

# Product datasheet

Specifications



## Preventa module Cat.4 features 6\*XPSUAF 48-240vac/dc screw

XPSUDN33AP

EAN Code : 3606489601751

### Main

Range of product	Harmony Safety Automation
Product or component type	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 = 1.36E-09 conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 1.36E-09 conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 1.36E-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, 0.2...2.5 mm <sup>2</sup> solid or flexible Removable screw terminal block, 0.25...2.5 mm <sup>2</sup> flexible with ferrule single conductor Removable screw terminal block, 0.2...1.5 mm <sup>2</sup> solid or flexible twin conductor Removable screw terminal block, 2 x 0.25...1 mm <sup>2</sup> flexible with ferrule without cable end, with bezel Removable screw terminal block, 2 x 0.5...1.5 mm <sup>2</sup> flexible with ferrule with cable end, with bezel
[Us] rated supply voltage	48...240 V AC/DC - 10...10 %

### 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	6 W 48 V DC

<b>Power consumption in VA</b>	25 VA 240 V AC 50/60 Hz
<b>Input protection type</b>	Internal, electronic
<b>Safety outputs</b>	3 NO + 1 NC
<b>Safety inputs</b>	6 safety input 24 V DC 5 mA
<b>Maximum wire resistance</b>	500 Ohm
<b>Input compatibility</b>	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
<b>[Ie] rated operational current</b>	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
<b>Control outputs</b>	7 on/off configurable pulsed output
<b>Input/Output type</b>	Semiconductor pulsed diagnostic output 24 V DC, 20 mA Z1, not safety-related
<b>[Ith] conventional free air thermal current</b>	16 A
<b>Associated fuse rating</b>	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
<b>Minimum output current</b>	10 mA for relay output
<b>Minimum output voltage</b>	12 V for relay output
<b>Maximum response time on input open</b>	20 ms
<b>[Ui] rated insulation voltage</b>	250 V (pollution degree 2) conforming to EN/IEC 60947-1
<b>[Uimp] rated impulse withstand voltage</b>	4 kV overvoltage category II conforming to EN/IEC 60947-1
<b>Local signalling</b>	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 S43 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S62 LED (yellow) for safety input S73
<b>Mounting support</b>	35 mm symmetrical DIN rail
<b>Depth</b>	120 mm
<b>Height</b>	100 mm
<b>Width</b>	45 mm
<b>Net weight</b>	0.350 kg

## Environment

<b>Standards</b>	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
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<b>Product certifications</b>	TÜV cULus
<b>IP degree of protection</b>	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
<b>Ambient air temperature for operation</b>	-25...50 °C at 24 V AC -25...55 °C at 24 V DC
<b>Ambient air temperature for storage</b>	-25...85 °C
<b>Relative humidity</b>	5...95 % non-condensing

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	7.0 cm
<b>Package 1 Width</b>	13.5 cm
<b>Package 1 Length</b>	15.5 cm
<b>Package 1 Weight</b>	418.0 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	16
<b>Package 2 Height</b>	30.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	7.527 kg

## Offer Sustainability

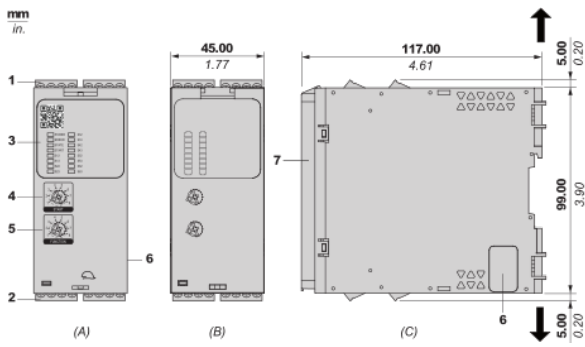
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes

## Contractual warranty

<b>Warranty</b>	18 months
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**Dimensions**

