

Product datasheet

Specifications



Safety module, Harmony Safety Automation, Zero speed monitoring with time delay, 24V AC/DC, screw

XPSUVN11AP

EAN Code: 3606482034051

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 Monitoring 3-phase motor with star-delta starting Monitoring 3-phase motor with variable number of poles Monitoring 3-phase motor with variable number of poles and star-delta starting Monitoring dc motor Monitoring servo motor Monitoring 3-phase motor supplied by variable speed drive Monitoring 3-phase motor supplied by servo drive 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 conforming to ISO 13849-1 Can reach SILCL 3 for normally open relay contact conforming to IEC 62061 Can reach SIL 3 for normally open relay contact conforming to IEC 61508
Safety reliability data	MTTFd > 30 years conforming to ISO 13849-1 Dcavg = 98.9 % conforming to ISO 13849-1 PFHd = 2.39E-9 1/h conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 2.39E-9 1/h conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 2.39E-9 1/h conforming to IEC 61508-1 SFF > 99% conforming to IEC 61508-1 Type = B conforming to IEC 61508-1
Product certifications	TÜV cULus
[Us] rated supply voltage	24 V AC - 15...10 % 24 V DC - 20...20 %
Output type	Relay, 1 NO circuit(s), 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

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 for NO relay output circuit
Associated fuse rating	6 A gG for relay output conforming to 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 for relay output
Minimum output voltage	5 V for relay output
[Ui] rated insulation voltage	690 V phase to phase (pollution degree 2) conforming to IEC 60947-1
	400 V phase to earth (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 with power marking for power ON
	LED red with error marking for error
	LED yellow with state marking for status
	LED yellow with L12 marking for input line comparison
	LED yellow with L32 marking for input line comparison
Connections - terminals	Removable screw terminal block solid or flexible cable: 0.2...2.5 mm ²
	Removable screw terminal block flexible with ferrule cable: 0.25...2.5 mm ² single conductor
	Removable screw terminal block solid or flexible cable: 0.2...1.5 mm ² twin conductor
	Removable screw terminal block flexible with ferrule cable: 2 x 0.25...1 mm ² without cable end, with bezel
	Removable screw terminal block flexible with ferrule cable: 2 x 0.5...1.5 mm ² with cable end, with bezel
Mounting support	35 mm symmetrical DIN rail
Depth	120 mm
Height	100 mm
Width	22.5 mm
Product weight	0.2 kg

Environment

IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP54 (mounting area) conforming to IEC 60529
Ambient air temperature for operation	-25...55 °C
Ambient air temperature for storage	-40...70 °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	6.900 cm
Package 1 Width	13.500 cm
Package 1 Length	15.700 cm
Package 1 Weight	263.000 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	4.857 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	Product Environmental Profile

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	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
--------	----

Use Again



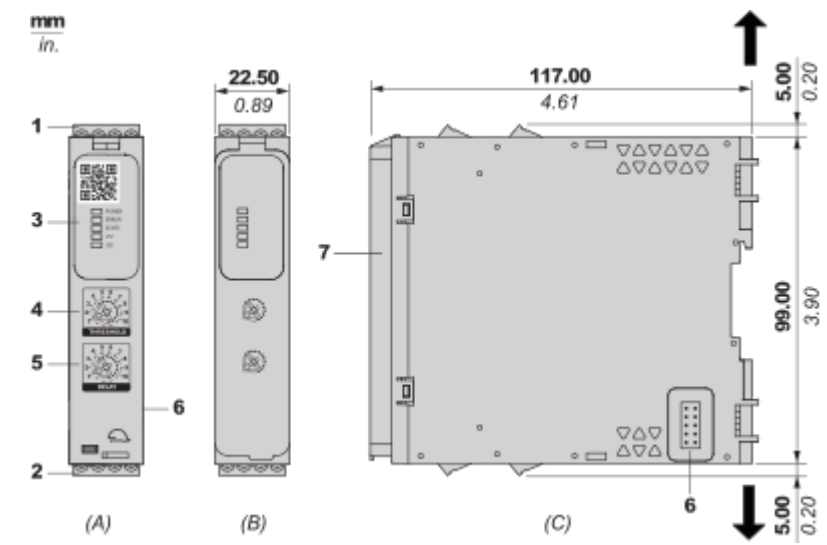
Repack and remanufacture

Recyclability potential, in %	0
End of life manual availability	End of Life Information
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

