

# Product datasheet

Specifications



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

XPSUAF13AP

EAN Code: 3606489601614

### Main

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product          | Harmony Safety Automation                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product or component type | Safety module                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Safety module name        | XPSUAF                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Safety module application | Monitoring antivalent contacts<br>For emergency stop, guard and light curtain monitoring                                                                                                                                                                                                                                                                                                                                                                 |
| Function of module        | Emergency stop button with 2 NC contacts<br>Guard monitoring with 1 or 2 limit switches<br>Monitoring 2 PNP sensors<br>Magnetic switch monitoring<br>Light curtain monitoring<br>RFID switch<br>Monitoring of electro-sensitive protection equipment (ESPE)<br>Proximity sensor monitoring                                                                                                                                                               |
| Safety level              | Can reach PL e/category 4 conforming to ISO 13849-1<br>Can reach SILCL 3 conforming to IEC 62061<br>Can reach SIL 3 conforming to IEC 61508                                                                                                                                                                                                                                                                                                              |
| Safety reliability data   | MTTFd > 30 years conforming to ISO 13849-1<br>Dcavg >= 99 % conforming to ISO 13849-1<br>PFHd = 1.13E-09 conforming to ISO 13849-1<br>HFT = 1 conforming to IEC 62061<br>PFHd = 1.13E-09 conforming to IEC 62061<br>SFF > 99% conforming to IEC 62061<br>HFT = 1 conforming to IEC 61508-1<br>PFHd = 1.13E-09 conforming to IEC 61508-1<br>SFF > 99% conforming to IEC 61508-1<br>Type = B conforming to IEC 61508-1                                     |
| Electrical circuit type   | NC pair<br>PNP pair<br>Antivalent pair<br>OSSD pair                                                                                                                                                                                                                                                                                                                                                                                                      |
| Connections - terminals   | Removable screw terminal block, 0.2...2.5 mm² solid or flexible<br>Removable screw terminal block, 0.25...2.5 mm² flexible with ferrule single conductor<br>Removable screw terminal block, 0.2...1.5 mm² solid or flexible twin conductor<br>Removable screw terminal block, 2 x 0.25...1 mm² flexible with ferrule without cable end, with bezel<br>Removable screw 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 %<br>24 V DC - 20...20 %                                                                                                                                                                                                                                                                                                                                                                                                               |

### Complementary

|                                     |                            |
|-------------------------------------|----------------------------|
| Synchronisation time between inputs | 0.5 s<br>2 s<br>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    |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                             |                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>XC limit switch conforming to ISO 14119<br>Mechanical contact conforming to ISO 14119<br>Normally closed circuit conforming to ISO 13850<br>Antivalent pair conforming to ISO 14119<br>OSSD pair conforming to IEC 61496-1-2<br>3-wire proximity sensors PNP |
| [Ie] rated operational current              | 5 A AC-1 for normally open relay contact<br>3 A AC-15 for normally open relay contact<br>5 A DC-1 for normally open relay contact<br>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 IEC 60947-1                                                                                                                                                                                                                                                            |
| [Uimp] rated impulse withstand voltage      | 4 kV overvoltage category II conforming to IEC 60947-1                                                                                                                                                                                                                                                          |
| Local signalling                            | LED (green) for power ON<br>LED (red) for error<br>LED (yellow) for start<br>LED (yellow) for safety status<br>LED (yellow) for safety input S12<br>LED (yellow) for safety input S22                                                                                                                           |
| Mounting support                            | 35 mm symmetrical DIN rail                                                                                                                                                                                                                                                                                      |
| Depth                                       | 120 mm                                                                                                                                                                                                                                                                                                          |
| Height                                      | 100 mm                                                                                                                                                                                                                                                                                                          |
| Width                                       | 22.5 mm                                                                                                                                                                                                                                                                                                         |
| Product weight                              | 0.200 kg                                                                                                                                                                                                                                                                                                        |

