



Main

Range of product	Preventa Safety automation
Product or component type	Preventa safety module
Safety module name	XPSUAB
Safety module application	For electrical monitoring of two-hand control stations For application with safety switchover contact For emergency stop, guard and light curtain monitoring Monitoring antivalent contacts
Function of module	Emergency stop monitoring 1-channel wiring Guard monitoring 1-channel wiring Monitoring 1 PNP sensor Monitoring two-hand control station type IIIA Magnetic switch monitoring Light curtain monitoring RFID switch Monitoring of electro-sensitive protection equipment (ESPE)
Safety level	Can reach PL c/category 1 conforming to ISO 13849-1 Can reach SILCL 1 conforming to IEC 62061 Can reach SIL 1 conforming to IEC 61508
Safety reliability data	MTTFd ≥ 30 years conforming to ISO 13849-1 Dcavg < 60 % conforming to ISO 13849-1 PFHd = 1177E-09 1/h conforming to ISO 13849-1 HFT = 0 conforming to IEC 62061 PFHd = 1177E-09 1/h conforming to IEC 62061 SFF > 60% conforming to IEC 62061 HFT=0 conforming to IEC 61508-1 PFHd = 1177E-09 1/h conforming to IEC 61508-1 SFF > 60% 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, 0.2...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

[Us] rated supply voltage	24 V AC - 15...10 %
	24 V DC - 20...20 %

Complementary

Synchronisation time between inputs	0.5 s 2.2 s
Type of start	Automatic/manual/monitored
Power consumption in W	1.5 W 24 V DC
Power consumption in VA	3.5 VA 24 V AC 50/60 Hz
Input protection type	Internal, electronic
Safety outputs	1 C/O
Safety inputs	1 safety input 24 V DC 5 mA
Maximum line resistance	60 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 Two-hand control conforming to EN 574/ISO 13851-III A 3-wire proximity sensors PNP
Output type	Relay output : 250 V AC, AC-1, D300 Relay output : 250 V AC, AC-15, D300 Relay output : 24 V DC, DC-1, R300 Relay output : 24 V DC, DC-13, R300
[Ie] 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 2 A DC-1 for normally closed relay contact 1 A DC-13 for normally closed relay contact
Control Outputs	2 on/off configurable pulsed output
Input/Output type	Semiconductor pulsed diagnostic output 24 V DC, 20 mA Z1, not safety-related
[Ith] conventional free air thermal current	3 A
Associated fuse rating	6 A gG for relay output conforming to IEC 60947-1
Minimum output current	10 mA for relay output
Minimum output voltage	15 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)power ON: LED (red)error: LED (yellow)start: LED (yellow)safety status: LED (yellow)safety input S12: LED (yellow)safety input S13:
Mounting support	35 mm symmetrical DIN rail
Depth	120 mm
Ambient air temperature for operation	-25...55 °C
Height	100 mm
Width	22.5 mm
Product weight	0.200 kg

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
 ISO 13849-1 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	5...95 % non-condensing

Offer Sustainability

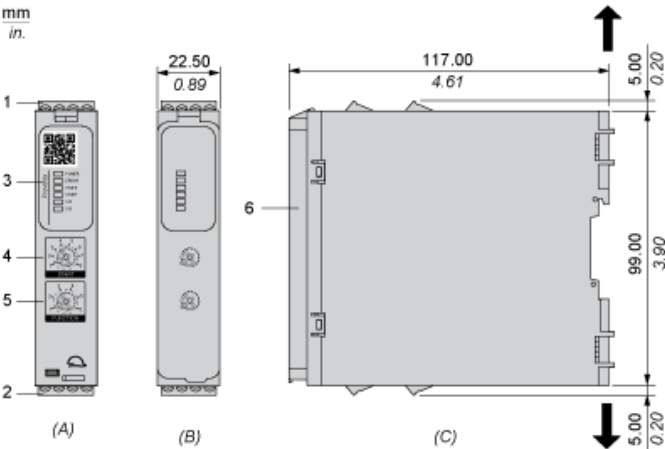
Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity 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

Contractual warranty

Warranty	18 months
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Dimensions

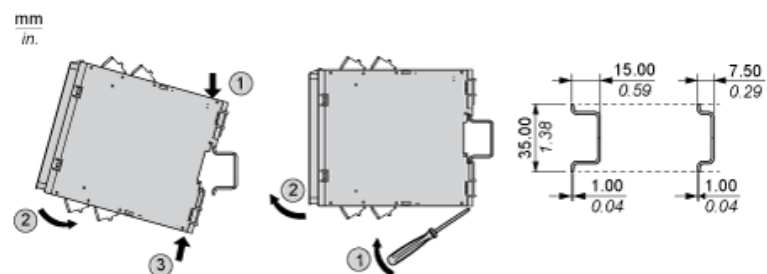
Front and Side Views



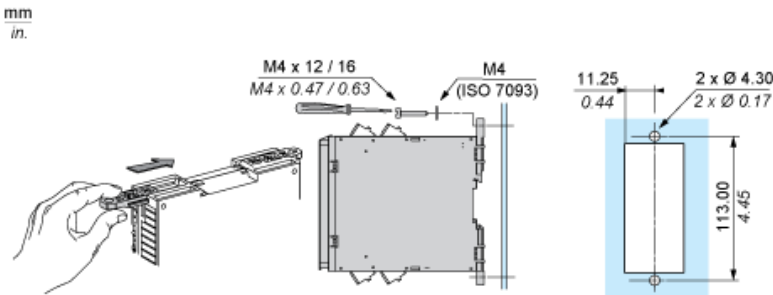
- (A) : Product drawing
- (B) : Screw clamp terminal
- (C) : Side view
- (1) : Removable terminal blocks, top
- (2) : Removable terminal blocks, bottom
- (3) : LED indicators
- (4) : Start function selector
- (5) : Function selector
- (6) : Sealable transparent cover

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		

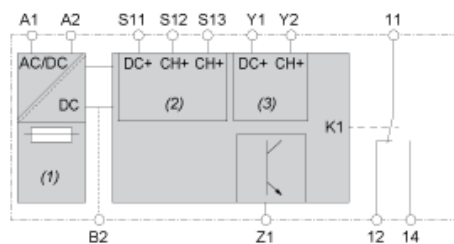
Mounting to DIN rail



Screw-mounting



Wiring Drawing



- (1) : A1-A2 (Power supply)
- (2) : S11-S12-S13 (Single-channel safety input)
- (3) : Y1-Y2 (Start)
- 11-12-14 Output
- B2 : Common ground terminal
- Z1 : Pulsed output for diagnostics, not safety-related