DATASHEET - PFIM-63/4/03-XS/B



Residual current circuit-breaker, all-current sensitive, 63 A, 4p, 300 mA, type XS/B $\,$



Part no. PFIM-63/4/03-XS/B Catalog No. 300308

110	INCE	nro	arom
116	IIVEIV	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	шаш
	,	Piu	gram

Basic function			Residual current circuit-breakers
Number of poles			4 pole
Application			Switchgear for residential and commercial applications
Rated current	In	Α	63
Rated short-circuit strength	I _{cn}	kA	10
Rated fault current	$I_{\Delta N}$	Α	0.3
Туре			Type B
Tripping		s	selective switch off
Product range			PFIM
Sensitivity			All current sensitive
Impulse withstand current			surge-proof 5 kA

Technical data

Electrical

Types conform to			IEC/EN 61008 IEC/EN 62423
Current test marks			As per inscription
Standards			IEC/EN 61008 IEC/EN 62423
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	196 - 440
Sensitivity			All current sensitive
Rated insulation voltage	Ui	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	Α	63
Overload	gG/gL	Α	63
Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m/I_{\Delta m}$	Α	630
Max. back-up fuse		A gL/gG	63
Maximum max. as short-circuit protective device		A gL	
Back-up fuse		A gL	63
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-4MU 101062

Mechanical

Device height Built-in width Mounting Degree of Protection Ferminals top and bottom Ferminal protection Solid Stranded Thickness of busbar material Degree and transport temperatures Degree of Protection mm To (ATE) Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 LP40, IP54 (with moisture-proof enclosure) Open mouthed/lift terminals finger and hand touch safe, DGUV VS3, EN 50274 finger and hand touch safe, DGUV VS3, EN 50274 Thickness of busbar material mm Degree of Protection mm Degree of Protection IP40, IP54 (with moisture-proof enclosure) Open mouthed/lift terminals finger and hand touch safe, DGUV VS3, EN 50274 Thickness of busbar material mm Degree of Protection mm Degree of Protection mm Degree of Protection mm Degree of Protection Thickness of busbar material mm To (ATE) Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Degree of Protection Thickness of busbar material mm To (ATE) Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Duick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Dui	Medianical			
Built-in width Mounting Degree of Protection Ferminals top and bottom Ferminal protection Solid mm² Stranded Finder and transport temperatures Permissible storage and transport temperatures Finder and transport temperatures Thickness of busbar material Finder and transport temperatures Thickness of busbar material	Standard front dimension	1	mm	45
Mounting Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715 Degree of Protection Terminals top and bottom Terminal protection Solid mm² Stranded mm² 2 x 16 Thickness of busbar material mm 08 - 2 Permissible storage and transport temperatures Thickness of busbar material	Device height	1	mm	80
Degree of Protection Ferminals top and bottom Ferminal protection Ferminal cross-section Solid mm² 1.5 - 35 Stranded mm² 2 × 16 Thickness of busbar material mm 0.8 - 2 Permissible storage and transport temperatures Climatic proofing Thickness of busbar material mm mm mm mm mm mm mm mm mm	Built-in width	1	mm	70 (4TE)
Terminals top and bottom Terminal protection Terminal cross-section Solid mm² 1.5 - 35 Stranded Thickness of busbar material mm Open mouthed/lift terminals finger and hand touch safe, DGUV VS3, EN 50274 Thickness of busbar material mm² 2 x 16 Thickness of busbar material mm 0.8 - 2 - 35 - +60 25-55°C/90-95% relative humidity according to IEC 60068-2 Thickness of busbar material mm	Mounting			Quick attachment with 2 latch positions for DIN-rail IEC/EN 60715
Ferminal protection Forminal cross-section Solid mm² 1.5 - 35 Stranded mm² 2 x 16 Thickness of busbar material mm 0.8 - 2 Permissible storage and transport temperatures Climatic proofing Thickness of busbar material mm mm mm mm Thickness of busbar material Thickness of busbar material Thickness of busbar material Thickness of busbar material	Degree of Protection			IP40, IP54 (with moisture-proof enclosure)
Ferminal cross-section Solid mm² 1.5 - 35 Stranded mm² 2 x 16 Thickness of busbar material mm 0.8 - 2 Permissible storage and transport temperatures Climatic proofing Thickness of busbar material mm mm	Terminals top and bottom			Open mouthed/lift terminals
Solid mm² 1.5 - 35 Stranded mm² 2 x 16 Thickness of busbar material mm 0.8 - 2 Permissible storage and transport temperatures °C -35 - +60 Climatic proofing Thickness of busbar material mm Thickness of busbar material mm	Terminal protection			finger and hand touch safe, DGUV VS3, EN 50274
Stranded mm² 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	Terminal cross-section			
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	Solid	1	mm ²	1.5 - 35
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	Stranded	1	mm ²	2 x 16
Climatic proofing 25-55°C/90-95% relative humidity according to IEC 60068-2 Thickness of busbar material mm	Thickness of busbar material	1	mm	0.8 - 2
Thickness of busbar material mm	Permissible storage and transport temperatures		°C	-35 - +60
	Climatic proofing			25-55°C/90-95% relative humidity according to IEC 60068-2
Material thickness mm 0.8 - 2	Thickness of busbar material	1	mm	
	Material thickness	1	mm	0.8 - 2

