Product data sheet Characteristics

XPSUDN13AC

Preventa module Cat.4 features 6*XPSUAF 24vac/dc spring





Main

Range of product	Preventa Safety automation
Product or component type	Preventa safety module
Safety module name	XPSUDN
Safety module application	Monitoring antivalent contacts For emergency stop, guard and light curtain monitoring
Function of module	Emergency stop button with 2 NC contacts Guard monitoring with 1 or 2 limit switches Monitoring 2 PNP sensors Magnetic switch monitoring Light curtain monitoring RFID switch Monitoring of electro-sensitive protection equipment (ESPE) Proximity sensor monitoring
Safety level	Can reach PL e/category 4 for normally open relay contact conforming-to ISO 13849-1 Can reach SILCL 3 for normally open relay contact conforming to IEC 62061 Can reach SIL 3 for normally open relay contact conforming to IEC 61508 Can reach PL c/category 1 for normally closed relay contact conforming-to ISO 13849-1 Can reach SILCL 1 for normally closed relay contact conforming to IEC 62061 Can reach SIL 1 for normally closed relay contact conforming to IEC 61508
Safety reliability data	MTTFd > 30 years conforming to ISO 13849-1 Dcavg >= 99 % conforming to ISO 13849-1 PFHd = 0.88E-09 conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 0.88E-09 conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 0.88E-09 conforming to IEC 61508-1 SFF > 99% conforming to IEC 61508-1 Type = B conforming to IEC 61508-1
Electrical circuit type	NC pair PNP pair Antivalent pair OSSD pair
Connections - terminals	Removable spring terminal block, 0.22.5 mm² solid or flexible Removable spring terminal block, 0.252.5 mm² flexible with ferrule single conductor Removable spring terminal block, 0.21.5 mm² solid or flexible twin conductor Removable spring terminal block, 2 x 0.251 mm² flexible with ferrule without cable end, with bezel Removable spring terminal block, 2 x 0.51.5 mm² flexible with ferrule with cable end, with bezel
[Us] rated supply voltage	24 V AC - 1510 % 24 V DC - 2020 %

Complementary

Complementary				
Synchronisation time between inputs	0.5 s 2 s 2.2 s 4 s			
Type of start	Automatic/Manual/Monitored			
Power consumption in W	4.5 W 24 V DC			
Power consumption in VA	10.5 VA 24 V AC 50/60 Hz			
Input protection type	Internal, electronic			
Auxiliary contact composition	3 NO + 1 NC			
Number of inputs	6 safety input 24 V DC 5 mA			
Maximum line resistance	500 Ohm			
Input compatibility	Normally closed circuit conforming to ISO 14119 XC limit switch conforming to ISO 14119 Mechanical contact conforming to ISO 14119 Normally closed circuit conforming to ISO 13850 Antivalent pair conforming to ISO 14119 OSSD pair conforming to IEC 61496-1-2 3-wire proximity sensors PNP			
Output type	Relay output: 250 V AC, AC-1, B300 for normally open relay contact Relay output: 250 V AC, AC-15, D300 for normally closed relay contact Relay output: 24 V DC, DC-1, R300 for normally open relay contact Relay output: 24 V DC, DC-13, R300 for normally closed relay contact			
[le] rated operational current	5 A AC-1 for normally open relay contact 3 A AC-15 for normally open relay contact 5 A DC-1 for normally open relay contact 3 A DC-13 for normally open relay contact 3 A AC-1 for normally closed relay contact 1 A AC-15 for normally closed relay contact 3 A DC-1 for normally closed relay contact 1 A DC-13 for normally closed relay contact			
Number of outputs	7 on/off configurable pulsed output			
Input/output type	Semiconductor pulsed diagnostic output 24 V DC, 20 mA Z1, not safety-related			
[lth] conventional free air thermal current	16 A			
Associated fuse rating	10 A gG for NO relay output circuit conforming to IEC 60947-1 4 A gG for NC relay output circuit conforming to IEC 60947-1			
Minimum output current	10 MA for relay output			
Minimum output voltage	12 V for relay output			
Maximum response time on input open	20 Ms			
[Ui] rated insulation voltage	250 V (pollution degree 2) conforming to EN/IEC 60947-1			
[Uimp] rated impulse withstand voltage	4 KV overvoltage category II conforming to EN/IEC 60947-1			
Local signalling				
	LED (green) for power ON LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S13 LED (yellow) for safety input S22 LED (yellow) for safety input S23 LED (yellow) for safety input S32 LED (yellow) for safety input S33 LED (yellow) for safety input S42 LED (yellow) for safety input S42 LED (yellow) for safety input S43 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S53 LED (yellow) for safety input S62 LED (yellow) for safety input S73			
Mounting support	LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S13 LED (yellow) for safety input S22 LED (yellow) for safety input S23 LED (yellow) for safety input S32 LED (yellow) for safety input S33 LED (yellow) for safety input S33 LED (yellow) for safety input S42 LED (yellow) for safety input S43 LED (yellow) for safety input S52 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S62			
Mounting support Depth	LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S13 LED (yellow) for safety input S22 LED (yellow) for safety input S23 LED (yellow) for safety input S32 LED (yellow) for safety input S33 LED (yellow) for safety input S33 LED (yellow) for safety input S42 LED (yellow) for safety input S43 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S53 LED (yellow) for safety input S62 LED (yellow) for safety input S73			
5 11	LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S13 LED (yellow) for safety input S22 LED (yellow) for safety input S23 LED (yellow) for safety input S32 LED (yellow) for safety input S33 LED (yellow) for safety input S42 LED (yellow) for safety input S42 LED (yellow) for safety input S43 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S53 LED (yellow) for safety input S62 LED (yellow) for safety input S62 LED (yellow) for safety input S73			
Depth	LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S13 LED (yellow) for safety input S22 LED (yellow) for safety input S23 LED (yellow) for safety input S32 LED (yellow) for safety input S33 LED (yellow) for safety input S42 LED (yellow) for safety input S43 LED (yellow) for safety input S43 LED (yellow) for safety input S52 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S62 LED (yellow) for safety input S73 35 mm symmetrical DIN rail			



