

Electronic overcurrent protection for 24V DC, fix 10A with tripped signal out-, control in-put, w/o supply terminals



Part no. PXS24S-e10/F/ORT
PXS24S10A002

General specifications		
Product name		Eaton Moeller series xEffect - PXS24 current monitoring relay
Part no.		PXS24S-e10/F/ORT
EAN		9010238011267
Product Length/Depth		127 millimetre
Product height		93 millimetre
Product width		18 millimetre
Product weight		0.118 kilogram
Compliances		UL508 CE RoHS conform
Certifications		IEC 61373 EN45545-2
Product Tradename		xEffect - PXS24
Product Type		Current monitoring relay
Product Sub Type		None
Delivery program		
Type		Automation engineering 24V
Technical Data - Electrical		
Voltage type		DC
Voltage rating		24 VDC (15 VDC - 30 VDC)
Rated control supply voltage (Us) at AC, 50 Hz - min		0 V
Rated control supply voltage (Us) at AC, 50 Hz - max		0 V
Rated control supply voltage (Us) at AC, 60 Hz - min		0 V
Rated control supply voltage (Us) at AC, 60 Hz - max		0 V
Rated control supply voltage (Us) at DC - min		15 V
Rated control supply voltage (Us) at DC - max		30 V
Rated operational current (Ie) fix		10 A
Current measurement - min		0 A
Current measurement - max		13 A
Overload current and short-circuit current trip		Type 1.3 x I _N with active current limitation
Electric connection type		Plug-in connection
Adjustable delay-on energization time - min		0 s
Permitted delay-on energization time - max		0 s
Adjustable off-delay time - min		0 s
Permitted off-delay time - max		0 s
Capacitive load		Up to 20,000 µF
Technical Data - Mechanical		
Mounting method		Snap-fit on DIN rail (EN 60715)
Degree of protection		IP20
Number of channels		1
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		0
Number of contacts (normally open contacts)		1
Busbar type		LINE (+) and GND (-); max 60A in various lengths of up to 1m
Output terminals		3x LOAD (+) and 3x GND (-)
Terminal type		Push in terminals
Terminal capacity		2.5 mm ² (flexible with ferrules) 4 mm ² (rigid)

Design verification as per IEC/EN 61439 - technical data		
Rated operational current for specified heat dissipation (In)		10 A
Equipment heat dissipation, current-dependent		1.6 W
Ambient operating temperature details		-30° C - 55° C
Permitted storage and transport temperature - min		-40 °C
Permitted storage and transport temperature - max		100 °C
Design verification as per IEC/EN 61439		
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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.
Additional information		
Features		Green = OK; Red = Triggered OFF = Channel not in operation Two-colored
Functions		DC-voltage over current
Protection		Electronic
Special features		Inductive loads: up to 13 A On/Off/Reset
Text field type		17.5 mm x 6 mm

Technical data ETIM 9.0

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 (ec1@ss13-27-37-18-02 [AKF096019])		
Type of electric connection		Plug-in connection
With detachable clamps		No
External power supply required		No
Voltage type (supply voltage)		
Supply voltage AC 50 Hz	V	
Supply voltage AC 60 Hz	V	
Supply voltage DC	V	
Voltage measuring range	V	
Type of current		
Current measuring range	A	0 - 13
Response value amperage 1	A	
Response value amperage 2	A	

Single-phase under current possible		No
Three-phase under current possible		No
Single-phase overcurrent possible		No
Three-phase overcurrent possible		No
Single-phase hysteresis possible		No
Three-phase hysteresis possible		No
Contains function DC-voltage under current		No
Contains function DC-voltage overcurrent		Yes
Function DC-current hysteresis		No
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
External current transformer		No
Number of contacts as normally closed contact		0
Number of contacts as normally open contact		1
Number of contacts as change-over contact		0
Voltage type (operating voltage)		
Operating voltage AC 50 Hz	V	
Operating voltage AC 60 Hz	V	
Operating voltage DC	V	
Rated switch current	A	
Width	mm	18
Height	mm	93
Depth	mm	127