# Product data sheet Characteristics

# XPSUAK32AP

Safety module, Harmony Safety Automation, Cat.4, features XPSUAF + PNP/NPN, safety mat, 48-240v AC/DC, screw





#### Main

Main				
Range of Product	Harmony Safety Automation			
Product or Component Type	Safety module			
Safety module name	XPSUAK			
Safety module application	Monitoring antivalent contacts For emergency stop, guard and light curtain monitoring Monitoring of pressure-sensitive 4-wire protective devices			
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) Sensing mat/edges Proximity sensor monitoring Monitoring 1 PNP + 1 NPN sensor			
Safety level	Can reach PL e/category 4 for normally open relay contact ISO 13849-1 Can reach SILCL 3 for normally open relay contact IEC 62061 Can reach SIL 3 for normally open relay contact IEC 61508 Can reach PL c/category 1 for normally closed relay contact ISO 13849-1 Can reach SILCL 1 for normally closed relay contact IEC 62061 Can reach SIL 1 for normally closed relay contact IEC 61508			
Safety reliability data	MTTFd > 30 years ISO 13849-1 Dcavg >= 99 % ISO 13849-1 PFHd = 1.61E-09 ISO 13849-1 HFT = 1 IEC 62061 PFHd = 1.61E-09 IEC 62061 SFF > 99% IEC 62061 HFT = 1 IEC 61508-1 PFHd = 1.61E-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, 0.22.5 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	48240 V AC/DC - 1010 %			

## Complementary

Synchronisation time between inputs	0.5 s			
	2 s 4 s			
Type of start	Automatic/manual/monitored			
Power consumption in W	3.0 W 48 V DC			
Power consumption in VA	6.5 VA 240 V AC 50/60 Hz			
Input protection type	Internal, electronic			
Safety outputs	2 NO + 1 NC			
Safety inputs	2			
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			
[le] rated operational current	5 A AC-1 3 A AC-15 5 A DC-1 3 A DC-13 3 A AC-1 1 A AC-15 3 A DC-11 1 A DC-13			
Control outputs	3 pulsed output			
Input/output type	Semiconductor pulsed diagnostic output Z1, 20 mA			
[lth] 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	12 V relay output			
[Ui] rated insulation voltage	250 V 2)EN/IEC 60947-1			
[Uimp] rated impulse withstand voltage	4 kV II EN/IEC 60947-1			
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

Ambient Air Temperature for Operation	-13131 °F (-2555 °C)		
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		
Relative Humidity	595 % non-condensing		

Ordering and shipping details

Category	22477-SAFETY MODULES (PREVENTA)		
Discount Schedule	SAF2		
GTIN	3606489601676		
Nbr. of units in pkg.	1		
Package weight(Lbs)	9.95 oz (282.0 g)		
Returnability	Yes		
Country of origin	ID		

Packing Units

3			
Unit Type of Package 1	PCE		
Package 1 Height	2.76 in (7 cm) 5.51 in (14 cm) 6.30 in (16 cm)		
Package 1 width			
Package 1 Length			
Unit Type of Package 2	S03		
Number of Units in Package 2	16		
Package 2 Weight	11.87 lb(US) (5.382 kg)		
Package 2 Height	11.81 in (30 cm)		
Package 2 width	11.81 in (30 cm)		
Package 2 Length	15.75 in (40 cm)		
Package 3 Height	11.81 in (30 cm)		

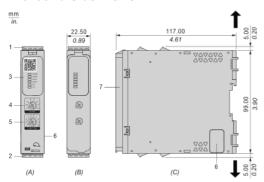
Offer Sustainability

Sustainable offer status	Green Premium product  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		
California proposition 65			
REACh Regulation	☑ REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EV RoHS Declaration		
Mercury free	Yes		
RoHS exemption information	€Yes		
China RoHS Regulation	China RoHS Declaration		
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		

## XPSUAK32AP

#### **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

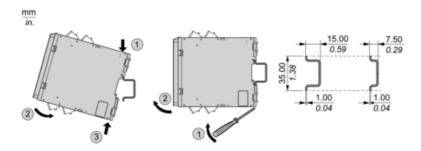
(6): Connector for optional output extension module (lateral)

(7): Sealable transparent cover

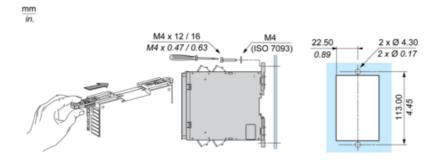
in	7.0–8.0 0.28–0.31	1 l	44	== &=	æ	- @>-
	mm²	0,2 2,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	24 12	2412	2416	2418	2016
Г			()c@pp		Nm	0.5 0.6
Ø 3,5 mm (0.14 in)		(,,,		lb-in	4,4 5,3	

# XPSUAK32AP

## Mounting to DIN rail



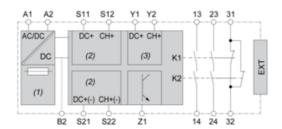
## Screw-mounting



# Product data sheet Connections and Schema

## XPSUAK32AP

### Wiring Drawing



(1): A1-A2 (Power supply)

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

(3): Y1-Y2 (Start)

13-23-31-14-24-32 : Output

EXT: Connector for optional extension module

B2: Common ground terminal

Z1 : Pulsed output for diagnostics, not safety-related