Environment			
Standards	IEC 60947-5-1 IEC 61508-1 functional safety standard IEC 61508-2 functional safety standard IEC 61508-3 functional safety standard IEC 61508-4 functional safety standard IEC 61508-5 functional safety standard IEC 61508-6 functional safety standard IEC 61508-7 functional safety standard IEC 62061 functional safety standard IEC 62061 functional safety standard		
Product certifications	TÜV CULus		
IP degree of protection	IP20 (terminals) conforming to EN/IEC 60947-1 IP40 (housing) conforming to EN/IEC 60947-1 IP54 (mounting area) conforming to EN/IEC 60947-1		
Ambient air temperature for operation	-2550 °C at 24 V AC -2555 °C at 24 V DC		
Ambient air temperature for storage	-2585 °C		
Relative humidity	595 % non-condensing		
Packing Units Package 1 Weight	417 G		
Offer Sustainability			
Sustainable offer status	Green Premium product		
REACh Regulation	☑ REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration		
Mercury free	Yes		
RoHS exemption information	₫Yes		
China RoHS Regulation	China RoHS Declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	End Of Life Information		
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		
PVC free	Yes		

Contractual warranty

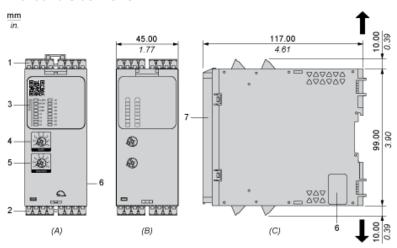
	Warranty	18 months		



XPSUDN13AC

Dimensions

Front and Side Views

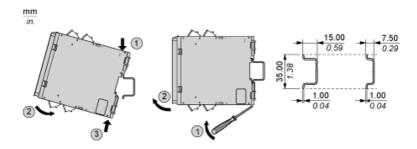


- (A): Product drawing
- (B): Spring Terminal
- (C): Side view
- (1): Removable terminal blocks, top
- (2): Removable terminal blocks, bottom
- (3): LED indicators
- (4): Start function selector
- (5): Function selector
- (6): Connector for optional output extension module (lateral)(7): Sealable transparent cover

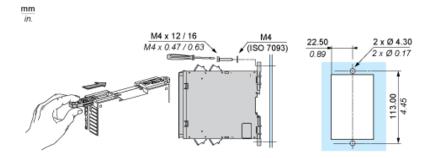
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	mm ²	0,22,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	2412	2412	2416	2418	2016

XPSUDN13AC

Mounting to DIN rail

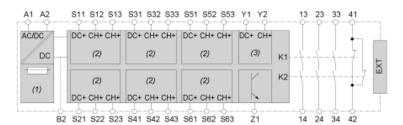


Screw-mounting



XPSUDN13AC

Wiring Drawing



(1): A1-A2 (Power supply)

(2): S11-S12-S13-S31-S32-S33-S51-S52-S53-S21-S22-S23-S41-S42-S43-S61-S62-S63 (Single-channel safety input) (3): Y1-Y2 (Start)

13-23@3tp4ult-14-24-34-42:

EXT : Connector for optional extension module

B2: Common ground terminal

Z1: Pulsed output for diagnostics, not safety-related

Product Life Status: Commercialised