

# Product data sheet

Specifications



safety module, Harmony XPS, zero speed monitoring with time delay, 24V AC or DC, spring

XPSUVN11AC

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## Main

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of Product              | Harmony Safety Automation                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product or Component Type     | Safety module                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Safety module name            | XPSUVN                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Safety module application     | For zero speed detection                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Function of module            | Monitoring 3-phase motor<br>Monitoring 3-phase motor with star-delta starting<br>Monitoring 3-phase motor with variable number of poles<br>Monitoring 3-phase motor with variable number of poles and star-delta starting<br>Monitoring dc motor<br>Monitoring servo motor<br>Monitoring 3-phase motor supplied by variable speed drive<br>Monitoring 3-phase motor supplied by servo drive<br>Controlling enegization to open of guard switch type XCSE, XCSLE, XCSLF, XCST |
| Safety level                  | Can reach PL e/category 3 for normally open relay contact ISO 13849-1<br>Can reach SILCL 3 for normally open relay contact IEC 62061<br>Can reach SIL 3 for normally open relay contact IEC 61508                                                                                                                                                                                                                                                                            |
| Safety reliability data       | MTTFd > 30 years ISO 13849-1<br>Dcavg = 98.9 % ISO 13849-1<br>PFHd = 2.39E-9 1/h ISO 13849-1<br>HFT = 1 IEC 62061<br>PFHd = 2.39E-9 1/h IEC 62061<br>SFF > 99% IEC 62061<br>HFT = 1 IEC 61508-1<br>PFHd = 2.39E-9 1/h IEC 61508-1<br>SFF > 99% IEC 61508-1<br>Type = B IEC 61508-1                                                                                                                                                                                           |
| Product Certifications        | TÜV<br>cULus                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Us] Rated Supply Voltage     | 24 V AC - 15...10 %<br>24 V DC - 20...20 %                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Output type                   | Relay, 1 NO, volt-free                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Number of additional circuits | 2 solid state outputs                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Complementary

|                         |        |
|-------------------------|--------|
| Power Consumption in W  | 2.0 W  |
| Power Consumption in VA | 5.5 VA |
| Input voltage           | 690 V  |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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 detection threshold                   | 50 mV                                                                                                            |
|                                             | 65 mV                                                                                                            |
|                                             | 85 mV                                                                                                            |
|                                             | 110 mV                                                                                                           |
|                                             | 140 mV                                                                                                           |
|                                             | 180 mV                                                                                                           |
|                                             | 230 mV                                                                                                           |
|                                             | 300 mV                                                                                                           |
|                                             | 400 mV                                                                                                           |
|                                             | 500 mV                                                                                                           |
| Time delay                                  | 0.5 s                                                                                                            |
|                                             | 1 s                                                                                                              |
|                                             | 2 s                                                                                                              |
|                                             | 3 s                                                                                                              |
|                                             | 5 s                                                                                                              |
|                                             | 8 s                                                                                                              |
|                                             | 12 s                                                                                                             |
|                                             | 20 s                                                                                                             |
|                                             | 35 s                                                                                                             |
|                                             | 60 s                                                                                                             |
| [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                                                                        |
| [Ith] conventional free air thermal current | 6 A NO relay output circuit                                                                                      |
| Associated fuse rating                      | 6 A gG relay output IEC 60947-1                                                                                  |
| 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                                                                             |
| Minimum output current                      | 10 mA relay output                                                                                               |
| Minimum output voltage                      | 5 V relay output                                                                                                 |
| [Ui] rated insulation voltage               | 690 V phase to phase 2)IEC 60947-1                                                                               |
|                                             | 400 V phase to earth 2)IEC 60947-1                                                                               |
| [Uimp] rated impulse withstand voltage      | 4 kV II IEC 60947-1                                                                                              |
| Local signalling                            | LED green power power ON                                                                                         |
|                                             | LED red error error                                                                                              |
|                                             | LED yellow state status                                                                                          |
|                                             | LED yellow L12 input line comparison                                                                             |
|                                             | LED yellow L32 input line comparison                                                                             |
| Connections - terminals                     | Removable spring terminal block solid or flexible 0.2...2.5 mm <sup>2</sup>                                      |
|                                             | Removable spring terminal block flexible with ferrule 0.25...2.5 mm <sup>2</sup> single conductor                |
|                                             | Removable spring terminal block solid or flexible 0.2...1.5 mm <sup>2</sup> twin conductor                       |
|                                             | Removable spring terminal block flexible with ferrule 2 x 0.25...1 mm <sup>2</sup> without cable end, with bezel |
|                                             | Removable spring terminal block flexible with ferrule 2 x 0.5...1.5 mm <sup>2</sup> with cable end, with bezel   |
| Mounting Support                            | 35 mm symmetrical DIN rail                                                                                       |
| Depth                                       | 4.7 in (120 mm)                                                                                                  |
| Height                                      | 3.9 in (100 mm)                                                                                                  |
| Width                                       | 0.9 in (22.5 mm)                                                                                                 |
| Product Weight                              | 0.4 lb(US) (0.2 kg)                                                                                              |

