

safety module, Harmony XPS, time delayed output, for Estop, guard, OSSD, 24V AC or DC, spring

XPSBAT12A1AC

Main

Range of product	Harmony Safety Automation			
Product or component type	Safety module			
Safety module name	XPSBAT			
Safety module application	For emergency stop and protective guard applications For OSSD monitoring			
Function of module	Emergency stop button with 2 NC contacts Guard monitoring with 1 or 2 limit switches Light curtain monitoring RFID switch Monitoring of electro-sensitive protection equipment (ESPE)			
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 62061 Can reach SIL 1 for normally closed relay contact conforming to IEC 61508 MTTFd > 30 years conforming to ISO 13849-1 Dcavg >= 99 % conforming to ISO 13849-1 PFHd = 0.98E-09 conforming to ISO 13849-1 for SS0 PFHd = 0.96E-09 conforming to ISO 13849-1 for SS1 HFT = 1 conforming to IEC 62061 PFHd = 0.98E-09 conforming to IEC 62061 for SS0 SFF > 99% conforming to IEC 62061 HFT = 1 conforming to IEC 62061 PFHd = 0.98E-09 conforming to IEC 61508-1 PFHd = 0.98E-09 conforming to IEC 61508-1 for SS0 SFF > 99% conforming to IEC 61508-1 Type = B conforming to IEC 61508-1			
Safety reliability data				
Electrical circuit type	NC 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

Synchronisation time between inputs	0.5 s 2 s

Type of start Automatic/manual/monitored

Power consumption in W	2 W 24 V DC				
Power consumption in VA	5 VA 24 V AC 50/60 Hz				
Input protection type	Internal, electronic				
safety outputs	2 NO immediate 1 NO configurable				
safety inputs	2 positive safety input 24 V DC 5 mA				
maximum wire resistance	500 Ohm				
Time delay range	0900 s off delay				
Input compatibility	Normally closed circuit conforming to ISO 14119 Mechanical contact conforming to ISO 14119 OSSD pair conforming to IEC 61496-1-2 Normally closed circuit conforming to ISO 13850 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				
control outputs	3 on/off configurable pulsed output				
Input/output type	Semiconductor output 24 V DC, 20 mA Z1, not safety-related				
[Ith] conventional free air thermal current	12 A				
Associated fuse rating	6 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				
Local signalling	LED green with power marking for power ON LED red with error marking for error LED yellow with state 1 marking for safety output instantaneous LED yellow with state 2 marking for safety output delayed LED yellow with start 1 marking for start LED yellow with start 2 marking for start LED yellow with S12 marking for safety input S12 LED yellow with S22 marking for safety input S22				
Mounting support	35 mm symmetrical DIN rail				
Depth	120 mm				
Height	100 mm				
Width	22.5 mm				
Product 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 61508-6 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 IEC 60529 IP40 (housing) conforming to IEC 60529 IP54 (mounting area) conforming to IEC 60529		
Ambient air temperature for operation	-2555 °C		
Ambient air temperature for storage	-2585 °C		
Relative humidity	595 % non-condensing		

Packing Units

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.8 cm
Package 1 Width	13.8 cm
Package 1 Length	15.5 cm
Package 1 Weight	292.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	5.409 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Total lifecycle Carbon footprint	71
Environmental Disclosure	Product Environmental Profile

Use Better

⊗ Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	152cf799-1df7-4892-81b4-4c890187f1d1
REACh Regulation	REACh Declaration
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

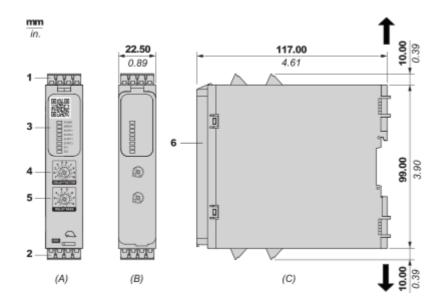
Use Again

○ Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

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): Delay factor selector (5) : Delay base selector

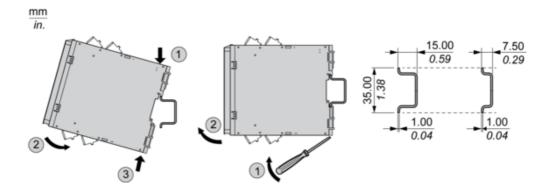
(6): Sealable transparent cover

mm in.	0.47		₩ ₩			
	mm²	0,22,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	2412	2412	2416	2418	2016

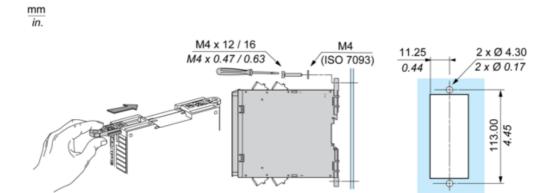
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Mounting and Clearance

Mounting to DIN rail

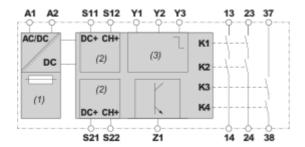


Screw-mounting



Connections and Schema

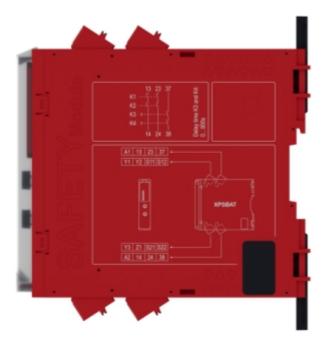
Wiring Diagram



- (1): A1-A2 (Power supply)
- (2): S11–S21 (Control outputs (DC+) of safety-related inputs), S12-S22 (Input channels (CH+) of safety-related inputs)
- (3): Y1 (Control output of Start/Restart input), Y2 (Input channel for automatic/manual start), Y3 (Input channel for monitored start with falling edge)
- 13-14-23-24: Terminals of the safety-related outputs (instantaneous)
- 37-38 : Terminals of the safety-related outputs (delayed)
- Z1 : Solid state output, not safety-related

Image of product / Alternate images

Alternative













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