Product Datasheet

Characteristic

XPSUAT13A3AP

safety module, Harmony XPSU, Cat4, features XPSUAK with delayed outputs, 24V AC or DC, screw

Green Premium™ Product

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Main

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
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 = 0.94E-09 conforming to ISO 13849-1 for SS0 PFHd = 0.95E-09 conforming to ISO 13849-1 for SS1 HFT = 1 conforming to IEC 62061 PFHd = 0.94E-09 conforming to IEC 62061 for SS0 PFHd = 0.95E-09 conforming to IEC 62061 for SS1 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 61508-1 PFHd = 0.94E-09 conforming to IEC 61508-1 for SS0 PFHd = 0.95E-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	24 V AC - 15…10 % 24 V DC - 20…20 %

Complementary

Synchronisation time between inputs	0.5 s 2 s 4 s
Type of start	Automatic/manual/monitored
Power consumption in W	3 W 24 V DC
Power consumption in VA	6.5 VA 24 V AC 50/60 Hz
Input protection type	Internal, electronic
Auxiliary contact composition	1 NC configurable 3 NO configurable 3 NO immediate
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 off delay
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
[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	Semiconductor output 24 V DC, 20 mA Z2, not safety-related Pulsed output for diagnostics 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
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 IEC 60947-1
[Uimp] rated impulse withstand voltage	4 kV overvoltage category II conforming to IEC 60947-1
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 IEC 60947-1
	IP40 (housing) conforming to IEC 60947-1
	IP20 (terminals) conforming to IEC 60947-1
Ambient air temperature for storage	-25…85 °C
Relative humidity	5…95 % non-condensing

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.500 cm
Package 1 Width	15.500 cm
Package 1 Length	13.500 cm
Package 1 Weight	440.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.706 kg
Unit Type of Package 3	P06
Number of Units in Package 3	128
Package 3 Height	77.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	72.160 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
Mercury free	Yes
China RoHS Regulation	X
RoHS exemption information	Yes
Environmental Disclosure	ENVPEP1811003EN
Circularity Profile	ENVEOLI1811003EN
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes