XPSUAF13AP

Safety module, Harmony Safety Automation, Cat.4, potential free NC/NC, NO/NC, PNP/PNP, 24v AC/DC, screw

Green Premium Product

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 ISO 13849-1 Can reach SILCL 3 IEC 62061 Can reach SIL 3 IEC 61508
Safety reliability data	MTTFd > 30 years ISO 13849-1 Dcavg >= 99 % ISO 13849-1 PFHd = 1.13E-09 ISO 13849-1 HFT = 1 IEC 62061 PFHd = 1.13E-09 IEC 62061 SFF > 99% IEC 62061 HFT = 1 IEC 61508-1 PFHd = 1.13E-09 IEC 61508-1 SFF > 99% IEC 61508-1 Type = B IEC 61508-1
Electrical circuit type	NC pair PNP pair Antivalent pair OSSD pair
Connections - terminals	Removable screw terminal block, 0.2...2.5 mm² solid or flexible Removable screw terminal block, 0.25...2.5 mm² flexible with ferrule single conductor Removable screw terminal block, 0.2...1.5 mm² solid or flexible twin conductor Removable screw terminal block, 2 x 0.25...1 mm² flexible with ferrule without cable end, with bezel Removable screw terminal block, 2 x 0.5...1.5 mm² flexible with ferrule with cable end, with bezel
[Us] Rated Supply Voltage	24 V AC - 15...10 % 24 V DC - 20...20 %

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 ISO 14119 XC limit switch ISO 14119 Mechanical contact ISO 14119 Normally closed circuit ISO 13850 Antivalent pair ISO 14119 OSSD pair IEC 61496-1-2 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
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 NO relay output circuit IEC 60947-1
Minimum output current	10 mA relay output
Minimum output voltage	15 V relay output
Maximum response time on input open	20 ms
[Ui] rated insulation voltage	250 V 2)EN/IEC 60947-1
[Uimp] rated impulse withstand voltage	4 kV II EN/IEC 60947-1
Local signalling	For power ON LED (green) For error LED (red) For start LED (yellow) For safety status LED (yellow) For safety input S12 LED (yellow) For safety input S22 LED (yellow)
Mounting Support	35 mm symmetrical DIN rail
Depth	4.72 in (120 mm)
Height	3.94 in (100 mm)
Width	0.89 in (22.5 mm)
Net Weight	0.44 lb(US) (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)EN/IEC 60529 IP40 housing)EN/IEC 60529 IP54 mounting area)EN/IEC 60529
Ambient Air Temperature for Storage	-13…185 °F (-25…85 °C)
Relative Humidity	5…95 % non-condensing

Ordering and shipping details

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Category	22477-SAFETY MODULES (PREVENTA)
Discount Schedule	SAF2
GTIN	3606489601614
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.64 in (6.700 cm)
Package 1 Width	5.39 in (13.700 cm)
Package 1 Length	6.10 in (15.500 cm)
Package 1 Weight	9.52 oz (270.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	11.05 lb(US) (5.010 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	128
Package 3 Height	29.53 in (75.000 cm)
Package 3 Width	23.62 in (60.000 cm)
Package 3 Length	31.50 in (80.000 cm)
Package 3 Weight	111.93 lb(US) (50.772 kg)

Offer Sustainability

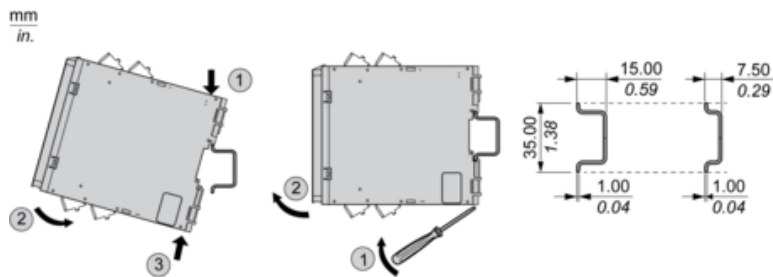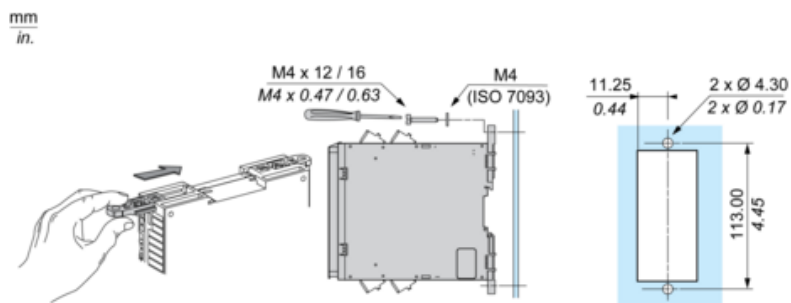|	
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Dimensions

Front and Side Views
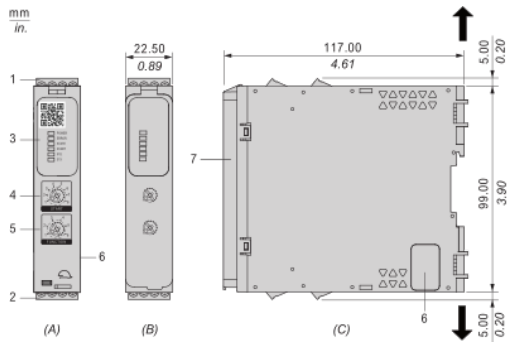
(A) : Product drawing

(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					
mm²		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 to DIN rail

mm / in.

15.00 / 0.59   7.50 / 0.29
35.00 / 1.38
1.00 / 0.04   1.00 / 0.04

Screw-mounting

mm / in.

M4 x 12 / 16
M4 x 0.47 / 0.63

M4 (ISO 7093)

11.25 / 0.44
2 x Ø 4.30
2 x Ø 0.17
113.00 / 4.45

Wiring Drawing
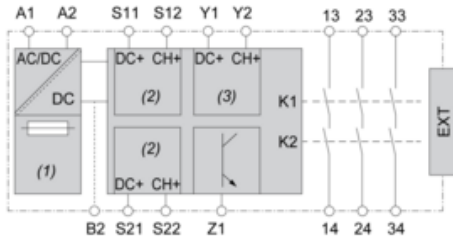
(1) : A1-A2 (Power supply)

(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

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