## Product data sheet Characteristics

# XPSUDN13AC

# Preventa module Cat.4 features 6\*XPSUAF 24vac/dc spring





#### 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 = 0.88E-09 conforming to ISO 13849-1 HFT = 1 conforming to IEC 62061 PFHd = 0.88E-09 conforming to IEC 62061 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 0.88E-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 spring terminal block, 0.22.5 mm² solid or flexible Removable spring terminal block, 0.252.5 mm² flexible with ferrule single conductor Removable spring terminal block, 0.21.5 mm² solid or flexible twin conductor Removable spring terminal block, 2 x 0.251 mm² flexible with ferrule without cable end, with bezel Removable spring 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

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	4.5 W 24 V DC		
Power consumption in VA	10.5 VA 24 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		
Control outputs	7 on/off configurable pulsed output		
Input/output type	Semiconductor pulsed diagnostic output 24 V DC, 20 mA Z1, not safety-related		
[lth] 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 S62 LED (yellow) for safety input S73		
Mounting support	35 mm symmetrical DIN rail		
Depth	120 mm		
Height	100 mm		
Width	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 IEC 61508-7 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

•		
Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	417 g	
Package 1 Height	7 cm	
Package 1 width	13.5 cm	
Package 1 Length	15.5 cm	

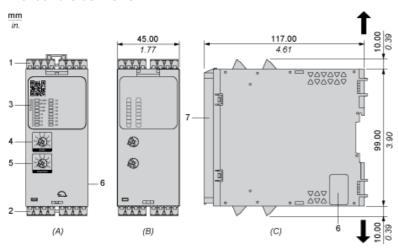
#### Offer Sustainability

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

## XPSUDN13AC

#### **Dimensions**

#### Front and Side Views



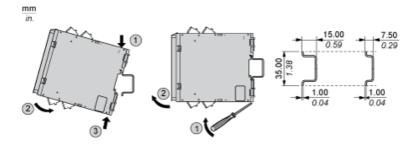
- (A): Product drawing
- (B): Spring Terminal (C): Side view
- (1): Removable terminal blocks, top
- (2): Removable terminal blocks, bottom
- (3): LED indicators
- (4): Start function selector
- (5): Function selector
- (6): Connector for optional output extension module (lateral)(7): Sealable transparent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

mm in.	0.47	11	44	== &=	<u>a</u> -	æD-
	mm <sup>2</sup>	0,22,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	2412	2412	2416	2418	2016

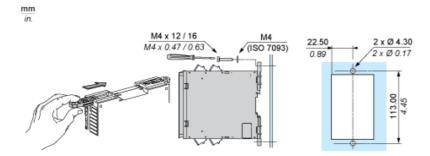
# Product data sheet Mounting and Clearance

# XPSUDN13AC

#### Mounting to DIN rail



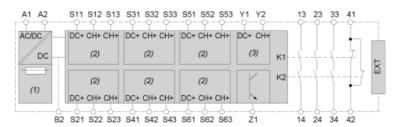
#### Screw-mounting



## Product data sheet Connections and Schema

### XPSUDN13AC

#### 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