DATASHEET - PXF-40/4/03-A

Part no. Catalog No.



Residual current circuit-breaker, 40A, 4pole, 300mA, type A

PXF-40/4/03-A 236778



Similar to illustration

Delivery program

Basic function			Residual current circuit-breakers
Number of poles			4 pole
Application			Switchgear for residential and commercial applications
Rated current	In	Α	40
Rated short-circuit strength	I _{cn}	kA	10
Rated fault current	$I_{\Delta N}$	Α	0.3
Туре			Туре А
Tripping		s	non-delayed
Product range			PXF
Sensitivity			Pulse-current sensitive
Impulse withstand current			Partly surge-proof 250 A

Technical data Electrical

: 1e	Cτr	icai	

Standards			IEC/EN 61008
Rated operational voltage	Ue	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			Pulse-current sensitive
Rated insulation voltage	Ui	V	440
Rated impulse withstand voltage	U _{imp}	kV	4
Rated short-circuit strength	I _{cn}	kA	10
Rated making and breaking capacity / Rated residual making and breaking capacity	$I_m / I_{\Delta m}$	A	500
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			
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

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	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	60
			Starting at 40 °C, the max. permissible continuous current decreases by 2.5% 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 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	А	40	
Rated fault current	mA	300	
Rated insulation voltage Ui	V	440	
Rated impulse withstand voltage Uimp	kV	4	

Leakage current typeImage: seakage curren			
Selective protection Image: Selective protection Short-time delayed tripping Image: Selective protection Short-time delayed tripping Image: Selective protection Short-circuit breaking capacity (lcw) Image: Selective protection Surge current capacity (lcw) Image: Selective protection Surge current capacity (lcw) Image: Selective protection Frequency Image: Selective protection Additional equipment possible Image: Selective protection Nith interlocking device Image: Selective protection Degree of protection (IP) Image: Selective protection Mith in number of modular spacings Image: Selective protection Sult-in depth Image: Selective protection Ambient temperature during operating Image: Selective protective protection Selective protection (IP) Image: Selective protective	Mounting method		DIN rail
Short-time delayed tripping Image: Short-time delayed tripping No Short-circuit breaking capacity (Icw) KA 0 Surge current capacity KA 0.5 Frequency KA 50 Hz Additional equipment possible Mo Yes Noth interlocking device Yes Yes Degree of protection (IP) Image: Short-time device Yes Sult-in depth mm 7.5 Ambient temperature during operating Yes Scooled Pollution degree Yes Scooled Pollution degree mm 7.5 Scooled Pollution degree mm ^a 1.5 16 Scooled	Leakage current type		A
Short-circuit breaking capacity (lcw) Short-circuit breaking capacity (lcw) Surge current capacity Frequency Additional equipment possible Additional equipment possible Oegree of protection (IP) With in number of modular spacings With in number of modular spacings Ambient temperature during operating Pollution degree Pollution degree Consectable conductor cross section multi-wired	Selective protection		No
Surge current capacity KA 0.25 Frequency 50 Hz Additional equipment possible Yes Nith interlocking device Yes Degree of protection (IP) Yes Nith in number of modular spacings Yes Built-in depth Mm Anbient temperature during operating Yes Pollution degree Yes Pollution degree Yes Pollution degree Mm Yes Yes Yes Ye	Short-time delayed tripping		No
FrequencySolutionAdditional equipment possibleSolutionNith interlocking deviceSolutionDegree of protection (IP)SolutionNith in number of modular spacingsSolutionBuilt-in depthImmAnbient temperature during operatingSolutionPollution degreeSolutionPollution degreeSolutionSolution degree </td <td>Short-circuit breaking capacity (Icw)</td> <td>kA</td> <td>10</td>	Short-circuit breaking capacity (Icw)	kA	10
Additional equipment possible Feed Feed Additional equipment possible Feed Feed Nith interlocking device Feed Feed Degree of protection (IP) Feed IP20 Nith in number of modular spacings Feed 4 Built-in depth Mm 7.5 Anbient temperature during operating Feed 2 Pollution degree Imm 15.16	Surge current capacity	kA	0.25
With interlocking deviceYesDegree of protection (IP)YesWith in number of modular spacingsYesBuilt-in depthmmAmbient temperature during operatingCPollution degreeCSconnectable conductor cross section multi-wiredmm²Item Pollution degreemm²Item Pollution degreemm²	Frequency		50 Hz
Degree of protection (IP) Image: Constraint of modular spacings Image: Constraint of modular spacings Width in number of modular spacings Image: Constraint of modular spacings Image: Constraint of modular spacings Built-in depth Image: Constraint of modular spacings Image: Constraint of modular spacings Ambient temperature during operating Image: Constraint of modular spacings Image: Constraint of modular spacings Pollution degree Image: Constraint of modular spacings Image: Constraint of modular spacings Constraint of modular spacings Image: Constraint of modular spacings	Additional equipment possible		Yes
Width in number of modular spacings Median Built-in depth mm Ambient temperature during operating °C Pollution degree °C Connectable conductor cross section multi-wired mm²	With interlocking device		Yes
Built-in depth nm 70.5 Ambient temperature during operating C 25 - 60 Pollution degree C 2 Connectable conductor cross section multi-wired Imm ² 15 - 16	Degree of protection (IP)		IP20
Ambient temperature during operating°C°C-25 - 60Pollution degreeC2Connectable conductor cross section multi-wiredmm²1.5 - 16	Width in number of modular spacings		4
Pollution degree 2 Connectable conductor cross section multi-wired mm ²	Built-in depth	mm	70.5
Connectable conductor cross section multi-wired mm ² 1.5 - 16	Ambient temperature during operating	°C	-25 - 60
	Pollution degree		2
Connectable conductor cross section solid-core mm ² 1.5 - 35	Connectable conductor cross section multi-wired	mm²	1.5 - 16
	Connectable conductor cross section solid-core	mm²	1.5 - 35