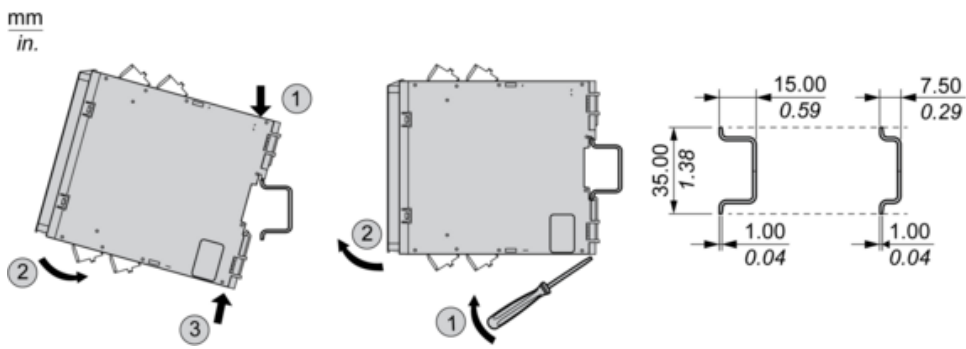
**Front and Side Views**



- (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) : Connector for optional output extension module (lateral)
- (7) : Sealable transparent cover

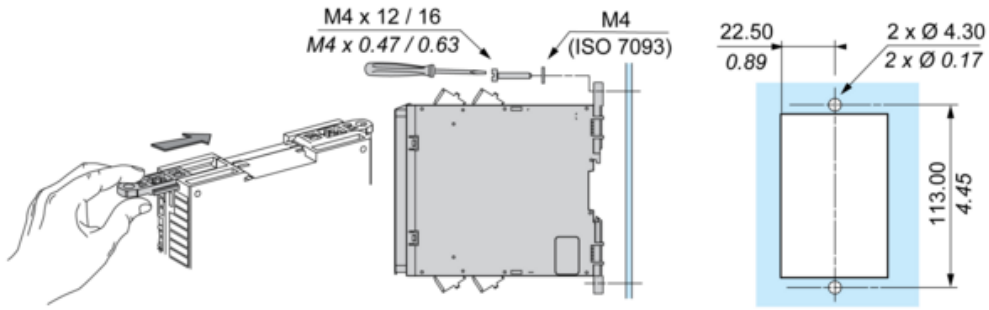
mm in.	7.0–8.0 0.28–0.31					
mm <sup>2</sup>	0,2... 2,5	0,25...2,5	0,2...1,5	0,25...1	0,5...1,5	
AWG	24... 12	24...12	24...16	24...18	20...16	
 Ø 3,5 mm (0.14 in)				Nm	0.5... 0.6	
				lb-in	4,4... 5,3	

Mounting to DIN rail

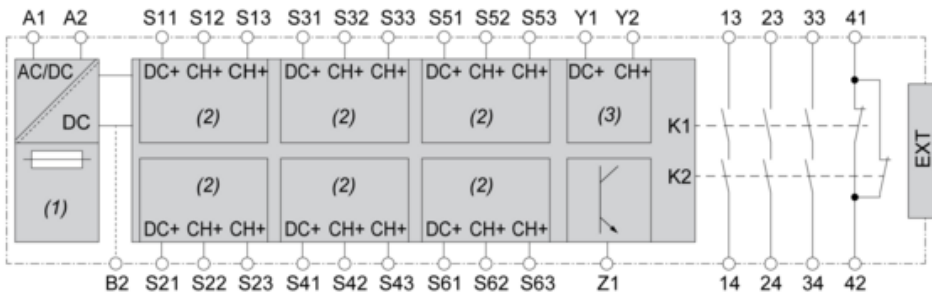


Screw-mounting

mm  
in.



**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)

13-23-33-41-14-24-34-42 : Output

EXT : Connector for optional extension module

B2 : Common ground terminal

Z1 : Pulsed output for diagnostics, not safety-related

**Recommended replacement(s)**