## Environment

|                                       |                                                                                    |
|---------------------------------------|------------------------------------------------------------------------------------|
| IP degree of protection               | IP20 terminals)IEC 60529<br>IP40 housing)IEC 60529<br>IP54 mounting area)IEC 60529 |
| Ambient Air Temperature for Operation | -13...131 °F (-25...55 °C)                                                         |
| Ambient Air Temperature for Storage   | -40...158 °F (-40...70 °C)                                                         |
| Relative Humidity                     | 5...95 % non-condensing                                                            |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US1SAF222477  |
| Discount Schedule | SAF2          |
| GTIN              | 3606482039315 |
| Returnability     | No            |
| Country of origin | ID            |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Nbr. of units in pkg.        | 1                        |
| Package 1 Height             | 2.559 in (6.500 cm)      |
| Package 1 Width              | 5.315 in (13.500 cm)     |
| Package 1 Length             | 6.102 in (15.500 cm)     |
| Package weight(Lbs)          | 9.453 oz (268.000 g)     |
| Unit Type of Package 2       | S03                      |
| Number of Units in Package 2 | 16                       |
| Package 2 Height             | 11.811 in (30.000 cm)    |
| Package 2 Width              | 11.811 in (30.000 cm)    |
| Package 2 Length             | 15.748 in (40.000 cm)    |
| Package 2 Weight             | 10.955 lb(US) (4.969 kg) |

## 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>                                                                                                                                                                                                      |
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



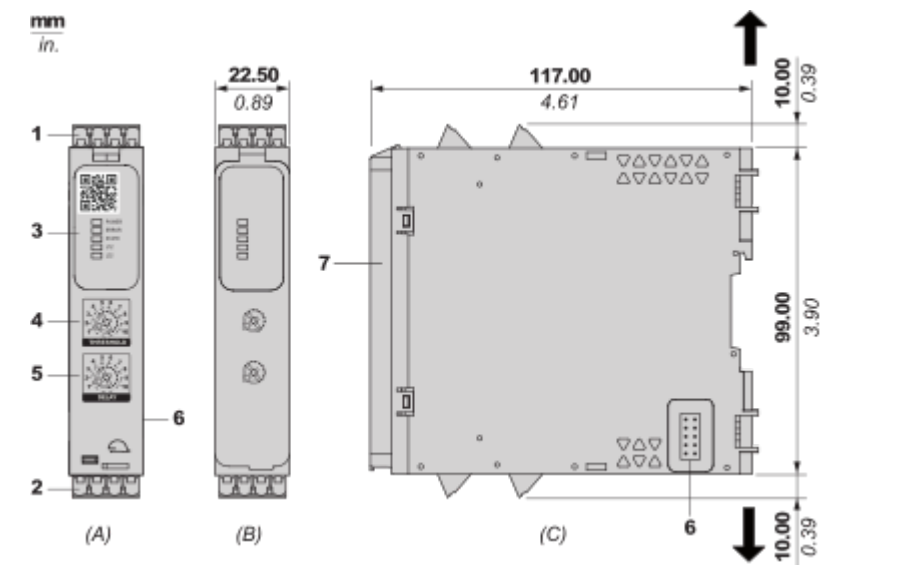
### Repack and remanufacture

|                               |                                                                                                                                                                                                                  |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in % | 0                                                                                                                                                                                                                |
| Circularity Profile           | <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

