Product data sheet Characteristics

XPSUAF13AP

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





Main

| Range of product | Preventa Safety automation |
|---------------------------|---|
| Product or component type | Preventa 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 screw terminal block, 0.22.5 mm² solid or flexible Removable screw terminal block, 0.252.5 mm² flexible with ferrule single conductor Removable screw terminal block, 0.21.5 mm² solid or flexible twin conductor Removable screw terminal block, 2 x 0.251 mm² flexible with ferrule without cable end, with bezel Removable screw terminal block, 2 x 0.51.5 mm² flexible with ferrule with cable end, with bezel |
| [Us] rated supply voltage | 24 V AC - 1510 % 24 V DC - 2020 % |

Complementary

| 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 | | | | |
| Auxiliary contact composition | 3 NO | | | | |
| Number of inputs | 2 safety input 24 V DC 5 mA | | | | |
| Maximum line 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 | | | | |
| Output type | Relay output : 250 V AC, AC-1, B300 Relay output : 250 V AC, AC-15, B300 Relay output : 24 V DC, DC-1, R300 Relay output : 24 V DC, DC-13, R300 | | | | |
| [le] 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 | | | | |
| Number of outputs | 3 on/off configurable pulsed output | | | | |
| Input/output type | Semiconductor pulsed diagnostic output 24 V DC, 20 mA Z1, not safety-related | | | | |
| [lth] 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 | | | | | |
| Mounting support Depth | LED (yellow) for safety input S22 | | | | |
| | LED (yellow) for safety input S22 35 mm symmetrical DIN rail | | | | |
| Depth | LED (yellow) for safety input S22 35 mm symmetrical DIN rail 120 Mm | | | | |



| 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 IEC 61508-7 functional safety standard IEC 61508-1 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 | -2585 °C | | | | |
| Relative humidity | 595 % non-condensing | | | | |
| Packing Units | | | | | |
| Package 1 Weight | 278 G | | | | |
| Package 2 Weight | 310 G | | | | |
| Package 3 Weight | 5.284 Kg | | | | |
| | | | | | |
| Offer Sustainability | | | | | |
| Offer Sustainability Sustainable offer status | Green Premium product | | | | |
| · | Green Premium product REACh Declaration | | | | |
| Sustainable offer status | | | | | |
| Sustainable offer status REACh Regulation | Pro-active compliance (Product out of EU RoHS legal scope) | | | | |
| Sustainable offer status REACh Regulation EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS Declaration | | | | |
| Sustainable offer status REACh Regulation EU RoHS Directive Mercury free | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes | | | | |
| Sustainable offer status REACh Regulation EU RoHS Directive Mercury free RoHS exemption information | Pro-active compliance (Product out of EU RoHS legal scope) Pro-active compliance (Product o | | | | |
| Sustainable offer status REACh Regulation EU RoHS Directive Mercury free RoHS exemption information China RoHS Regulation | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes China RoHS Declaration | | | | |
| Sustainable offer status REACh Regulation EU RoHS Directive Mercury free RoHS exemption information China RoHS Regulation Environmental Disclosure | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes Yes China RoHS Declaration Product Environmental Profile | | | | |

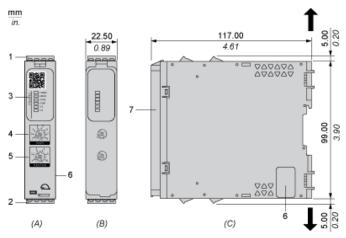
Contractual warranty

| Contraction Warranty | |
|----------------------|-----------|
| Warranty | 18 months |

XPSUAF13AP

Dimensions

Front and Side Views

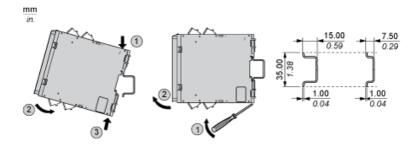


- (A): Product drawing
- (B): Screw clamp terminal
- (C): Side view
- (1): Removable terminal blocks, top
- (2): Removable terminal blocks, bottom (3): LED indicators
- (4): Start function selector
- (5): Function selector
- (6): Connector for optional output extension module (lateral)
- (7): Sealable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

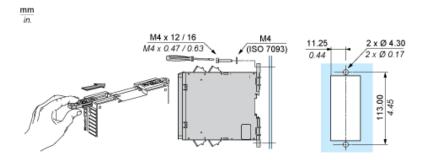
| in. | 7.0–8.0 0.28–0.31 | 11 | | == 8= | a D- | - 8 |
|--------------------|----------------------|---------|---------|--------|-------------|--------|
| | mm ² | 0,2 2,5 | 0,252,5 | 0,21,5 | 0,251 | 0,51,5 |
| | AWG | 24 12 | 2412 | 2416 | 2418 | 2016 |
| | | (Ac@) | | Nm | 0.5 0.6 | |
| Ø 3,5 mm (0.14 in) | | Colon | | lb-in | 4,4 5,3 | |

XPSUAF13AP

Mounting to DIN rail



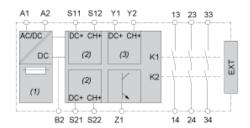
Screw-mounting



Product data sheet Connections and Schema

XPSUAF13AP

Wiring Drawing



(1): A1-A2 (Power supply)

(2): S11-S12-S21-S22 (Single-channel safety input) (3): Y1-Y2 (Start)

13-23Q3dtplut-24-34:

EXT : Connector for optional extension module

B2: Common ground terminal

Z1: Pulsed output for diagnostics, not safety-related

Product Life Status: Commercialised