Product data sheet Characteristics

XPSUAT33A3AP

Safety module, Harmony Safety Automation, Cat.4, features XPSUAK + delayed outputs, 48-240v AC/DC, screw





Range of Product	Harmony Safety Automation					
Product or Component Type	Safety module					
Safety module name	XPSUAT					
Safety module application	Monitoring antivalent contacts For emergency stop, guard and light curtain monitoring Monitoring of pressure-sensitive 4-wire protective devices				For emergency stop, guard and light curtain monitoring Monitoring of pressure-sensitive 4-wire protective	
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 = 1.47E-09 for SS0 ISO 13849-1 PFHd = 1.48E-09 for SS1 ISO 13849-1 HFT = 1 IEC 62061 PFHd = 1.47E-09 for SS0 IEC 62061 PFHd = 1.48E-09 for SS1 IEC 62061 SFF > 99% IEC 62061 HFT = 1 IEC 61508-1 PFHd = 1.47E-09 for SS0 IEC 61508-1 PFHd = 1.48E-09 for SS1 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						



Complementary

complementary				
Synchronisation time between inputs	0.5 s			
	2 s 4 s			
Type of start	Automatic/manual/monitored			
Power consumption in W	4 W 48 V DC			
Power consumption in VA	10 VA 240 V AC 50/60 Hz			
Input protection type	Internal, electronic			
Safety outputs	3 NO			
	3 NO			
	1 NC			
Safety inputs	2			
	1			
Maximum wire resistance	500 Ohm			
Time delay range	0900 s			
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			
Reference Constants	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-1			
	1 A DC-13			
Control outputs	4 pulsed output			
Input/output type	Pulsed output for diagnostics Z1, 20 mA			
	Semiconductor output Z2, 20 mA			
[Ith] conventional free air thermal current	16 A			
Associated fuse rating	10 A gG NO relay output circuit IEC 60947-1			
Minimum output current	20 mA relay output			
Minimum output voltage	24 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			
Mounting Support	35 mm symmetrical DIN rail			
Depth	4.72 in (120 mm)			
Height	3.94 in (100 mm)			
Width	1.77 in (45 mm)			
	1.77 in (45 mm)			

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	ΤÜV
	cULus
IP degree of protection	IP54 mounting area)EN/IEC 60947-1
	IP40 housing)EN/IEC 60947-1
	IP20 terminals)EN/IEC 60947-1
Ambient Air Temperature for Storage	-13185 °F (-2585 °C)
Relative Humidity	595 % non-condensing

Ordering and shipping details

Category	22477 - SAFETY MODULES (PREVENTA)		
Discount Schedule	SAF2		
GTIN	3606489601713		
Nbr. of units in pkg.	1		
Package weight(Lbs)	15.73 oz (446 g)		
Returnability	Yes		
Country of origin	ID		

Packing Units

0		
Unit Type of Package 1	PCE	
Package 1 Height	2.56 in (6.5 cm)	
Package 1 width	5.39 in (13.7 cm)	
Package 1 Length	6.10 in (15.5 cm)	
Unit Type of Package 2	S03	
Number of Units in Package 2	16	
Package 2 Weight	17.31 lb(US) (7.853 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			
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) ^A EU R Declaration			
Mercury free	Yes			
RoHS exemption information	₫ _{Yes}			
China RoHS Regulation	Grina RoHS Declaration			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	Pend 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			

Product data sheet Dimensions Drawings

XPSUAT33A3AP

Dimensions

Front and Side Views



- (2) : Removable terminal blocks, bottom
- (3) : LED indicators
- (4) : Start function selector
- (5) : Function selector
- (6) : Delay factor selector
- (7): Delay base selector
- (8) : Connector for optional output extension module (lateral)
- (9) : Sealable transparent cover

mm in.	7.0–8.0 0.28–0.31) []	88		æ	- @-
	mm ²	0,2 2,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	24 12	2412	2416	2418	3 2016
		() c () m		Nm	0.5 0.6	
Ø 3,5 mm (0.14 in)		0.00	سرر	lb-in	4,4 5,3	

XPSUAT33A3AP

Mounting to DIN rail



Screw-mounting

mm in.



Product data sheet **Connections and Schema**

XPSUAT33A3AP

Wiring Drawing



(1): A1-A2 (Power supply)

- (2): S11-S12-S21-S22-S31-S32 (Single-channel safety input)
- (3) : Y1-Y2 (Start)

13-23-33-47-57-67-75-14-24-34-48-58-68-76 : Output

- EXT : Connector for optional extension module
- B2 : Common ground terminal
- Z1 : Pulsed output for diagnostics, not safety-related
- Z2 : Solid state output, not safety-related