## Environment

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                           | IEC 60947-5-1<br>IEC 61508-1 functional safety standard<br>IEC 61508-2 functional safety standard<br>IEC 61508-3 functional safety standard<br>IEC 61508-4 functional safety standard<br>IEC 61508-5 functional safety standard<br>IEC 61508-6 functional safety standard<br>IEC 61508-7 functional safety standard<br>ISO 13849-1 functional safety standard<br>IEC 62061 functional safety standard |
| Product certifications              | TÜV<br>cULus                                                                                                                                                                                                                                                                                                                                                                                          |
| IP degree of protection             | IP20 (terminals) conforming to IEC 60529<br>IP40 (housing) conforming to IEC 60529<br>IP54 (mounting area) conforming to 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             | 6.700 cm  |
| Package 1 Width              | 13.700 cm |
| Package 1 Length             | 15.500 cm |
| Package 1 Weight             | 281.000 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             | 5.100 kg  |
| Unit Type of Package 3       | P06       |
| Number of Units in Package 3 | 128       |
| Package 3 Height             | 75.000 cm |
| Package 3 Width              | 60.000 cm |
| Package 3 Length             | 80.000 cm |
| Package 3 Weight             | 50.772 kg |

## Logistical informations

|                   |    |
|-------------------|----|
| Country of origin | ID |
|-------------------|----|

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

|  Environmental footprint |                                               |
|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint                                                                          | 70 kg CO2 eq.                                 |
| Carbon footprint of the manufacturing phase [A1 to A3]                                                    | 5 kg CO2 eq.                                  |
| Carbon footprint of the distribution phase [A4]                                                           | 0.1 kg CO2 eq.                                |
| Carbon footprint of the installation phase [A5]                                                           | 0 kg CO2 eq.                                  |
| Carbon footprint of the use phase [B2, B3, B4, B6]                                                        | 65 kg CO2 eq.                                 |
| Carbon footprint of the end-of-life phase [C1 to C4]                                                      | 0.6 kg CO2 eq.                                |
| Environmental Disclosure                                                                                  | <a href="#">Product Environmental Profile</a> |

### Use Better

|  Materials and Substances |                                                                                        |
|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard                                                                      | Yes                                                                                    |
| Packaging without single use plastic                                                                        | No                                                                                     |
| SCIP Number                                                                                                 | 152cf799-1df7-4892-81b4-4c890187f1d1                                                   |
| EU RoHS Directive                                                                                           | <a href="#">Compliant By Exemption</a>                                                 |
| REACH Regulation                                                                                            | <a href="#">Reference contains Substances of Very High Concern above the threshold</a> |
| PVC free                                                                                                    | Yes                                                                                    |

### Use Longer

|  Lifetime extension |    |
|--------------------------------------------------------------------------------------------------------|----|
| Repair                                                                                                 | No |

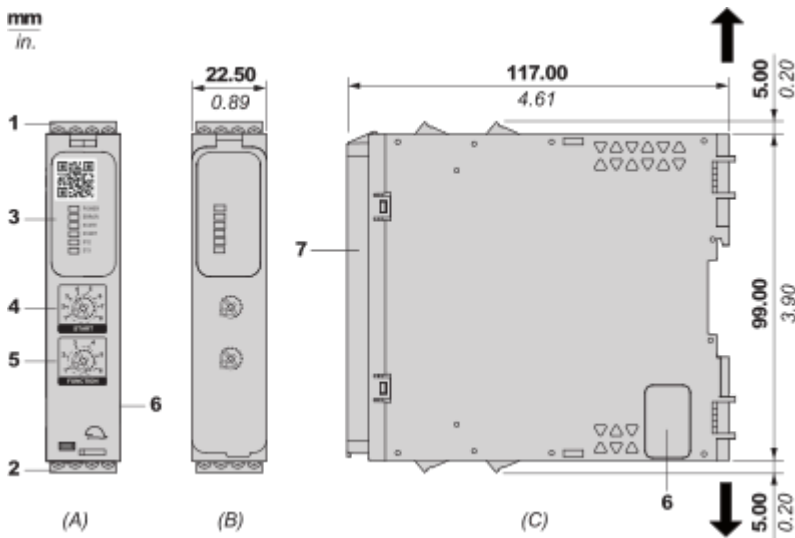
### Use Again

|  Repack and remanufacture |                                                                                                                                                                                                                 |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %                                                                                | 0                                                                                                                                                                                                               |
| End of life manual availability                                                                              | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                                                                                                    | No                                                                                                                                                                                                              |
| WEEE Label                                                                                                   |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Dimensions Drawings

