

Electronic overcurrent protection for 24V DC, fix 6A with tripped signal out-, control in-put and supply terminals



Part no. **PXS24S-e6/F/ORT-IT**
Catalog No. **PXS24S06A001**

Delivery program

Basic function			Automation engineering 24V
Number of channels			1
Protection			Electronic
Rated current	I_n	A	6
Rated operating voltage	U_n	V	24
Standard/Approval			CE UL508

Technical data

Electrical

Operational voltage	U_B		24V DC (15 .. 30V DC)
Rated operational current fix	I_N	A	6
Overload current and short-circuit current trip			Type 1.3 x I_N with active current limitation
Trip time for electronic trip		ms	170
Capacitive loads		μF	Up to 20,000
Inductive loads		A	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		mm ²	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		mm ²	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
Standards		EN 45545-2; IEC 61373

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	6
Equipment heat dissipation, current-dependent	P _{vid}	W	0.9
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 8.0

Relays (EG000019) / Current monitoring relay (EC001440)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Monitoring equipment (low-voltage switch technology) / Current monitoring equipment (ecl@ss10.0.1-27-37-18-02 [AKF096014])		
Type of electric connection		Plug-in connection
With detachable clamps		No
Single-phase under current possible		No
Three-phase under current possible		No
Single-phase over current possible		No
Three-phase over current possible		No
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	V	0 - 0
Rated control supply voltage Us at AC 60Hz	V	0 - 0
Rated control supply voltage Us at DC	V	15 - 30
Voltage type for actuating		DC
Current measuring range	A	0 - 7.8

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	mm	18
Height	mm	93
Depth	mm	127