Product data sheet
Characteristics

XPSUAT33A3AP
Preventa module Cat.4 features XPSUAK + delayed outputs 48-240vac/dc screw

Main

Range of product	Preventa Safety automation
Product or component type	Preventa 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
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 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 = 1.47E-09 conforming to ISO 13849-1 for SS0 PFHd = 1.48E-09 conforming to ISO 13849-1 for SS1 HFT = 1 conforming to IEC 62061 PFHd = 1.47E-09 conforming to IEC 62061 for SS0 PFHd = 1.48E-09 conforming to IEC 62061 for SS1 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 1.47E-09 conforming to IEC 61508-1 for SS0 PFHd = 1.48E-09 conforming to IEC 61508-1 for SS1 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, 0.2...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	48...240 V AC/DC - 10...10 %

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
Auxiliary contact composition	3 NO configurable 3 NO immediate 1 NC configurable
Number of inputs	2 positive safety input 24 V DC 8 mA 1 negative safety input
Maximum line resistance	500 Ohm
Time delay range	0...900 s
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
Output type	Relay output : 250 V AC, AC-1, D300 for normally open relay contact Relay output : 250 V AC, AC-15, D300 for normally closed relay contact Relay output : 24 V DC, DC-1, R300 for normally open relay contact Relay output : 24 V DC, DC-13, R300 for normally closed relay contact
[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 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
Number of outputs	4 on/off configurable pulsed output
Input/output type	Pulsed output for diagnostics 24 V DC, 20 mA Z1, not safety-related Semiconductor output 24 V DC, 20 mA Z2, 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
Minimum output current	20 MA for relay output
Minimum output voltage	24 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 output instantaneous LED (yellow) for safety output delayed LED (yellow) for safety input S12 LED (yellow) for safety input S22 LED (yellow) for safety input S32
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	IP54 (mounting area) conforming to EN/IEC 60947-1 IP40 (housing) conforming to EN/IEC 60947-1 IP20 (terminals) conforming to EN/IEC 60947-1
Ambient air temperature for storage	-25…85 °C
Relative humidity	5…95 % non-condensing

Packing Units

Package 1 Weight	446 G
Package 2 Weight	460 G
Package 3 Weight	7.853 Kg

Offer Sustainability

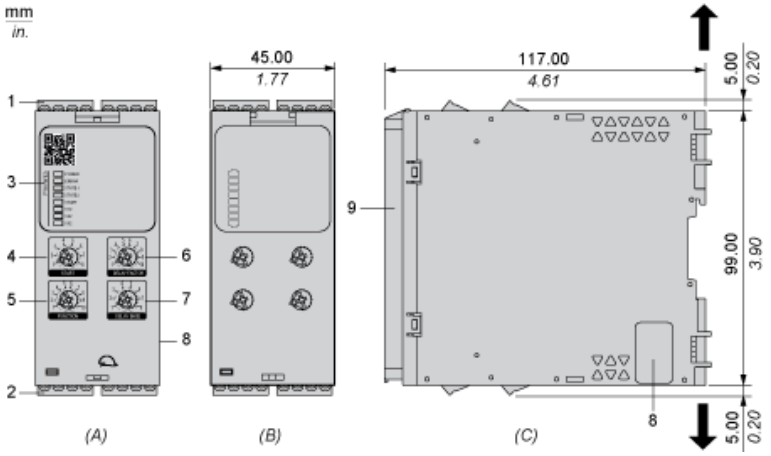
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product 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

Contractual warranty

Warranty	18 months

Dimensions

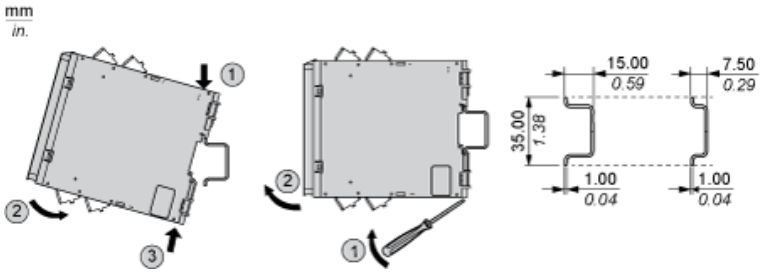
Front and Side Views



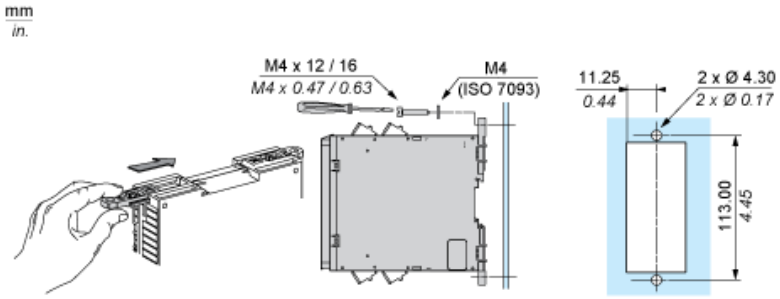
(A) : Product drawing
(B) : Screw clamp terminal
(C) : Side view
(1) : Removable terminal blocks, top
(2) : Removable terminal blocks, bottom
(3) : LED indicators
(4) : Start function selector
(5) : Function selector
(6) : Delay factor selector
(7) : Delay base selector
(8) : Connector for optional output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

mm / in. 7.0–8.0 / 0.28–0.31					
mm^2	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

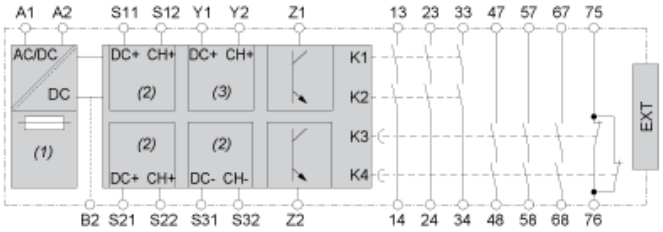
Mounting to DIN rail



Screw-mounting



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

Product Life Status :	Commercialised