61008
Nation Part	Standards			IEC/EN 61008
Rated operating voltage Asted frequency Asted frequency Institute values of the operating voltage Test circuit	Rated operational voltage	U _e	٧	
Asted frequency Limit values of the operating voltage Test circuit Asted inclusion voltage Asted insulation voltage Asted short-circuit strength Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated residual making and breaking Asted making and breaking capacity/ Rated sesidual making and breaking Asted making and breaking and breaking and breaking Asted making and breaking and bre		U _e	V AC	
Test circuit Test circuit Sensitivity	Rated operating voltage	U _e	V AC	230
Test circuit Sensitivity Rated insulation voltage Ui Vi Vi Vus	Rated frequency	f	Hz	50
Sensitivity Alted insulation voltage Ui V 440 Alted impulse withstand voltage Vump KV 4 Alted short-circuit strength Alted making and breaking capacity / Rated residual making and breaking capacity / Rated making and breaking capa	Limit values of the operating voltage			
Asted insulation voltage Ui V V 440 Asted impulse withstand voltage Vi V 4 Asted impulse withstand voltage I v V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strength I v V V V 4 Asted short-circuit strengt	Test circuit		V AC	196 - 264
As ted impulse withstand voltage As ted short-circuit strength As ted short-circuit strength As ted making and breaking capacity / Rated residual making and breaking apacity Flectrical Operations Electrical Operations Operations Auxiliary switch for subsequent installation Fripping signal contact for subsequent installation Fripping sig	Sensitivity			Pulse-current sensitive
Rated short-circuit strength Rated making and breaking capacity / Rated residual making and breaking and bre	Rated insulation voltage	Ui	٧	440
Rated making and breaking capacity/ Rated residual making and breaking apacity Implication Impl	Rated impulse withstand voltage	U _{imp}	kV	4
Electrical Operations ≥ 4000 Mechanical Operations ≥ 20000 Mechanical Operations ≥ 2.HK 248432 Z-HK 248434 Z-HK 248434 Z-FW/LP 248296 MLV-TC-2 276240 MILV-TC-2 276240 Switching interlock Sealing cover set KLV-TC-2 276240 Sealing cover set IS/SPE-1TE 101911 Scaling of Sealing of Sealing	Rated short-circuit strength	I _{cn}	kA	10
Electrical Operations ≥ 4000 Mechanical Operations ≥ 20000 References Auxiliary switch for subsequent installation Fripping signal contact for subsequent installation Remote control and automatic switching device Compact enclosure Switching interlock Sealing cover set Sealing cover set Sealing device to the dimension Mechanical Standard front dimension Michanical Standard front dimension Micha	Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m/I_{\Delta m}$	Α	500
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-2 276240 Switching interlock IS/SPE-1TE 101911 Sealing cover set Z-RC/AK-2TE 285385 Mechanical Standard front dimension mm 45 Device height mm 80 Built-in width mm 35 (2TE) Mounting Opere of Protection IP20, IP40 with suitable enclosure	lifespan			
Auxiliary switch for subsequent installation Auxiliary switch for s	Electrical	Operations		≧ 4000
Auxiliary switch for subsequent installation Fripping signal contact for subsequent installation Remote control and automatic switching device Compact enclosure Switching interlock Switching interlock Sealing cover set Mechanical Standard front dimension mm 80 Built-in width mm 35 (2TE) Mounting Degree of Protection Z-HK 248432 Z-NHK 248434 Z-NHK 248434 Z-RW/LP 248296 KLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 MCLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 AUXILIAR LIAR Z-RC/AK-2TE 285385 LIAR AUXILIAR AUXILIAR Z-RW/LP 248296 KLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 LIAR AUXILIAR AUXILIAR Z-RW/LP 248296 KLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 AUXILIAR AUXILIAR AUXILIAR Z-RC/AK-2TE 285385 AUXILIAR	Mechanical	Operations		≧ 20000
Tripping signal contact for subsequent installation Remote control and automatic switching device Compact enclosure Switching interlock Switching interlock Sealing cover set Mechanical Standard front dimension mm 45 Device height Suilt-in width mm 35 (2TE) Mounting Degree of Protection Z-NHK 248434 Z-FW/LP 248296 KLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 MECHANICAL STANDARD	References			
Remote control and automatic switching device Compact enclosure KLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 Mechanical Standard front dimension mm 45 Device height mm 80 Built-in width mm 35 (2TE) Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Degree of Protection I P20, IP40 with suitable enclosure	Auxiliary switch for subsequent installation			Z-HK 248432
Compact enclosure Switching interlock Switching interlock Sealing cover set Carc/AK-2TE 285385 Mechanical Standard front dimension mm 45 Device height Suilt-in width mm 35 (2TE) Mounting Degree of Protection KLV-TC-2 276240 IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 ACCIVATE 285385 ACCIVATE 285385 IS/SPE-1TE 101911 ACCIVATE 285385 ACCIVA	Tripping signal contact for subsequent installation			Z-NHK 248434
Switching interlock Sealing cover set Z-RC/AK-2TE 285385 Mechanical Standard front dimension mm 45 Device height mm 80 Built-in width mm 35 (2TE) Mounting Degree of Protection IS/SPE-1TE 101911 Z-RC/AK-2TE 285385 Mounting IS/SPE-1TE 101911 Q-IS/SPE-1TE 101911 Q-	Remote control and automatic switching device			Z-FW/LP 248296
Sealing cover set Mechanical Standard front dimension mm 45 Device height mm 80 Built-in width Mounting Degree of Protection Z-RC/AK-2TE 285385 T-RC/AK-2TE 285385 Z-RC/AK-2TE 285385 Z-RC/AK-2TE 285385 Z-RC/AK-2TE 285385 I P20, IP40 with suitable enclosure	Compact enclosure			KLV-TC-2 276240
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	Switching interlock			IS/SPE-1TE 101911
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	Sealing cover set			Z-RC/AK-2TE 285385
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	Mechanical			
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	Standard front dimension		mm	45
Mounting Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Degree of Protection IP20, IP40 with suitable enclosure	Device height		mm	80
Degree of Protection IP20, IP40 with suitable enclosure	Built-in width		mm	35 (2TE)
	Mounting			Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715
Terminals top and bottom Open mouthed/lift terminals	Degree of Protection			IP20, IP40 with suitable enclosure
	Terminals top and bottom			Open mouthed/lift terminals

Terminal protection		BGV A3, ÖVE-EN 6
Terminal cross-section		
Solid	mm^2	1.5 - 35
Stranded	mm^2	2 x 16
Thickness of busbar material	mm	0.8 - 2
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 120/214 01-103			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	25
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	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	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.
${\bf 10.2.3.2Verificationofresistanceofinsulatingmaterialstonormalheat}$			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) (pc)(0xs1)0.01-27-14-29-01 [AAR906014])

(ecl@ss10.0.1-27-14-22-01 [AAB906014])		
Number of poles		2
Rated voltage	V	230

Rated current	А	25
Rated fault current	mA	30
Rated insulation voltage Ui	V	440
Rated impulse withstand voltage Uimp	kV	4
Mounting method		DIN rail
Leakage current type		A
Selective protection		No
Short-time delayed tripping		No
Short-circuit breaking capacity (Icw)	kA	10
Surge current capacity	kA	0.25
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	69.5
Ambient temperature during operating	°C	-25 - 55
Pollution degree		2
Connectable conductor cross section multi-wired	mm²	1.5 - 16
Connectable conductor cross section solid-core	mm²	1.5 - 35