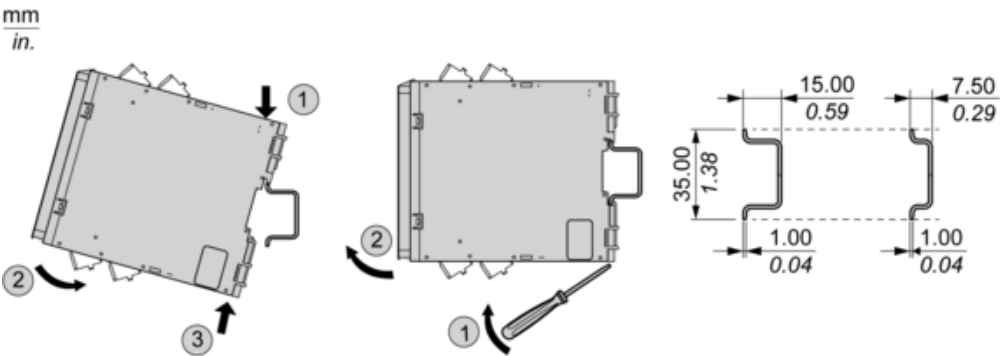


- (A) : Product drawing  
(B) : Spring terminal  
(C) : Side view  
(1) : Removable terminal blocks, top  
(2) : Removable terminal blocks, bottom  
(3) : LED indicators  
(4) : Voltage threshold selector  
(5) : Activation delay selector  
(6) : Connector for optional output extension module XPSUEP (lateral)  
(7) : Sealable transparent cover

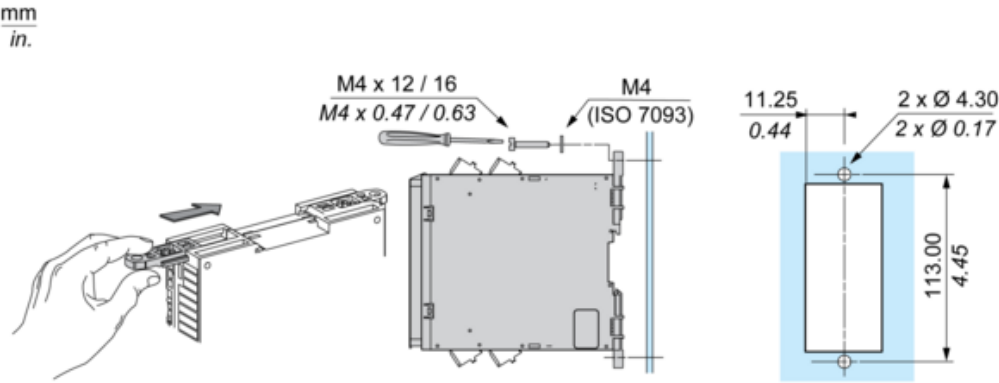
|                                                                      |           |            |           |          |           |
|----------------------------------------------------------------------|-----------|------------|-----------|----------|-----------|
| <div><div>mm</div><div>in.</div><div>12.0</div><div>0.47</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   |

Mounting and Clearance

Mounting to DIN rail

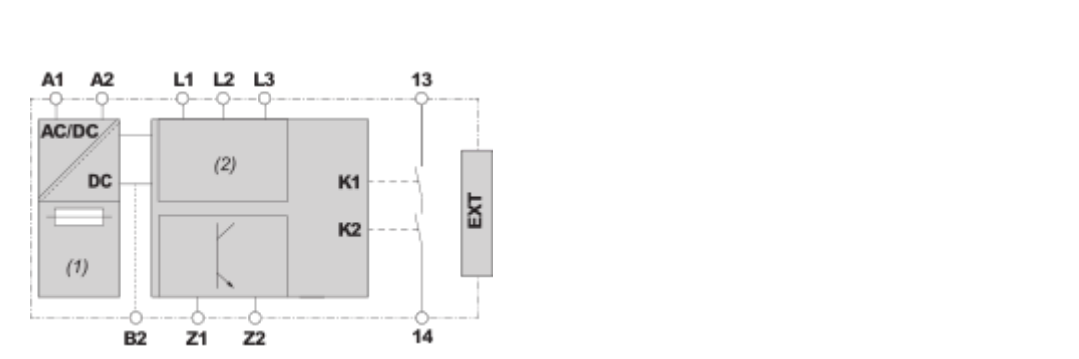


Screw-mounting



Connections and Schema

Wiring Diagram



- (1) : A1-A2 (Power supply)
- (2) : L1-L2-L3 (Input channels of safety-related analog input )
- 13-14 : Terminals of the safety-related outputs
- B2 : Terminal for common reference potential for 24 Vdc signals. The power supplies of the connected equipment must have a common reference potential to be connected to this terminal. In the case of XPSUVN31A\*, terminal B2 must be grounded. In the case of XPSUVN11A\*, the safety module is already grounded via the PELV power supply unit connected to terminals A1 and A2.
- Z1 : Pulsed output for diagnostics, not safety-related
- Z2 : Solid state output, not safety-related
- EXIT : Connector for output extension module XPSUEP

Image of product / Alternate images

Alternative

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