Product datasheet

Specifications

Preventa module Cat.4 potential free NC/NC, NO/NC & PNP/PNP 24vac/dc spring

XPSUAF13AC

EAN Code : 3606489601607

Main

Range of product	Harmony Safety Automation
Product or component type	Safety module
Safety module name	XPSUAF
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 conforming to ISO 13849-1 Can reach SILCL 3 conforming to IEC 62061 Can reach SIL 3 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 spring terminal block, 0.2...2.5 mm² solid or flexible Removable spring terminal block, 0.25...2.5 mm² flexible with ferrule single conductor Removable spring terminal block, 0.2...1.5 mm² solid or flexible twin conductor Removable spring terminal block, 2 x 0.25...1 mm² flexible with ferrule without cable end, with bezel Removable spring terminal block, 2 x 0.5...1.5 mm² flexible with ferrule with 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 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	3 NO
Safety inputs	2 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 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
Control outputs	3 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	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	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 S22
Mounting support	35 mm symmetrical DIN rail
Depth	120 mm
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 IP40 (housing) conforming to EN/IEC 60529 IP54 (mounting area) conforming to EN/IEC 60529
Ambient air temperature for storage	-25…85 °C
Relative humidity	5…95 % non-condensing

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.500 cm
Package 1 Width	14.000 cm
Package 1 Length	15.500 cm
Package 1 Weight	279.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.160 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

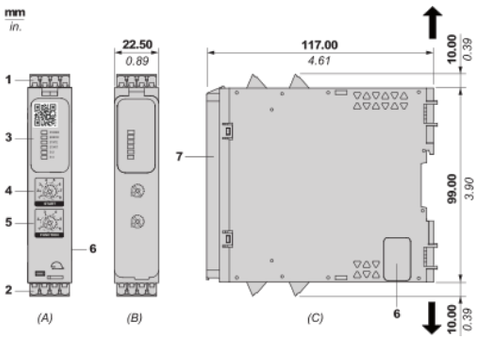
Warranty	18 months

Product datasheet XPSUAF13AC

Dimensions Drawings

Dimensions

Front and Side Views



(A) : Product drawing

(B) : Spring Terminal

(C) : Side view

(1) : Removable terminal blocks, top

(2) : Removable terminal blocks, bottom

(3) : LED indicators

(4) : Start function selector

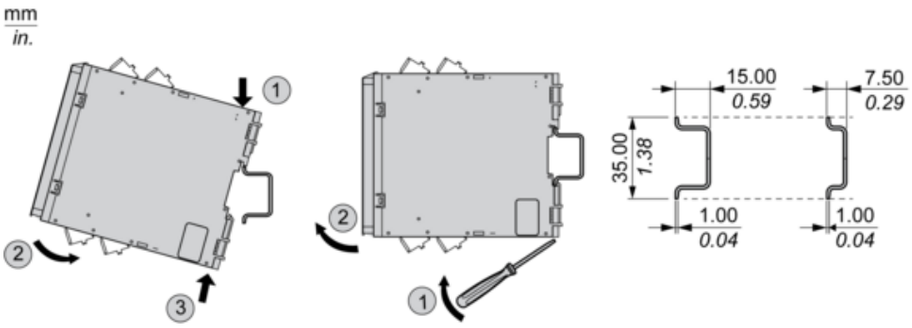
(5) : Function selector

(6) : Connector for optional output extension module (lateral)

(7) : Sealable transparent cover

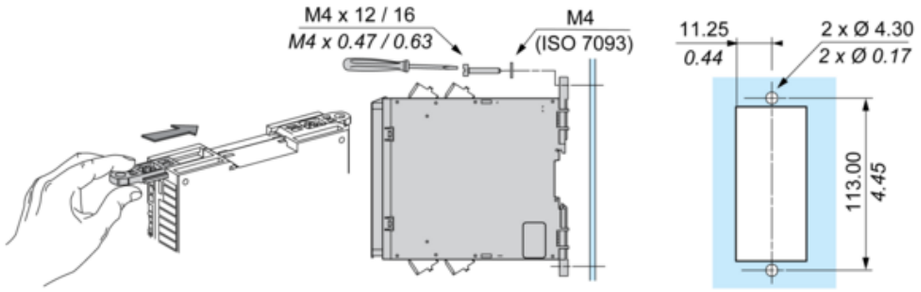
mm / in. 12.0 / 0.47					
mm^2	0,2...2,5	0,25…2,5	0,2…1,5	0,25...1	0,5...1,5
AWG	*24…12*	*24…12*	*24…16*	*24…18*	*20…16*

Mounting to DIN rail

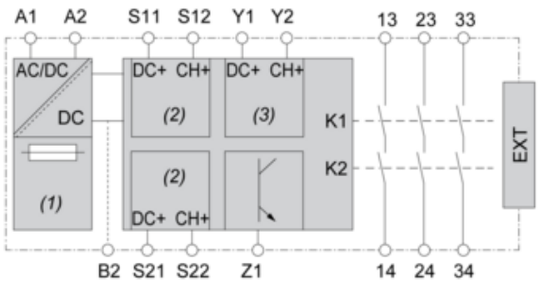


Screw-mounting

mm
in.



Wiring Drawing



(1) : A1-A2 (Power supply)

(2) : S11-S12-S21-S22 (Single-channel safety input)

(3) : Y1-Y2 (Start)

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

EXT : Connector for optional extension module

B2 : Common ground terminal

Z1 : Pulsed output for diagnostics, not safety-related

Recommended replacement(s)