



Residual current circuit breaker (RCCB), 80A, 4 p, 30mA, type AC



Part no. PF7-80/4/003-DE
Catalog No. 263594

Similar to illustration

Delivery program

Basic function			Residual current circuit-breakers
Number of poles			4 pole
Application			Residual current circuit-breaker for residential and commercial applications
Rated current	I_n	A	80
Rated short-circuit strength	I_{cn}	kA	10
Rated fault current	$I_{\Delta N}$	A	0.03
Type			Type AC
Tripping		s...	non-delayed
Product range			PF7
Sensitivity			AC current sensitive
Impulse withstand current			Partly surge-proof 250 A

Technical data

Electrical

Types conform to			IEC/EN 61008
Standards			IEC/EN 61008
Rated operational voltage	U_e	V	
	U_e	V AC	
Rated operating voltage	U_e	V AC	230/400
Rated frequency	f	Hz	50
Limit values of the operating voltage			
Test circuit		V AC	184 - 440
Sensitivity			AC current sensitive
Rated insulation voltage	U_i	V	440
Rated impulse withstand voltage	U_{imp}	kV	4
Rated short-circuit strength	I_{cn}	kA	10
Max. admissible back-up fuse			
Short-circuit	gG/gL	A	80
Overload	gG/gL	A	50
Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m / I_{\Delta m}$	A	800
Max. back-up fuse		A gL/gG	50
Maximum max. as short-circuit protective device		A gL	
Back-up fuse		A gL	80
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
Switching interlock		IS/SPE-1TE 101911
Sealing cover set		Z-RC/AK-4TE 101062

Mechanical

Standard front dimension	mm	45
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Device height	mm	80
Built-in width	mm	70 (4TE)
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		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

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	80
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	11.4
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	60
			Starting at 40 °C, the max. permissible continuous current decreases by 1.2% for every 1 °C
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
10.2.2.1 Verification of thermal stability of enclosures			
10.2.2.2 Verification of resistance of insulating materials to normal heat			
10.2.2.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			
10.2.4 Resistance to ultra-violet (UV) radiation			
10.2.5 Lifting			
10.2.6 Mechanical impact			
10.2.7 Inscriptions			
10.3 Degree of protection of ASSEMBLIES			
10.4 Clearances and creepage distances			
10.5 Protection against electric shock			
10.6 Incorporation of switching devices and components			
10.7 Internal electrical circuits and connections			
10.8 Connections for external conductors			
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			
10.9.3 Impulse withstand voltage			
10.9.4 Testing of enclosures made of insulating material			
10.10 Temperature rise			
10.11 Short-circuit rating			
10.12 Electromagnetic compatibility			
10.13 Mechanical function			

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)
(ecl@ss10.0.1-27-14-22-01 [AAB906014])

Number of poles		4
Rated voltage	V	400
Rated current	A	80
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		AC
Selective protection		No
Short-time delayed tripping		No
Short-circuit breaking capacity (I_{cw})	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		4
Built-in depth	mm	69.5
Ambient temperature during operating	°C	-25 - 60
Pollution degree		2
Connectable conductor cross section multi-wired	mm ²	1.5 - 16
Connectable conductor cross section solid-core	mm ²	1.5 - 35