

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 ISO 13849-1 Can reach SILCL 3 for normally open relay contact IEC 62061 Can reach SIL 3 for normally open relay contact IEC 61508 Can reach PL c/category 1 for normally closed relay contact ISO 13849-1 Can reach SILCL 1 for normally closed relay contact IEC 62061 Can reach SIL 1 for normally closed relay contact IEC 61508
Safety reliability data	MTTFd > 30 years ISO 13849-1 Dcavg >= 99 % ISO 13849-1 PFHd = 1.13E-09 ISO 13849-1 HFT = 1 IEC 62061 PFHd = 1.13E-09 IEC 62061 SFF > 99% IEC 62061 HFT = 1 IEC 61508-1 PFHd = 1.13E-09 IEC 61508-1 SFF > 99% IEC 61508-1 Type = B IEC 61508-1
Electrical circuit type	NC pair PNP pair Antivalent pair OSSD pair
Connections - terminals	Removable screw terminal block, 0.2...2.5 mm ² solid or flexible Removable screw terminal block, 0.25...2.5 mm ² flexible with ferrule single conductor Removable screw terminal block, 0.2...1.5 mm ² solid or flexible twin conductor Removable screw terminal block, 2 x 0.25...1 mm ² flexible with ferrule without cable end, with bezel Removable screw terminal block, 2 x 0.5...1.5 mm ² flexible with ferrule with cable end, with bezel
[Us] rated supply voltage	24 V AC - 15...10 % 24 V DC - 20...20 %

The information provided in this documentation contains general descriptions and/or technical characteristics of the products of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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
Safety outputs	2 NO + 1 NC
Safety inputs	2
Maximum wire resistance	500 Ohm
Input compatibility	Normally closed circuit ISO 14119 XC limit switch ISO 14119 Mechanical contact ISO 14119 Normally closed circuit ISO 13850 Antivalent pair ISO 14119 OSSD pair IEC 61496-1-2 3-wire proximity sensors PNP
Output type	Relay output, 250 V AC Relay output, 250 V AC Relay output, 24 V DC Relay output, 24 V DC
[I _e] rated operational current	5 A AC-1 3 A AC-15 5 A DC-1 3 A DC-13 3 A AC-1 1 A AC-15 3 A DC-1 1 A DC-13
Control outputs	3 pulsed output
Input/output type	Semiconductor pulsed diagnostic output Z1, 20 mA
[I _{th}] conventional free air thermal current	8 A
Associated fuse rating	10 A gG NO relay output circuit IEC 60947-1
Minimum output current	10 mA relay output
Minimum output voltage	12 V relay output
Maximum response time on input open	20 ms
[U _i] rated insulation voltage	250 V 2)EN/IEC 60947-1
[U _{imp}] rated impulse withstand voltage	4 kV II EN/IEC 60947-1
Local signalling	Power ON LED green) Error LED red) Start LED yellow) Safety status LED yellow) Safety input S12 LED yellow) Safety input S22 LED yellow)
Mounting support	35 mm symmetrical DIN rail
Maximum Depth	4.72 in (120 mm)
Maximum Height	3.94 in (100 mm)
Maximum Width	0.89 in (22.5 mm)
Net Weight	0.44 lb(US) (0.200 kg)

Environment

Ambient air temperature for operation	-13...131 °F (-25...55 °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 ISO 13849-1 functional safety standard IEC 62061 functional safety standard
Product certifications	TÜV CULus
IP degree of protection	IP20 terminals)EN/IEC 60529 IP40 housing)EN/IEC 60529 IP54 mounting area)EN/IEC 60529
Relative humidity	5...95 % non-condensing

Ordering and shipping details

Nbr. of units in pkg.	1
Package weight(Lbs)	9.66 oz (274 g)

