

Product data sheet

Specifications



safety module, Harmony XPSU,
potential free 2 NC, NO NC, 2 PNP,
48 to 240V AC or DC, screw

XPSUAB31CP

Main

Range of product	Harmony Safety Automation
Product or component type	Safety module
Safety module name	XPSUAB
Safety module application	For electrical monitoring of two-hand control stations For application with safety switchover contact For emergency stop, guard and light curtain monitoring Monitoring antivalent contacts
Function of module	Emergency stop monitoring 1-channel wiring Guard monitoring 1-channel wiring Monitoring 1 PNP sensor Monitoring two-hand control station type IIIA Magnetic switch monitoring Light curtain monitoring RFID switch Monitoring of electro-sensitive protection equipment (ESPE) Proximity sensor monitoring
Safety level	Can reach PL = c conforming to ISO 13849-1 Can reach SILCL 1 conforming to IEC 62061 Can reach SIL 1 conforming to IEC 61508
Safety reliability data	MTTFd \geq 30 years conforming to ISO 13849-1 Dcavg < 60 % conforming to ISO 13849-1 PFHd = 1177E-09 1/h conforming to ISO 13849-1 HFT = 0 conforming to IEC 62061 PFHd = 1177E-09 1/h conforming to IEC 62061 SFF > 60% conforming to IEC 62061 HFT=0 conforming to IEC 61508-1 PFHd = 1177E-09 1/h conforming to IEC 61508-1 SFF > 60% conforming to IEC 61508-1 Type = B conforming to 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 %

Complementary

Synchronisation time between inputs	0.5 s 2.2 s
Type of start	Automatic/manual/monitored
Power consumption in W	2.0 W 48 V DC

Power consumption in VA	6.5 VA 240 V AC 50/60 Hz
Input protection type	Internal, electronic
safety outputs	1 C/O
safety inputs	1 safety input 24 V DC 5 mA
maximum wire resistance	500 Ohm
Input compatibility	Normally closed circuit conforming to ISO 14119 XC limit switch conforming to ISO 14119 Mechanical contact conforming to ISO 14119 Normally closed circuit conforming to ISO 13850 Antivalent pair conforming to ISO 14119 OSSD pair conforming to IEC 61496-1-2 Two-hand control conforming to EN 574/ISO 13851-III A 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 2 A DC-1 for normally closed relay contact 1 A DC-13 for normally closed relay contact
Control Outputs	2 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	3 A
Associated fuse rating	6 A gG for relay output 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 LED (red) for error LED (yellow) for start LED (yellow) for safety status LED (yellow) for safety input S12 LED (yellow) for safety input S13
Mounting support	35 mm symmetrical DIN rail
Depth	120 mm
Ambient air temperature for operation	-25...55 °C
Height	100 mm
Width	22.5 mm
Net weight	0.200 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
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Product certifications	TÜV cULus
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP54 (mounting area) conforming to IEC 60529
Relative humidity	5...95 % non-condensing

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.5 cm
Package 1 Width	13.5 cm
Package 1 Length	15.5 cm
Package 1 Weight	262.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.939 kg



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

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard No

Packaging without single use plastic No

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number 152cf799-1df7-4892-81b4-4c890187f1d1

REACH Regulation [REACH Declaration](#)

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**

PVC free Yes

Use Again

Repack and remanufacture

End of life manual availability [End of Life Information](#)

