Product data sheet Characteristics

XPSUAK12AP

Preventa module Cat.4 features XPSUAF + PNP/NPN, safety mat 24vac/dc screw





Main

Range of product	Preventa Safety automation
Product or component type	Preventa safety module
Safety module name	XPSUAK
Safety module application	Monitoring antivalent contacts For emergency stop, guard and light curtain monitoring Monitoring of pressure-sensitive 4-wire protective devices
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) Sensing mat/edges Proximity sensor monitoring Monitoring 1 PNP + 1 NPN sensor
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 = 1.13E-09 conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 1.13E-09 conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 1.13E-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 screw terminal block, 0.22.5 mm² solid or flexible Removable screw terminal block, 0.252.5 mm² flexible with ferrule single conductor Removable screw terminal block, 0.21.5 mm² solid or flexible twin conductor Removable screw terminal block, 2 x 0.251 mm² flexible with ferrule without cable end, with bezel Removable screw terminal block, 2 x 0.51.5 mm² flexible with ferrule with ca-			
	ble end, with bezel			
[Us] rated supply voltage	24 V AC - 1510 % 24 V DC - 2020 %			
Complementary				
Synchronisation time between inputs	0.5 s			
, ,	2 s 4 s			
Type of start	Automatic/Manual/Monitored			
Power consumption in W	2.0 W 24 V DC			
Power consumption in VA	5.0 VA 24 V AC 50/60 Hz			
Input protection type	Internal, electronic			
Auxiliary contact composition	2 NO + 1 NC			
Number of inputs	2 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	3 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	8 A			
Associated fuse rating	10 A gG for NO 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 S22			
Mounting support	35 mm symmetrical DIN rail			
Depth	120 Mm			
Height	100 Mm			
Width	22.5 Mm			
Net weight	0.200 Kg			



Environment

Ambient air temperature for operation	-2555 °C			
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 60529 IP40 (housing) conforming to EN/IEC 60529 IP54 (mounting area) conforming to EN/IEC 60529			
Relative humidity	595 % non-condensing			
Packing Units				
Package 1 Weight	274 G			
Package 2 Weight	310 G			
Package 3 Weight	5.228 Kg			
Offer Sustainability				
Offer Sustainability Sustainable offer status	Green Premium product			
·	Green Premium product REACh Declaration			
Sustainable offer status	•			
Sustainable offer status REACh Regulation	Pro-active compliance (Product out of EU RoHS legal scope) □ EU RoHS Decla-			
Sustainable offer status REACh Regulation EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration			
Sustainable offer status REACh Regulation EU RoHS Directive Mercury free	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes			
Sustainable offer status REACh Regulation EU RoHS Directive Mercury free RoHS exemption information	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes Yes			
Sustainable offer status REACh Regulation EU RoHS Directive Mercury free RoHS exemption information China RoHS Regulation	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes This is a second of EU RoHS legal scope of EU RoHS Declaration Yes This is a second of EU RoHS legal scope of EU RoHS Declaration			
Sustainable offer status REACh Regulation EU RoHS Directive Mercury free RoHS exemption information China RoHS Regulation Environmental Disclosure	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes Yes China RoHS Declaration Product Environmental Profile			

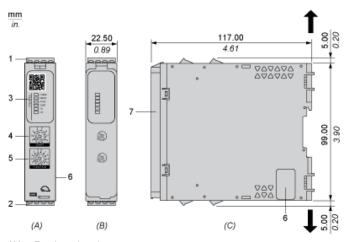
Contractual warranty

Some action warranty		
Warranty	18 months	

XPSUAK12AP

Dimensions

Front and Side Views

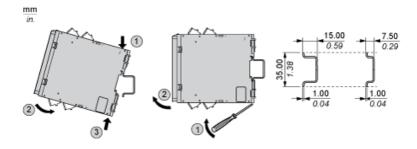


- (A): Product drawing
- (B): Screw clamp terminal
- (C): Side view
- (1): Removable terminal blocks, top
- (2): Removable terminal blocks, bottom (3): LED indicators
- (4): Start function selector
- (5): Function selector
- (6): Connector for optional output extension module (lateral)
- (7): Sealable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

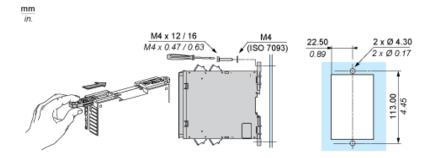
in.	7.0–8.0 0.28–0.31	7	₽₽ 	===	a D-	- @>-
	mm ²	0,2 2,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	24 12	2412	2416	2418	3 2016
		(Ac@		Nm	0.5 0.6	
Ø 3,5 mm (0.14 in)		6.06	سرره	lb-in	4,4 5,3	

XPSUAK12AP

Mounting to DIN rail



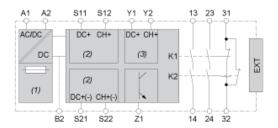
Screw-mounting



Product data sheet Connections and Schema

XPSUAK12AP

Wiring Drawing



(1): A1-A2 (Power supply)

(2): S11-S12-S21-S22 (Single-channel safety input) (3): Y1-Y2 (Start)

13-23@utplut-24-32:

EXT : Connector for optional extension module

B2: Common ground terminal

Z1: Pulsed output for diagnostics, not safety-related

Product Life Status: Commercialised