

## safety module, Harmony XPSU, Cat 4, potential free 2 NC, NO NC, 2 PNP, 24V AC or DC, screw

XPSUAF13AP

#### Main

Range Of Product	Harmony Safety Automation				
Product Or Component Type	Safety module				
Safety Module Name	XPSUAF				
Safety Module Application	Monitoring antivalent contacts For emergency stop, guard and light curtain monitoring				
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) Proximity sensor monitoring				
Safety Level	Can reach PL e/category 4 conforming to ISO 13849-1 Can reach SILCL 3 conforming to IEC 62061 Can reach SIL 3 conforming to IEC 61508				
Safety Reliability Data	MTTFd > 30 years conforming to ISO 13849-1 Dcavg >= 99 % conforming to ISO 13849-1 PFHd = 1.13E-09 conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 1.13E-09 conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 1.13E-09 conforming to IEC 61508-1 SFF > 99% 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, 0.22.5 mm² solid or flexible Removable screw terminal block, 0.252.5 mm² flexible with ferrule single conductor Removable screw terminal block, 0.21.5 mm² solid or flexible twin conductor Removable screw terminal block, 2 x 0.251 mm² flexible with ferrule without cable end, with bezel Removable screw terminal block, 2 x 0.51.5 mm² flexible with ferrule with cable end, with bezel				
[Us] Rated Supply Voltage	24 V AC - 1510 % 24 V DC - 2020 %				

## Complementary

Synchronisation Time Between Inputs	0.5 s 2 s 4 s
Type Of Start	Automatic/manual/monitored
Power Consumption In W	2 0 W 24 V DC

Power Consumption In Va	5.0 VA 24 V AC 50/60 Hz				
Input Protection Type	Internal, electronic				
Safety Outputs	3 NO				
Safety Inputs	2 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  3-wire proximity sensors PNP				
[le] 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				
Control Outputs	3 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	8 A				
Associated Fuse Rating	10 A gG for NO relay output circuit 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 S22				
Mounting Support	35 mm symmetrical DIN rail				
Depth	120 mm				
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				
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				

Ambient Air Temperature For Storage	-2585 °C	
Relative Humidity	595 % non-condensing	

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	6.700 cm
Package 1 Width	13.700 cm
Package 1 Length	15.500 cm
Package 1 Weight	281.000 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	5.225 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	128
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	50.772 kg

## Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Transparency RoHS/REACh

## Well-being performance

Mercury Free

Rohs Exemption Information

Yes



Pvc Free

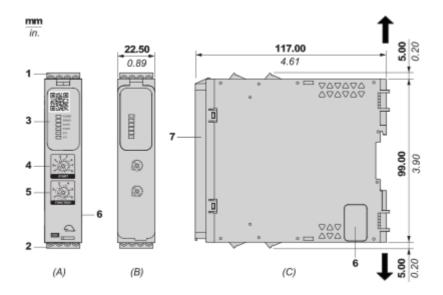
#### **Certifications & Standards**

Reach Regulation	REACh Declaration			
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)			
China Rohs Regulation	China RoHS declaration			
<b>Environmental Disclosure</b>	Product Environmental Profile			
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins			
Weee Circularity Profile	· · · · · · · · · · · · · · · · · · ·			

#### **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

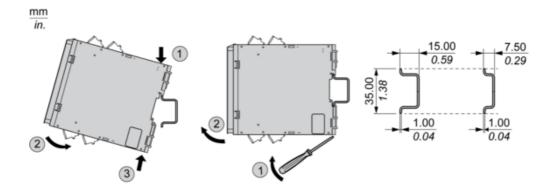
(6): Connector for optional output extension module (lateral)

(7): Sealable transparent cover

mm in.	7.0–8.0 0.28–0.31				<b>a</b>	-	
	mm²	0,2 2,5	0,252,5	0,21,5	0,251	1	0,51,5
	AWG	24 12	2412	2416	2418		2016
		(,c@)		Nm	0.5 0.6		
Ø 3,5 mm (0.14 in)				lb-in	4,4 5,3		

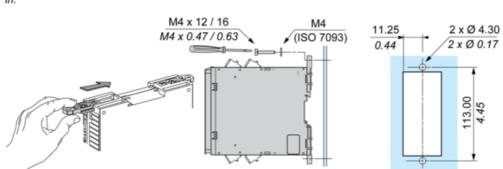
## Mounting and Clearance

### Mounting to DIN rail



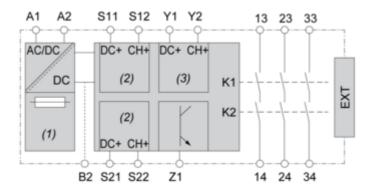
#### **Screw-mounting**





#### Connections and Schema

#### **Wiring Drawing**



(1): A1-A2 (Power supply)

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

(3): Y1-Y2 (Start)

13-23-33-14-24-34 : Output

**EXT**: Connector for optional extension module

**B2**: Common ground terminal

Z1 : Pulsed output for diagnostics, not safety-related