# **DATASHEET - PXS24S-E2/F/ORT-IT**



Electronic overcurrent protection for 24V DC, fix 2A with tripped signal out-, control in-put and supply terminals



PXS24S-e2/F/ORT-IT Part no. PXS24S02A001 Catalog No.

Similar to illustration

### **Delivery program**

belivery program			
Basic function			Automation engineering 24V
Number of channels			1
Protection			Electronic
Rated current	In	Α	2
Rated operating voltage	$U_{n}$	V	24
Standard/Approval			in Arbeit

# **Technical data**

Electrical			
Operational voltage	$U_{B}$		24 DC (16 30V DC)
Rated operational current fix	I <sub>N</sub>	Α	2
Overload current and short-circuit current trip			Type 1.3 x $I_N$ with active current limitation
Trip time for electronic trip		ms	470
Capacitive loads		μF	Up to 20,000
Inductive loads		Α	Up to 13
Mechanical			
Width		mm	17.5
Depth		mm	119.2
Terminals			
Input terminals			3x LINE (+) and 3x GND (-)
Output Terminals			3x LOAD (+) and 3x GND (-)
Terminal type:			Push in terminals
Terminal capacity		mm²	2.5 (flexible with ferrules) 4 (rigid)
Communication connector			
Communication connector			Two remote signaling outputs (internally connected to each other) Two remote signaling inputs (internally connected to each other) 1x GND
Terminal type:			Push in terminals
Terminal capacity		mm²	0.75 (flexible with ferrule) 1.5 (rigid)
Remote signaling output			Triggered Via communication connector (conforming to IEC 61131-2), class: 0.1 A Type1/Type2 and Type3 Digital inputs A max. of 30 PXS24V can be connected simultaneously External signal sources up to 0.2 A@24 V (EATON RMQ series, etc.)
Remote control input			On/Off/Reset Via communication connector (conforming to IEC 61131-2), type 1/type 3 A max. of 30 PXS24V can be connected simultaneously
Sequential control			Via communication connector
Busbars			LINE (+) and GND (-); max 60A in various lengths of up to 1m
Mounting			snap-fit on mounting rail TH35 (EN 60715)
Status LED			Two-colored Green = OK; Red = Triggered OFF = Channel not in operation
Slide switch			On/Off/Reset
Text field		mm	17,5 x 6
Degree of Protection			IP20

Ambient temperature	°C	-30 - +55
Permissible storage and transport temperatures	°C	-40 - +100
Base dimension	mm	92.5

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	2
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0.4
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**

Relays (EG000019) / Current monitoring relay (EC001440	0)
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Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Current monitoring equipment

Type of electric connection With detachable clamps Single-phase under current possible Three-phase under current possible Single-phase over current possible Three-phase over current possible Three-phase over current possible Three-phase over current possible Three-phase bysteresis possible Single-phase hysteresis possible Three-phase hysteresis possible Three-phase hysteresis possible Three-phase over current Three-phase bysteresis possible Three-phase hysteresis possible Three-phase over current possible Three-phase over curr	(ecl@ss10.0.1-27-37-18-02 [AKF096014])	0,1	3-4-6
Single-phase under current possible Three-phase under current possible Single-phase over current possible No Single-phase over current possible No Three-phase over current possible No Single-phase hysteresis possible No Contains function DC-voltage under current Contains function DC-voltage over current Contains function DC-voltage over current Ves Function DC-current hysteresis No Rated control supply voltage Us at AC 50HZ V O-0 Rated control supply voltage Us at AC 60HZ V O-0 Rated control supply voltage Us at DC V 16-30	Type of electric connection		Plug-in connection
Three-phase under current possible Single-phase over current possible No Three-phase over current possible No Single-phase hysteresis possible No Three-phase hysteresis possible No Three-phase hysteresis possible No Contains function DC-voltage under current Contains function DC-voltage over current Ves Function DC-current hysteresis No Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ V 0 - 0 Rated control supply voltage Us at DC V 16 - 30	With detachable clamps		No
Single-phase over current possible Three-phase over current possible Single-phase hysteresis possible No Three-phase hysteresis possible No Contains function DC-voltage under current Contains function DC-voltage over current Yes Function DC-current hysteresis Function DC-current hysteresis Rated control supply voltage Us at AC 50HZ Rated control supply voltage Us at AC 60HZ V 0 0 - 0 Rated control supply voltage Us at DC V 16 - 30	Single-phase under current possible		No
Three-phase over current possible  Single-phase hysteresis possible  No  Three-phase hysteresis possible  No  Contains function DC-voltage under current  No  Contains function DC-voltage over current  Yes  Function DC-current hysteresis  No  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  V  0 - 0  Rated control supply voltage Us at DC  V  16 - 30	Three-phase under current possible		No
Single-phase hysteresis possible  Three-phase hysteresis possible  Contains function DC-voltage under current  Contains function DC-voltage over current  Yes  Function DC-current hysteresis  No  Rated control supply voltage Us at AC 50HZ  V 0 - 0  Rated control supply voltage Us at AC 60HZ  V 0 - 0  Rated control supply voltage Us at DC  V 16 - 30	Single-phase over current possible		No
Three-phase hysteresis possible  Contains function DC-voltage under current  Contains function DC-voltage over current  Function DC-current hysteresis  Function DC-current hysteresis  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  Rated control supply voltage Us at DC  No  Rated control supply voltage Us at DC  V  16 - 30	Three-phase over current possible		No
Contains function DC-voltage under current  Contains function DC-voltage over current  Function DC-current hysteresis  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  Rated control supply voltage Us at DC  No  O - 0  Rated control supply voltage Us at DC  V  16 - 30	Single-phase hysteresis possible		No
Contains function DC-voltage over current  Function DC-current hysteresis  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  Rated control supply voltage Us at DC  V  V  V  V  V  V  V  V  V  V  V  V  V	Three-phase hysteresis possible		No
Function DC-current hysteresis  Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  Rated control supply voltage Us at DC  V  0 - 0  Rated control supply voltage Us at DC  V  16 - 30	Contains function DC-voltage under current		No
Rated control supply voltage Us at AC 50HZ  Rated control supply voltage Us at AC 60HZ  V  0 - 0  Rated control supply voltage Us at DC  V  16 - 30	Contains function DC-voltage over current		Yes
Rated control supply voltage Us at AC 60HZ V 0 - 0  Rated control supply voltage Us at DC V 16 - 30	Function DC-current hysteresis		No
Rated control supply voltage Us at DC V 16 - 30	Rated control supply voltage Us at AC 50HZ	V	0 - 0
	Rated control supply voltage Us at AC 60HZ	V	0 - 0
Voltage type for actuating DC	Rated control supply voltage Us at DC	V	16 - 30
	Voltage type for actuating		DC

Current measurement range	Α	A 0 - 2.6
Current measurement range	А	U - 2.0
Min. adjustable delay-on energization time	s	0
Max. permitted delay-on energization time	s	0
Min. adjustable off-delay time	s	0
Max. permitted off-delay time	s	0
Number of contacts as normally closed contact		0
Number of contacts as normally open contact		1
Number of contacts as change-over contact		0
External current transformer		No
Width	mn	nm 18
Height	mn	nm 93
Depth	mn	nm 127