

Product data sheet

Specifications



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

XPSUAB31CC

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 >= 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 spring terminal block, 0.2...2.5 mm² solid or flexible Removable spring terminal block, 0.25...2.5 mm² flexible with ferrule single conductor Removable spring terminal block, 0.2...1.5 mm² solid or flexible twin conductor Removable spring terminal block, 2 x 0.25...1 mm² flexible with ferrule without cable end, with bezel Removable spring terminal block, 2 x 0.5...1.5 mm² 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

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

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
Product 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	14.0 cm
Package 1 Length	15.5 cm
Package 1 Weight	269.0 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	5.156 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

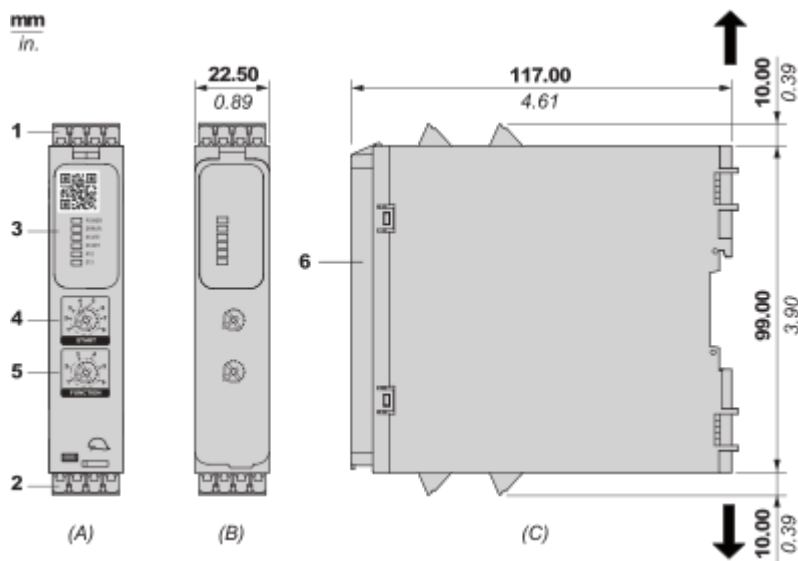
Use Again

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

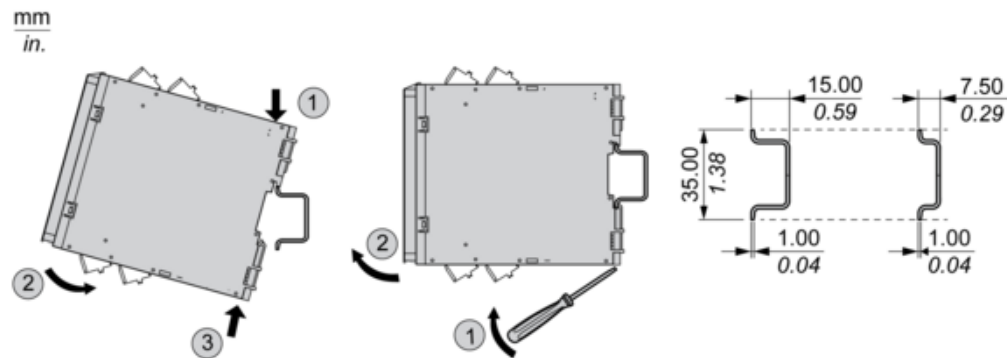


- (A) : Product drawing
(B) : Spring Terminal
(C) : Side view
(1) : Removable terminal blocks, top
(2) : Removable terminal blocks, bottom
(3) : LED indicators
(4) : Start function selector
(5) : Function selector
(6) : Sealable transparent cover

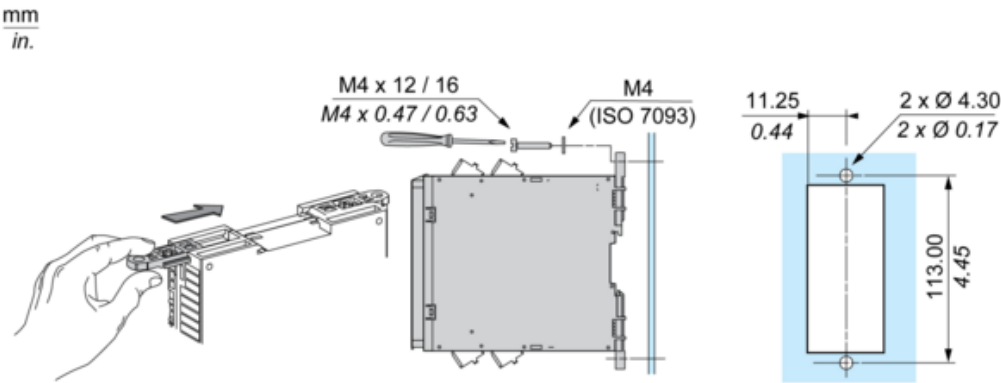
mm in. 12.0 0.47					
mm ²	0,2...2,5	0,25...2,5	0,2...1,5	0,25...1	0,5...1,5
AWG	24...12	24...12	24...16	24...18	20...16

Mounting and Clearance

Mounting to DIN rail

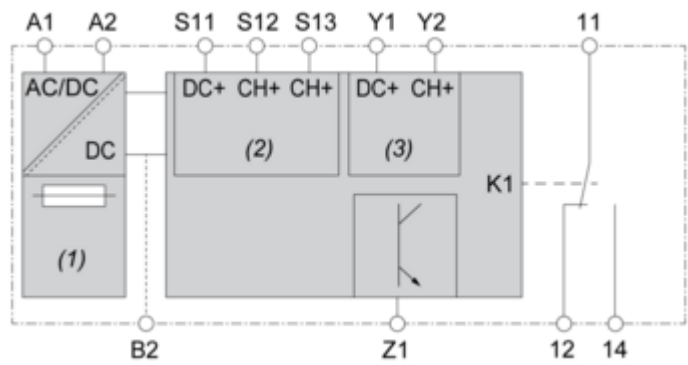


Screw-mounting



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

