# **DATASHEET - PFIM-63/4/01-U**



## Residual current circuit-breaker, 63A, 4pole, 100mA, type U

PFIM-63/4/01-U

Powering Business Worldwide\*

Catalog No. EL-Nummer

Part no.

0001609367

235746

(Norway) Similar to illustration

Delivery program

elivery program			
asic function			Residual current circuit-breakers
umber of poles			4 pole
pplication			Residual current circuit-breaker - frequency converter-proof
ated current	In	Α	63
ated short-circuit strength	I <sub>cn</sub>	kA	10
ated fault current	$I_{\Delta N}$	Α	0.1
уре			Type U
ipping		s	selective switch off
roduct range			PFIM
ensitivity			pulse-current sensitive, suitable for variable frequency drives
npulse withstand current			surge-proof 5 kA

## **Technical data**

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Standards			IEC/EN 61008
Rated operational voltage	U <sub>e</sub>	V	
	U <sub>e</sub>	V AC	
Rated operating voltage	U <sub>e</sub>	V AC	230/400
Rated frequency	f	Hz	50
Limit values of the operating voltage			
Test circuit		V AC	196 - 456
Sensitivity			pulse-current sensitive, suitable for variable frequency drives
Rated insulation voltage	Ui	V	440
Rated impulse withstand voltage	U <sub>imp</sub>	kV	4
Rated short-circuit strength	I <sub>cn</sub>	kA	10
Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m/I_{\Delta m}$	Α	630
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

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
Sealing cover set	Z-RC/AK-4MU 101062
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#### Mechanical

Standard front dimension	mm	45
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		DGUV VS3, EN 50274
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

Design vermoation as per illo/liv 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	$P_{vid}$	W	10.5
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	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 1.8% 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.
$10.2.3.3\mbox{Verification}$ 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)

(ecl@ss10.0.1-27-14-22-01 [AAB906014])		
Number of poles		4
Rated voltage	V	400
Rated current	Α	63
Rated fault current	mA	100

Rated insulation voltage Ui	V		440
Rated impulse withstand voltage Uimp	kV	V	4
Mounting method			DIN rail
Leakage current type			Other
Selective protection			Yes
Short-time delayed tripping			No
Short-circuit breaking capacity (Icw)	k.A	A	10
Surge current capacity	k.A	A	5
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	mı	nm	70.5
Ambient temperature during operating	°C	С	-25 - 40
Pollution degree			2
Connectable conductor cross section multi-wired	mı	nm²	1.5 - 16
Connectable conductor cross section solid-core	mı	nm²	1.5 - 35