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	10
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	50
			Starting at 40 °C, the max. permissible continuous current decreases by 2.2% for every 1 °C
EC/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 hear and fire due to internal electric effects	t		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.

Technical data ETIM 8.0

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@xs10.01-27-14-29-01 [AAR906014])

Rated voltage V 400 Rated current A 63 Rated fault current A 300 Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Mounting method Leakage current type B 101 rail Selective protection Yes Yes Short-time delayed tripping No No Short-circuit breaking capacity (lew) kA 10 Surge current capacity kA 5 Frequency Ves Yes Additional equipment possible Yes With interlocking device Yes Yes Degree of protection (IP) Yes Percurrent capacity Yes Width in number of modular spacings Yes Percurrent capacity Yes Width in number of modular spacings Yes Percurrent capacity Yes Width in number of modular spacings Yes Percurrent capacity Yes Ambient temperature during operating Yes Percurrent capacity <t< th=""><th>(ecl@ss10.0.1-27-14-22-01 [AAB906014])</th><th>,</th><th></th><th>, , , , , , , , , , , , , , , , , , , ,</th></t<>	(ecl@ss10.0.1-27-14-22-01 [AAB906014])	,		, , , , , , , , , , , , , , , , , , , ,
Rated current A 63 Rated fault current A 300 Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Mounting method Leakage current type B B Selective protection Ves W Short-time delayed tripping No No Short-circuit breaking capacity (lcw) kA 10 Surge current capacity kA 5 Frequency kA 5 Additional equipment possible Yes Yes With interlocking device Yes Yes Degree of protection (IP) IP20 IP20 Width in number of modular spacings Imm 70.5 Built-in depth mm 70.5 Ambient temperature during operating "C 25 - 50 Pollution degree "C 25 - 50 Connectable conductor cross section multi-wired mm" at 15 - 16	Number of poles			4
Rated fault current A 300 Rated insulation voltage Uin V 440 Rated impulse withstand voltage Uimp kV 4 Mounting method DIN rail Leakage current type B B Selective protection Yes Short-time delayed tripping No No Short-circuit breaking capacity (Icw) kA 10 Surge current capacity Short-direction type of the possible Yes With interlocking device Yes Yes Degree of protection (IP) Yes Within innumber of modular spacings Yes Width in number of modular spacings Mm 70.5 Ambient temperature during operating "C 25 - 50 Pollution degree 2 25 - 50 Connectable conductor cross section multi-wired mm* 1.5 - 16	Rated voltage	\	V	400
Rated insulation voltage Ui V 440 Rated impulse withstand voltage Uimp kV 4 Mounting method DIN rail Leakage current type B B Selective protection Yes No Short-time delayed tripping No No Short-circuit breaking capacity (Icw) KA 10 Surge current capacity KA 50 Hz Additional equipment possible Yes With interlocking device Yes Degree of protection (IP) IP20 Width in number of modular spacings Mm 70.5 Ambient temperature during operating °C -25 - 50 Pollution degree 2 -25 - 50 Connectable conductor cross section multi-wired mm² 1.5 - 16	Rated current	,	A	63
Rated impulse withstand voltage Uimp Mounting method Leakage current type Selective protection Short-time delayed tripping Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired Width in the protection (Icw) Pollution degree Connectable conductor cross section multi-wired Width in the protection (Icw) Pollution degree Width in the protection (Icw) Pollution degree P	Rated fault current	,	A	300