Packing Units

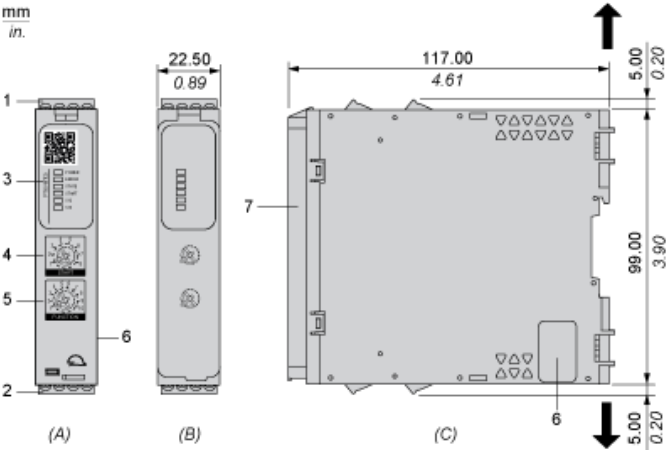
Unit Type of Package 1	PCE
Package 1 Height	2.56 in (6.5 cm)
Package 1 width	5.31 in (13.5 cm)
Package 1 Length	6.10 in (15.5 cm)
Unit Type of Package 2	BB1
Number of Units in Package 2	1
Package 2 Weight	10.93 oz (310 g)
Package 2 Height	2.52 in (6.4 cm)
Package 2 width	5.24 in (13.3 cm)
Package 2 Length	6.02 in (15.3 cm)
Unit Type of Package 3	S03
Number of Units in Package 3	16
Package 3 Weight	11.53 lb(US) (5.228 kg)
Package 3 Height	11.81 in (30 cm)
Package 3 width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
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

Dimensions

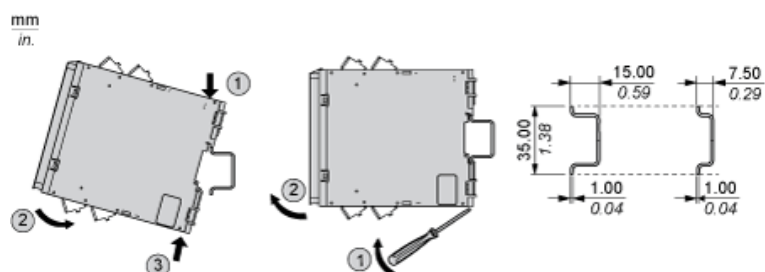
Front and Side Views



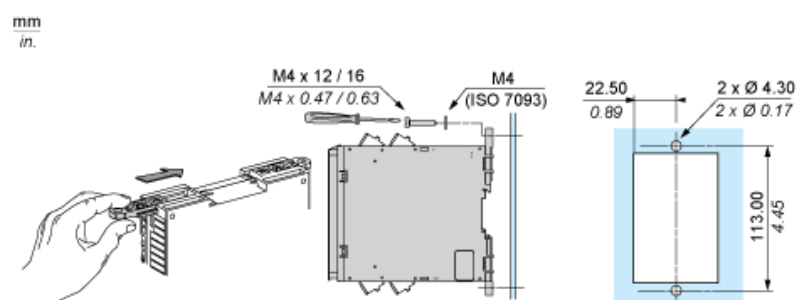
- (A) : Product drawing
(B) : Screw clamp terminal
(C) : Side view
(1) : Removable terminal blocks, top
(2) : Removable terminal blocks, bottom
(3) : LED indicators
(4) : Start function selector
(5) : Function selector
(6) : Connector for optional output extension module (lateral)
(7) : Sealable transparent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

mm in.	7.0-8.0 0.28-0.31					
mm ²	0,2... 2,5	0,25...2,5	0,2...1,5	0,25...1	0,5...1,5	
AWG	24... 12	24...12	24...16	24...18	20...16	
	Ø 3,5 mm (0.14 in)			Nm	0.5... 0.6	
				lb-in	4,4... 5,3	

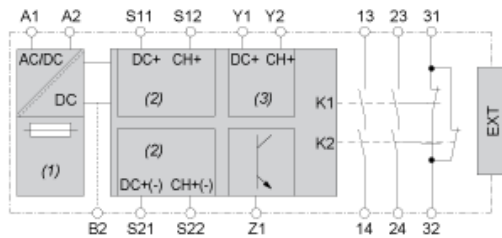
Mounting to DIN rail



Screw-mounting



Wiring Drawing



- (1) : A1-A2 (Power supply)
 (2) : S11-S12-S21-S22 (Single-channel safety input)
 (3) : Y1-Y2 (Start)
 13-23 Output 14-24 :
 EXT :Connector for optional extension module
 B2 : Common ground terminal
 Z1 : Pulsed output for diagnostics, not safety-related