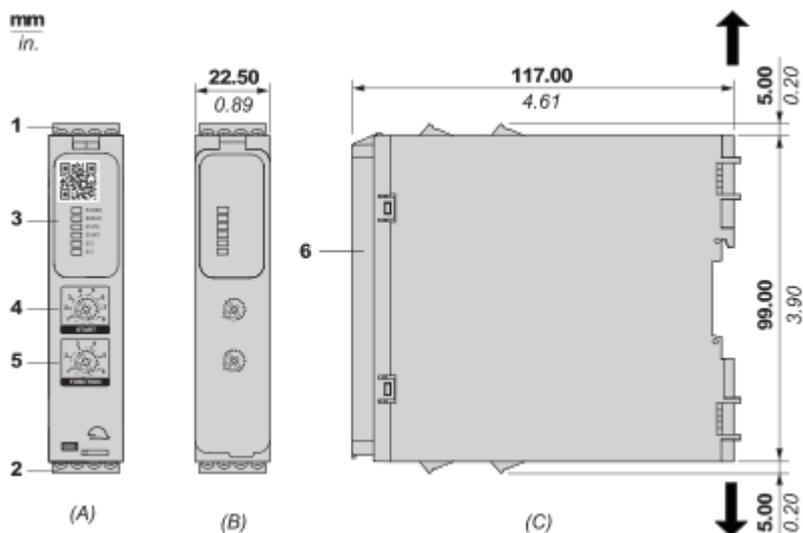
Take-back No

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

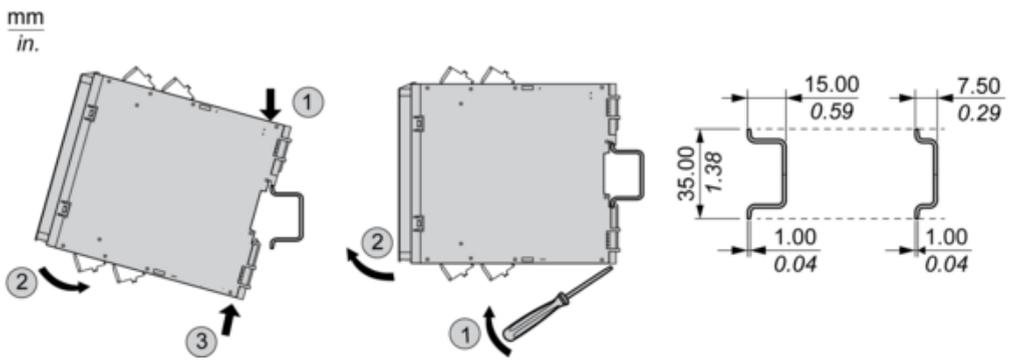


- (A) : Product drawing
- (B) : Screw clamp terminal
- (C) : Side view
- (1) : Removable terminal blocks, top
- (2) : Removable terminal blocks, bottom
- (3) : LED indicators
- (4) : Start function selector
- (5) : Function selector
- (6) : Sealable transparent cover

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

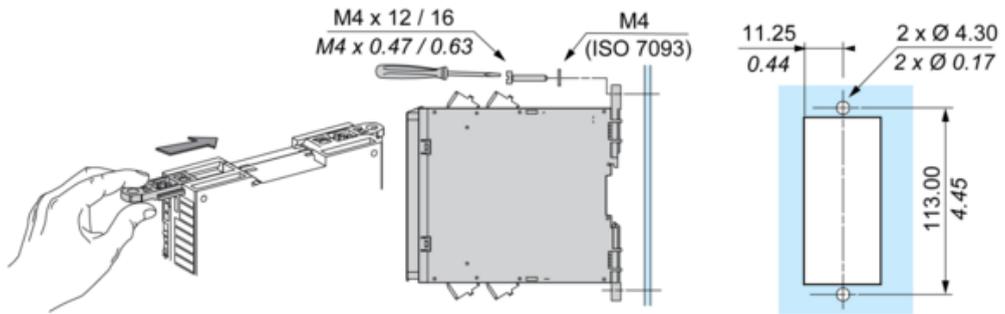
Mounting and Clearance

Mounting to DIN rail



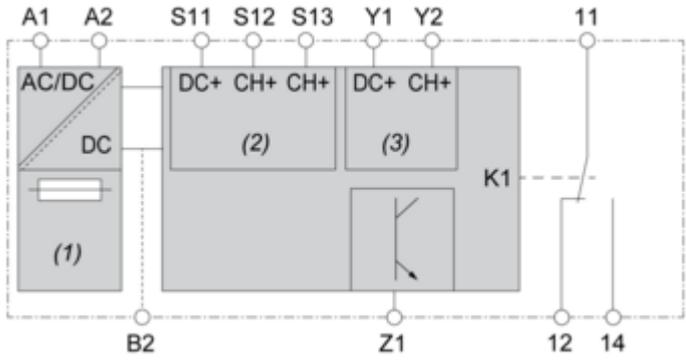
Screw-mounting

mm
in.



Connections and Schema

Wiring Drawing



- (1) : A1-A2 (Power supply)
- (2) : S11-S12-S13 (Single-channel safety input)
- (3) : Y1-Y2 (Start)
- 11-12-14 : Output
- B2 : Common ground terminal
- Z1 : Pulsed output for diagnostics, not safety-related

Image of product / Alternate images

Alternative

