



Residual current circuit-breaker, 40A, 4pole, 100mA, type U

Part no. PFIM-40/4/01-U
Article no. 235744

Delivery program

Basic function			Residual current circuit breakers
Number of poles			4 pole
Application			Residual current circuit-breaker - frequency converter-proof
Rated current	I_n	A	40
Rated short-circuit strength	I_{cn}	kA	10
Rated fault current	$I_{\Delta N}$	A	0.1
Type			Type U
Tripping		A	selective switch off
Product range			PFIM
Sensitivity			pulse-current sensitive, suitable for variable frequency drives
Impulse withstand current			surge-proof 5 kA

Technical data

Electrical

Sensitivity			pulse-current sensitive, suitable for variable frequency drives
Rated short-circuit strength	I_{cn}	kA	10

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	40
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	8.4
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	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			
10.2.3.1 Verification of thermal stability of enclosures			
10.2.3.2 Verification of resistance of insulating materials to normal heat			
10.2.3.3 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			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) (ecl@ss8.1-27-14-22-01 [AAB906011])			
Number of poles			4
Nominal rated voltage		V	400
Nominal rated current		A	40
Rated fault current		A	0.1
Mounting method			DIN rail
Leakage current type			-
Selective protection			Yes
Short-circuit breaking capacity (I _{cn})		kA	10
Surge current capacity		kA	5
Frequency			50 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			No