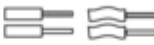
Dimensions Drawings

Dimensions

Front and Side Views

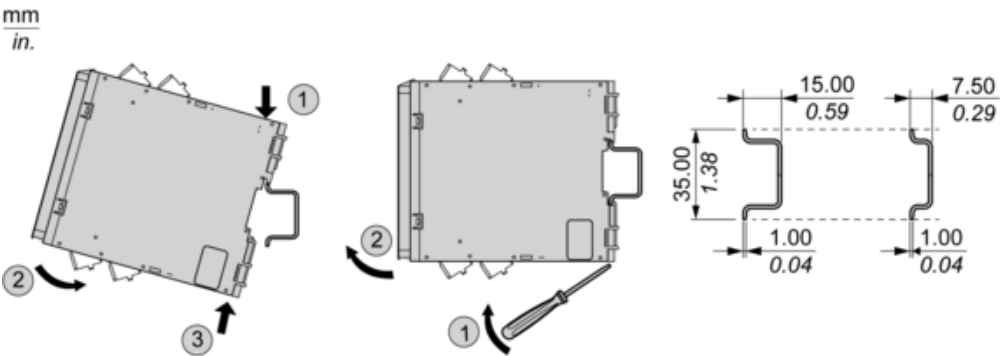


- (A) : Product drawing
(B) : Screw clamp terminal
(C) : Side view
(1) : Removable terminal blocks, top
(2) : Removable terminal blocks, bottom
(3) : LED indicators
(4) : Voltage threshold selector
(5) : Activation delay selector
(6) : Connector for optional output extension module XPSUEP (lateral)
(7)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

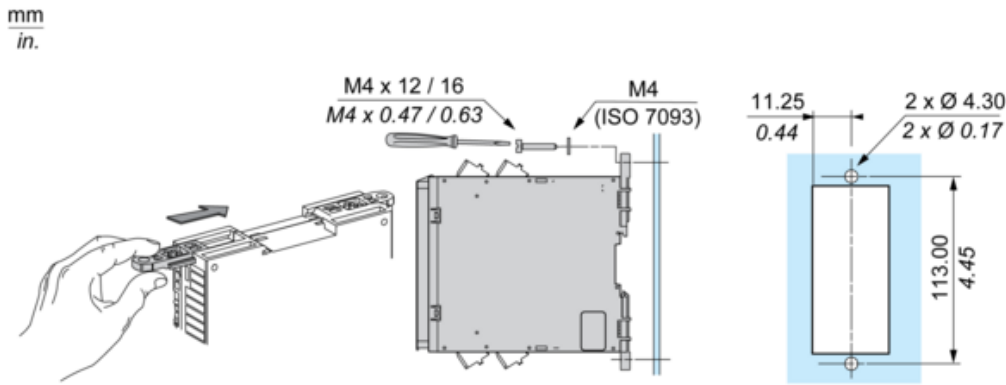
mm in.	7.0–8.0 0.28–0.31					
mm ²	0,2... 2,5	0,25...2,5	0,2... 1,5	0,25...1	0,5... 1,5	
AWG	24... 12	24...12	24...16	24...18	20...16	
 Ø 3,5 mm (0.14 in)					Nm	0.5... 0.6
					lb-in	4,4... 5,3

Mounting and Clearance

Mounting to DIN rail

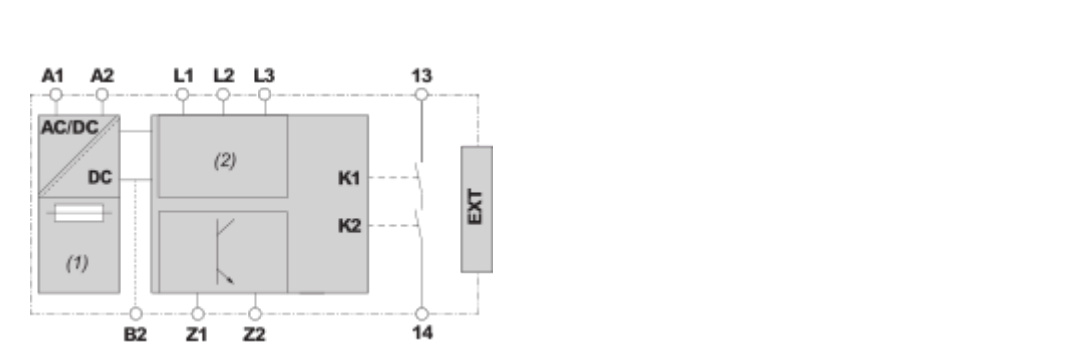


Screw-mounting



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

