

XPSUAT33A3AP

safety module, Harmony XPSU, Cat4, features XPSUAK with delayed outputs, 48 to 240V AC or DC, screw



Main

| | |
|---------------------------|--|
| Range of Product | Harmony Safety Automation |
| Product or Component Type | Safety module |
| Safety module name | XPSUAT |
| Safety module application | Monitoring antivalent contacts For emergency stop, guard and light curtain monitoring Monitoring of pressure-sensitive 4-wire protective devices |
| 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) Sensing mat/edges Proximity sensor monitoring Monitoring 1 PNP + 1 NPN sensor |
| 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 = 1.47E-09 for SS0 ISO 13849-1 PFHd = 1.48E-09 for SS1 ISO 13849-1 HFT = 1 IEC 62061 PFHd = 1.47E-09 for SS0 IEC 62061 PFHd = 1.48E-09 for SS1 IEC 62061 SFF > 99% IEC 62061 HFT = 1 IEC 61508-1 PFHd = 1.47E-09 for SS0 IEC 61508-1 PFHd = 1.48E-09 for SS1 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 | 48...240 V AC/DC - 10...10 % |

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 4 s |
| Type of start | Automatic/manual/monitored |
| Power consumption in W | 4 W 48 V DC |
| Power consumption in VA | 10 VA 240 V AC 50/60 Hz |
| Input protection type | Internal, electronic |
| Safety outputs | 3 NO configurable 3 NO immediate 1 NC configurable |
| Safety inputs | 2 positive safety input 24 V DC 8 mA 1 negative safety input |
| Maximum wire resistance | 500 Ohm |
| Time delay range | 0...900 s off |
| 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 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 3 A DC-1 for normally closed relay contact 1 A DC-13 for normally closed relay contact |
| Control outputs | 4 on/off configurable pulsed output |
| Input/output type | Pulsed output for diagnostics 24 V DC, 20 mA Z1, not safety-related Semiconductor output 24 V DC, 20 mA Z2, not safety-related |
| [Ith] conventional free air thermal current | 16 A |
| Associated fuse rating | 10 A gG NO relay output circuit IEC 60947-1 |
| Minimum output current | 20 mA relay output |
| Minimum output voltage | 24 V relay output |
| Maximum response time on input open | 20 ms |
| [Ui] rated insulation voltage | 250 V 2) IEC 60947-1 |
| [Uimp] rated impulse withstand voltage | 4 kV II IEC 60947-1 |
| 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[RETURN]cULus |
| IP degree of protection | IP54 mounting area) IEC 60947-1 IP40 housing) IEC 60947-1 IP20 terminals) IEC 60947-1 |
| 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 | 3606489601713 |
| Returnability | No |
| Country of origin | ID |

Packing Units

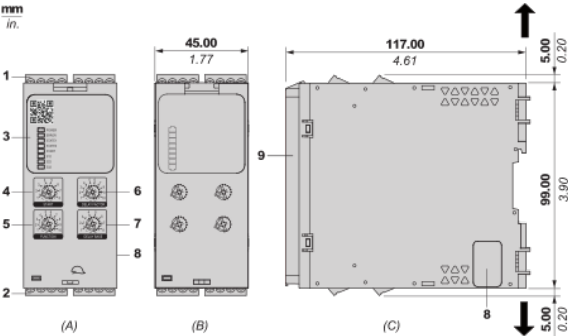
| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 2.56 in (6.5 cm) |
| Package 1 Width | 5.39 in (13.7 cm) |
| Package 1 Length | 6.10 in (15.5 cm) |
| Package 1 Weight | 15.87 oz (450.0 g) |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 16 |
| Package 2 Height | 11.81 in (30 cm) |
| Package 2 Width | 11.81 in (30 cm) |
| Package 2 Length | 15.75 in (40 cm) |
| Package 2 Weight | 17.45 lb(US) (7.914 kg) |

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) |
| 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 |

