Product data sheet Characteristics

XPSUDN33AP

Preventa module Cat.4 features 6*XPSUAF 48-240vac/dc screw





Main

Range of product	Preventa Safety automation		
Product or component type	Preventa safety module		
Safety module name	XPSUDN		
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 for normally open relay contact conforming to ISO 13849-1 Can reach SILCL 3 for normally open relay contact conforming to IEC 62061 Can reach SIL 3 for normally open relay contact conforming to IEC 61508 Can reach PL c/category 1 for normally closed relay contact conforming to ISO 13849-1 Can reach SILCL 1 for normally closed relay contact conforming to IEC 62061 Can reach SIL 1 for normally closed relay contact conforming to IEC 61508		
Safety reliability data	MTTFd > 30 years conforming to ISO 13849-1 Dcavg >= 99 % conforming to ISO 13849-1 PFHd = 1.36E-09 conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 1.36E-09 conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 1.36E-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	48240 V AC/DC - 1010 %		

Complementary

Complementary			
Synchronisation time between inputs	0.5 s 2 s 2.2 s 4 s		
Type of start	Automatic/manual/monitored		
Power consumption in W	6 W 48 V DC		
Power consumption in VA	25 VA 240 V AC 50/60 Hz		
Input protection type	Internal, electronic		
Safety outputs	3 NO + 1 NC		
Safety inputs	6 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 3 A AC-1 for normally closed relay contact 1 A AC-15 for normally closed relay contact 3 A DC-1 for normally closed relay contact 1 A DC-13 for normally closed relay contact 1 A DC-13 for normally closed relay contact		
Control outputs	7 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	16 A		
Associated fuse rating	10 A gG for NO relay output circuit conforming to IEC 60947-1 4 A gG for NC relay output circuit conforming to IEC 60947-1		
Minimum output current	10 mA for relay output		
Minimum output voltage	12 V for relay output		
Maximum response time on input open	20 ms		
[Ui] rated insulation voltage	250 V (pollution degree 2) conforming to EN/IEC 60947-1		
[Uimp] rated impulse withstand voltage	4 kV overvoltage category II conforming to EN/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 LED (yellow) for safety input S22 LED (yellow) for safety input S23 LED (yellow) for safety input S32 LED (yellow) for safety input S33 LED (yellow) for safety input S42 LED (yellow) for safety input S42 LED (yellow) for safety input S43 LED (yellow) for safety input S52 LED (yellow) for safety input S52 LED (yellow) for safety input S53 LED (yellow) for safety input S62 LED (yellow) for safety input S73		
Mounting support	35 mm symmetrical DIN rail		
Depth	120 mm		
Height	100 mm		
Width	45 mm		
Net weight	0.350 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 EN/IEC 60947-1	
	IP40 (housing) conforming to EN/IEC 60947-1	
	IP54 (mounting area) conforming to EN/IEC 60947-1	
Ambient air temperature for operation	-2550 °C at 24 V AC	
	-2555 °C at 24 V DC	
Ambient air temperature for storage	-2585 °C	
Relative humidity	595 % non-condensing	

Packing Units

Package 1 Weight	340.000 g	
Package 1 Height	6.400 cm	
Package 1 width	13.300 cm	
Package 1 Length	15.300 cm	

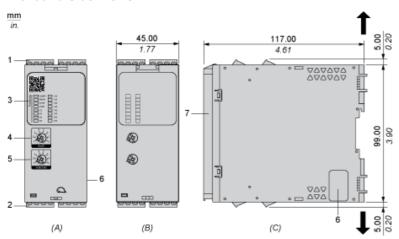
Offer Sustainability

Sustainable offer status	Green Premium product		
REACh Regulation	REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEL 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		

XPSUDN33AP

Dimensions

Front and Side Views

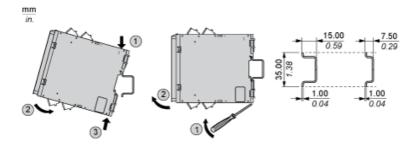


- (A): Product drawing
- (B): Screw clamp terminal
- (C): Side view
- (1): Removable terminal blocks, top
- (2): Removable terminal blocks, bottom (3): LED indicators
- (4): Start function selector
- (5): Function selector
- (6): Connector for optional output extension module (lateral)
- (7): Sealable transparent cover

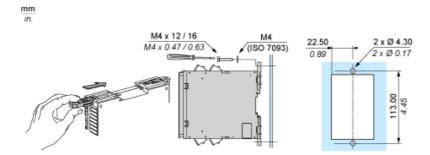
mm in.	7.0-8.0 0.28-0.31	11	88	== 2=	a D-	- @>-
	mm ²	0,2 2,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	24 12	2412	2416	2418	3 2016
		()c@m		Nm	0.5 0.6	
Ø 3,5 mm (0.14 in)		6.06	{)D	lb-in	4,4 5,3	

XPSUDN33AP

Mounting to DIN rail



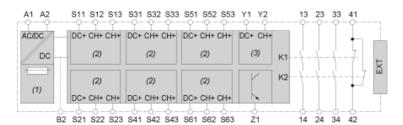
Screw-mounting



Product data sheet Connections and Schema

XPSUDN33AP

Wiring Drawing



(1): A1-A2 (Power supply)

(2): S11-S12-S13-S31-S32-S33-S51-S52-S53-S21-S22-S23-S41-S42-S43-S61-S62-S63 (Single-channel safety input) (3): Y1-Y2 (Start)

13-23Q3tp4.tt-14-24-34-42:

EXT : Connector for optional extension module

B2: Common ground terminal

Z1: Pulsed output for diagnostics, not safety-related