

XPSUDN13AP

Safety module, Harmony Safety Automation, Cat.4, features 6*XPSUAF, 24v AC/DC, screw



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 ISO 13849-1 Can reach SILCL 3 for normally open relay contact IEC 62061 Can reach SIL 3 for normally open relay contact IEC 61508 Can reach PL c/category 1 for normally closed relay contact ISO 13849-1 Can reach SILCL 1 for normally closed relay contact IEC 62061 Can reach SIL 1 for normally closed relay contact IEC 61508 |
| Safety reliability data | MTTFd > 30 years ISO 13849-1 Dcavg >= 99 % ISO 13849-1 PFHd = 0.88E-09 ISO 13849-1 HFT = 1 IEC 62061 PFHd = 0.88E-09 IEC 62061 SFF > 99% IEC 62061 HFT = 1 IEC 61508-1 PFHd = 0.88E-09 IEC 61508-1 SFF > 99% IEC 61508-1 Type = B 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 | 24 V AC - 15...10 % 24 V DC - 20...20 % |

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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 | 4.5 W 24 V DC |
| Power consumption in VA | 10.5 VA 24 V AC 50/60 Hz |
| Input protection type | Internal, electronic |
| Safety outputs | 3 NO + 1 NC |
| Safety inputs | 6 |
| Maximum wire resistance | 500 Ohm |
| Input compatibility | Normally closed circuit ISO 14119 XC limit switch ISO 14119 Mechanical contact ISO 14119 Normally closed circuit ISO 13850 Antivalent pair ISO 14119 OSSD pair IEC 61496-1-2 3-wire proximity sensors PNP |
| [Ie] rated operational current | 5 A AC-1 3 A AC-15 5 A DC-1 3 A DC-13 3 A AC-1 1 A AC-15 3 A DC-1 1 A DC-13 |
| Control outputs | 7 pulsed output |
| Input/output type | Semiconductor pulsed diagnostic output Z1, 20 mA |
| [Ith] conventional free air thermal current | 16 A |
| Associated fuse rating | 10 A gG NO relay output circuit IEC 60947-1 4 A gG NC relay output circuit IEC 60947-1 |
| Minimum output current | 10 mA relay output |
| Minimum output voltage | 12 V relay output |
| Maximum response time on input open | 20 ms |
| [Ui] rated insulation voltage | 250 V 2)EN/IEC 60947-1 |
| [Uimp] rated impulse withstand voltage | 4 kV II EN/IEC 60947-1 |
| Local signalling | For power ON LED (green) For error LED (red) 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 LED (yellow) |
| Mounting Support | 35 mm symmetrical DIN rail |
| Depth | 4.72 in (120 mm) |
| Height | 3.94 in (100 mm) |
| Width | 1.77 in (45 mm) |
| Net Weight | 0.77 lb(US) (0.350 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)EN/IEC 60947-1 IP40 housing)EN/IEC 60947-1 IP54 mounting area)EN/IEC 60947-1 |
| Ambient air temperature for operation | -13...122 °F (-25...50 °C) at 24 V AC -13...131 °F (-25...55 °C) at 24 V DC |
| Ambient Air Temperature for Storage | -13...185 °F (-25...85 °C) |
| Relative Humidity | 5...95 % non-condensing |



Ordering and shipping details

| | |
|-----------------------|-----------------------------------|
| Category | 22477 - SAFETY MODULES (PREVENTA) |
| Discount Schedule | SAF2 |
| GTIN | 3606489601737 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 15.87 oz (450 g) |
| Returnability | No |
| Country of origin | ID |

Packing Units

| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Package 1 Height | 5.31 in (13.5 cm) |
| Package 1 width | 5.31 in (13.5 cm) |
| Package 1 Length | 5.31 in (13.5 cm) |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 1 |
| Package 2 Weight | 16.23 oz (460 g) |
| Package 2 Height | 2.52 in (6.4 cm) |
| Package 2 width | 5.24 in (13.3 cm) |
| Package 2 Length | 6.02 in (15.3 cm) |
| Unit Type of Package 3 | S03 |
| Number of Units in Package 3 | 16 |
| Package 3 Weight | 16.11 lb(US) (7.308 kg) |
| Package 3 Height | 11.81 in (30 cm) |
| Package 3 width | 11.81 in (30 cm) |
| Package 3 Length | 15.75 in (40 cm) |

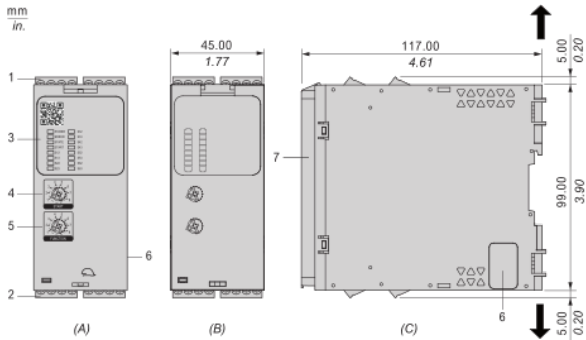
Offer Sustainability

| | |
|---------------------------|---|
| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation |  REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration |
| Mercury free | Yes |

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|----------------------------|--|
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| 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 |

Dimensions

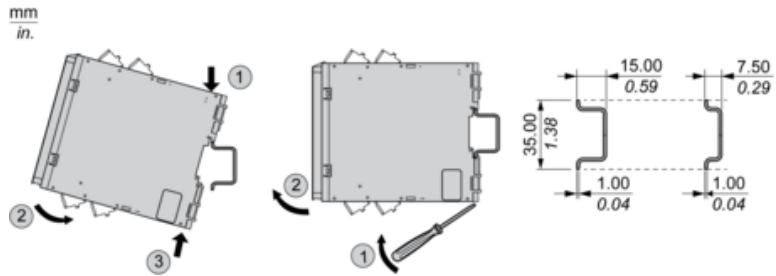
Front and Side Views



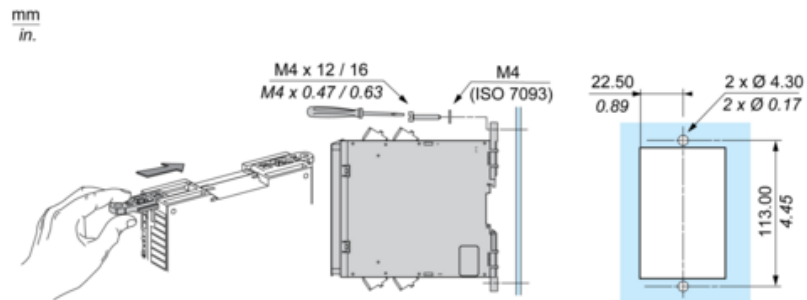
- (A) : Product drawing
- (B) : Screw clamp terminal
- (C) : Side view
- (1) : Removable terminal blocks, top
- (2) : Removable terminal blocks, bottom
- (3) : LED indicators
- (4) : Start function selector
- (5) : Function selector
- (6) : Connector for optional output extension module (lateral)
- (7)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

| | | | | | | |
|-----------------|----------------------|------------|------------|----------|------------|--|
| mm in. | 7.0-8.0 0.28-0.31 | | | | | |
| mm 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



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