Dimensions

Front and Side Views

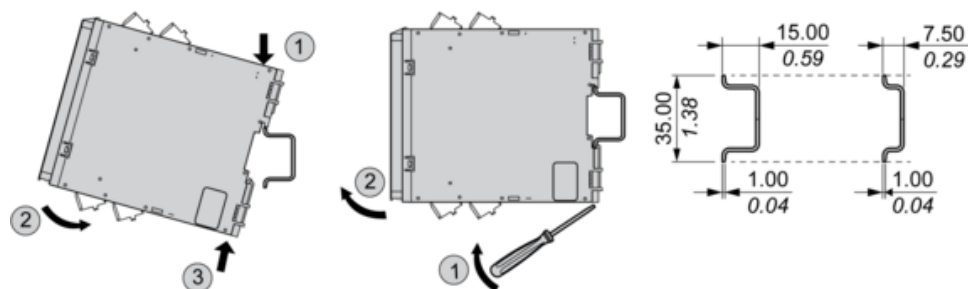


- (A) : Product drawing
(B) : Screw clamp terminal
(C) : Side view
(1) : Removable terminal blocks, top
(2) : Removable terminal blocks, bottom
(3) : LED indicators
(4) : Start function selector
(5) : Function selector
(6) : Delay factor selector
(7) : Delay base selector
(8) : Connector for optional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

| | | | | | |
|---|---|---|---|---|---|
| <div>mm</div> <div>in.</div> <div>7.0–8.0</div> <div>0.28–0.31</div> |  |  |  |  |  |
| 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 |

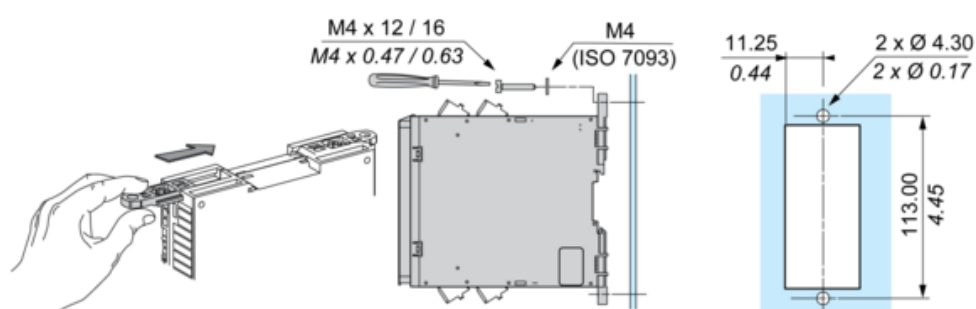
Mounting to DIN rail

mm
in.

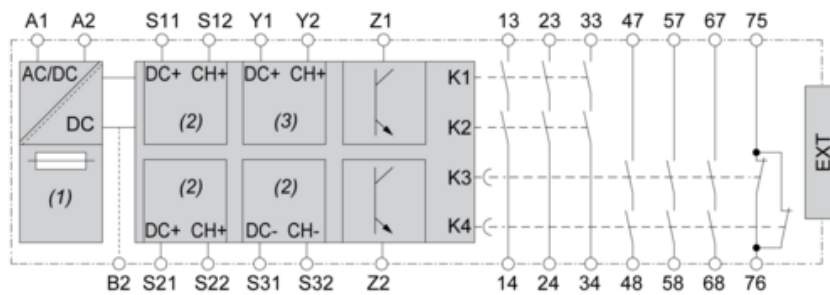


Screw-mounting

mm
in.



Wiring Drawing



(1) : A1-A2 (Power supply)

(2) : S11-S12-S21-S22-S31-S32 (Single-channel safety input)

(3) : Y1-Y2 (Start)

13-23-33-47-57-67-75-14-24-34-48-58-68-76 : Output

EXT : Connector for optional extension module

B2 : Common ground terminal

Z1 : Pulsed output for diagnostics, not safety-related

Z2 : Solid state output, not safety-related