Mounting method Leakage current type Selective protection Short-time delayed tripping Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Mounting method DIN rail Built-in degree DIN rail No No No No Stres Short-circuit breaking capacity (Icw) No No No Surge current capacity NA NA S S S S S S S S S S S S S	Rated insulation voltage Ui	\	V	440
Leakage current type Selective protection Selective protection Short-time delayed tripping Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired Be a Section 199 Pollution degree Be a Section 199 Pollution 199 Pollution 199 Pollution 200	Rated impulse withstand voltage Uimp	ŀ	kV	4
Selective protection Short-time delayed tripping Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired Yes Yes Yes Yes Yes Yes Yes Y	Mounting method			DIN rail
Short-tire delayed tripping Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired No No No No 10 PA	Leakage current type			В
Short-circuit breaking capacity (Icw) Surge current capacity Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired KA 10 5 4 Frequency Yes Pres Pr	Selective protection			Yes
Surge current capacity kA 5 Frequency Additional equipment possible With interlocking device Pegree of protection (IP) Width in number of modular spacings With in depth Minimater during operating Pollution degree Pollution degree Connectable conductor cross section multi-wired kA 5 50 Hz Yes Yes Protection (IP) Pol 4 4 5 6 70.5 70.5 70.5 70.5 70.5 70.5 70.5 70.5	Short-time delayed tripping			No
Frequency Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired 50 Hz Yes Yes Yes Yes 1P20 1P20 1P20 1P20 2 2 1.5 - 16	Short-circuit breaking capacity (Icw)	ŀ	kA	10
Additional equipment possible With interlocking device Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired Yes Yes Pollococcoccoccoccoccoccoccoccoccoccoccoc	Surge current capacity	ŀ	kA	5
With interlocking device Degree of protection (IP) Width in number of modular spacings Width in number of modular spacings Width in number of modular spacings Min 70.5 Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired Yes 1P20 4 Connectable conductor cross section multi-wired Min 70.5 2 Connectable conductor cross section multi-wired Min 70.5 2 Connectable conductor cross section multi-wired Min 70.5 1.5 - 16	Frequency			50 Hz
Degree of protection (IP) Width in number of modular spacings Built-in depth Ambient temperature during operating Pollution degree Connectable conductor cross section multi-wired Pollution degree IP20 4 4 70.5 -25 - 50 2 Connectable conductor cross section multi-wired mm² 1.5 - 16	Additional equipment possible			Yes
Width in number of modular spacings Built-in depth mm 70.5 Ambient temperature during operating °C -25 - 50 Pollution degree Connectable conductor cross section multi-wired mm² 1.5 - 16	With interlocking device			Yes
Built-in depth mm 70.5 Ambient temperature during operating °C -25 - 50 Pollution degree 2 Connectable conductor cross section multi-wired mm² 1.5 - 16	Degree of protection (IP)			IP20
Ambient temperature during operating °C -25 - 50 Pollution degree 2 Connectable conductor cross section multi-wired mm² 1.5 - 16	Width in number of modular spacings			4
Pollution degree 2 Connectable conductor cross section multi-wired mm² 1.5 - 16	Built-in depth	r	mm	70.5
Connectable conductor cross section multi-wired mm ² 1.5 - 16	Ambient temperature during operating	c	°C	-25 - 50
	Pollution degree			2
Connectable conductor cross section solid-core mm ² 1.5 - 35	Connectable conductor cross section multi-wired	ı	mm²	1.5 - 16
	Connectable conductor cross section solid-core	1	mm²	1.5 - 35