

Product datasheet

Specifications



Preventa module Cat.1 potential free NC/NC, NO/NC & PNP/PNP 48-240vac/dc screw

XPSUAB31CP

EAN Code : 3606489601591

Main

Range of product	Harmony Safety Automation
Product or component type	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) Proximity sensor monitoring
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 Removable screw terminal block, 2 x 0.5...1.5 mm ² 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 2.2 s
Type of start	Automatic/manual/monitored
Power consumption in W	2.0 W 48 V DC

Power consumption in VA	6.5 VA 240 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 wire 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 Two-hand control conforming to EN 574/ISO 13851-III A 3-wire proximity sensors PNP
[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) 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
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
Net 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

Relative humidity	5...95 % non-condensing
-------------------	-------------------------

Packing Units

Unit Type of Package 1	PCE
------------------------	-----

Number of Units in Package 1	1
------------------------------	---

Package 1 Height	6.5 cm
------------------	--------

Package 1 Width	13.5 cm
-----------------	---------

Package 1 Length	15.5 cm
------------------	---------

Package 1 Weight	262.0 g
------------------	---------

Unit Type of Package 2	S03
------------------------	-----

Number of Units in Package 2	16
------------------------------	----

Package 2 Height	30 cm
------------------	-------

Package 2 Width	30 cm
-----------------	-------

Package 2 Length	40 cm
------------------	-------

Package 2 Weight	4.939 kg
------------------	----------

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
--------------	-----

China RoHS Regulation	China RoHS declaration
-----------------------	--

RoHS exemption information	Yes
----------------------------	---------------------

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
------	---

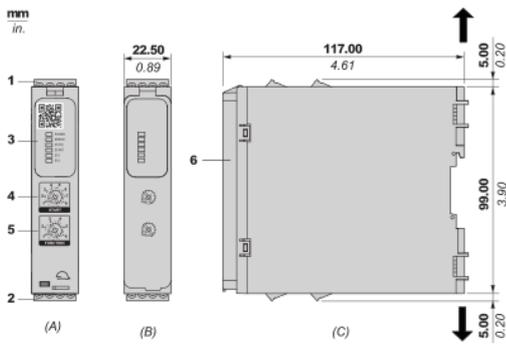
PVC free	Yes
----------	-----

Contractual warranty

Warranty	18 months
----------	-----------

Dimensions

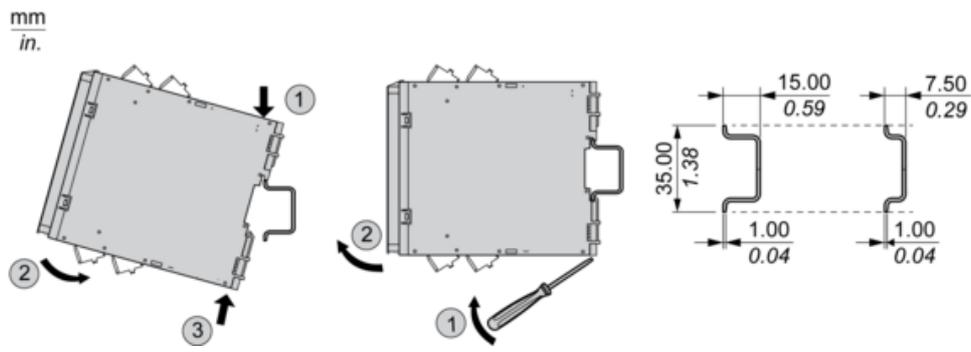
Front and Side Views



- (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

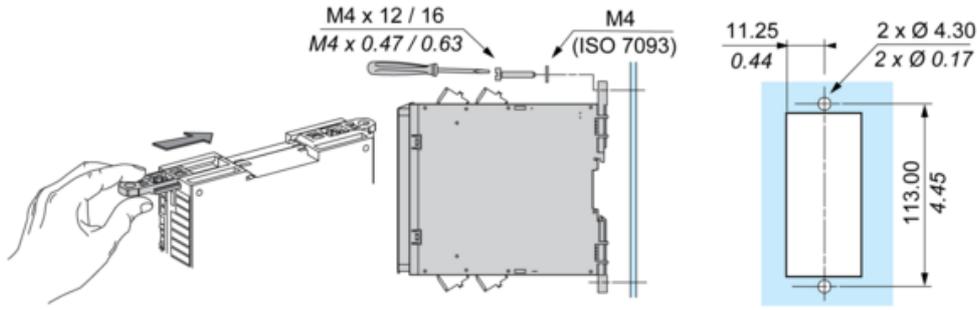
mm in.	7.0–8.0 0.28–0.31						
	mm ²	0,2... 2,5	0,25...2,5	0,2... 1,5	0,25...1	0,5... 1,5	
	AWG	24... 12	24...12	24...16	24...18	20...16	
	 Ø 3,5 mm (0.14 in)					Nm	0.5... 0.6
						lb-in	4,4... 5,3

Mounting to DIN rail

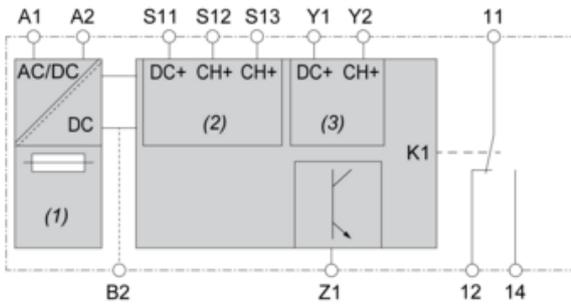


Screw-mounting

mm
in.



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

Recommended replacement(s)