Dimensions

Front and Side Views

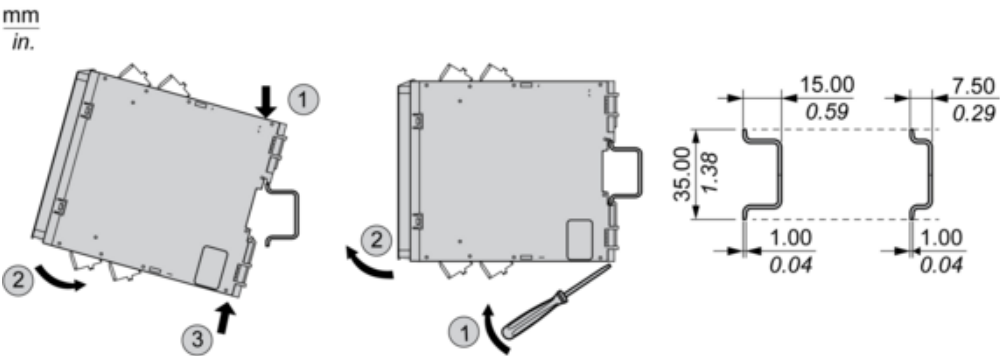


- (A) : Product drawing  
(B) : Screw clamp terminal  
(C) : Side view  
(1) : Removable terminal blocks, top  
(2) : Removable terminal blocks, bottom  
(3) : LED indicators  
(4) : Start function selector  
(5) : Function selector  
(6) : Connector for optional output extension module (lateral)  
(7)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

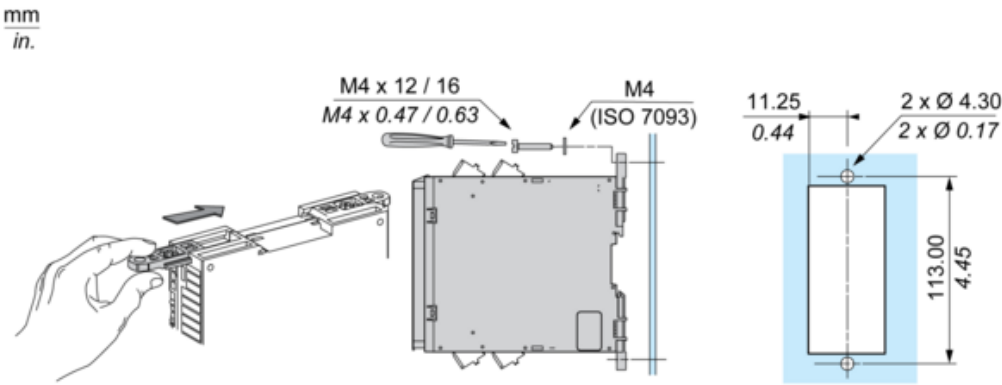
|                                                                                            |                                           |             |             |             |             |
|--------------------------------------------------------------------------------------------|-------------------------------------------|-------------|-------------|-------------|-------------|
| <div><div>mm</div><div>in.</div></div> <div>7.0–8.0</div> <div>0.28–0.31</div> <div></div> | <div></div>                               | <div></div> | <div></div> | <div></div> | <div></div> |
| 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     |
| <div></div> <div>Ø 3,5 mm (0.14 in)</div>                                                  | <div></div> <div>Ø 3,5 mm (0.14 in)</div> |             |             | Nm          | 0.5... 0.6  |
|                                                                                            |                                           |             |             | lb-in       | 4,4... 5,3  |

Mounting and Clearance

Mounting to DIN rail

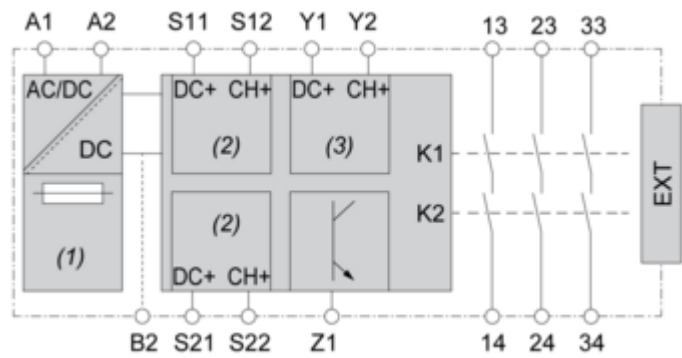


Screw-mounting



Connections and Schema

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



Image of product / Alternate images

Alternative

---

