Product data sheet Characteristics

XPSBAC14AC

safety module, Harmony XPS, estop or guard, connected to supply terminals 24V AC or DC, no inputs, spring





Main

Range of product	Harmony Safety Automation			
Product or component type	Safety module			
Safety module name	XPSBAC			
Safety module application	For emergency stop and protective guard applications			
Function of module	Emergency stop button with 2 NC contacts Guard monitoring with 1 or 2 limit switches			
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			
Safety reliability data	MTTFd > 30 years conforming to ISO 13849-1 for normally open relay contact Dcavg >= 99 % conforming to ISO 13849-1 for normally open relay contact PFHd = 0.95E-09 conforming to ISO 13849-1 for normally open relay contact HFT = 1 conforming to IEC 62061 for normally open relay contact PFHd = 0.95E-09 conforming to IEC 62061 for normally open relay contact SFF > 99% conforming to IEC 62061 for normally open relay contact HFT = 1 conforming to IEC 61508-1 for normally open relay contact HFT = 1 conforming to IEC 61508-1 for normally open relay contact PFHd = 0.95E-09 conforming to IEC 61508-1 for normally open relay contact SFF > 99% conforming to IEC 61508-1 for normally open relay contact Type = B conforming to IEC 61508-1 for normally open relay contact MTTFd > 30 years conforming to ISO 13849-1 for normally closed relay contact DC > 60 % conforming to ISO 13849-1 for normally closed relay contact PFHd = 0.95E-09 conforming to ISO 13849-1 for normally closed relay contact HFT=0 conforming to IEC 62061 for normally closed relay contact PFHd = 0.95E-09 conforming to IEC 62061 for normally closed relay contact HFT=0 conforming to IEC 62061 for normally closed relay contact FFHd = 0.95E-09 conforming to IEC 62061 for normally closed relay contact FFHd = 0.95E-09 conforming to IEC 61508-1 for normally closed relay contact FFHd = 0.95E-09 conforming to IEC 61508-1 for normally closed relay contact FFHd = 0.95E-09 conforming to IEC 61508-1 for normally closed relay contact FFH = 0.95E-09 conforming to IEC 61508-1 for normally closed relay contact FFH = 0.95E-09 conforming to IEC 61508-1 for normally closed relay contact			
Electrical circuit type	NC pair			
	<u> </u>			

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	Unlimited		
Type of start	Automatic/manual/monitored		
Power consumption in W	1.5 W 24 V DC		
Power consumption in VA	3.5 VA 24 V AC 50/60 Hz		
Input protection type	Internal, electronic		
Safety outputs	4 NO + 1 NC		
Safety inputs	0		
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		
Input terminal	Power supply		
[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	0		
[lth] conventional free air thermal current	6 A		
Associated fuse rating	10 A gG for NO relay output circuit conforming to IEC 60947-1		
Minimum output current	10 mA for relay output		
Minimum output voltage	5 V for relay output		
Response time	150 ms at 24 V AC 80 ms at 24 V DC		
[Ui] rated insulation voltage	300 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 marking for status LED yellow with start1 marking for start input LED yellow with start2 marking for start input		
Mounting support	35 mm symmetrical DIN rail		
Depth	120 mm		
Height	100 mm		
Width	22.5 mm		
Net weight	0.200 kg		

Environment

Ambient air temperature for operation	-2555 °C	
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[RETURN]cULus	
IP degree of protection	IP20 (terminals) conforming to IEC 60529	
	IP40 (housing) conforming to IEC 60529	
	IP54 (mounting area) conforming to IEC 60529	
elative humidity 595 % non-condensing		

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	6.5 cm	
Package 1 Width	13.5 cm	
Package 1 Length	15.5 cm	
Package 1 Weight	301.0 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	5.518 kg	

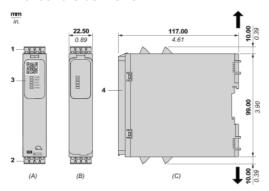
Offer Sustainability

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

XPSBAC14AC

Dimensions

Front and Side Views



(A): Product drawing

(B): Spring terminal

(C): Side view

(1): Removable terminal blocks, top

(2): Removable terminal blocks, bottom

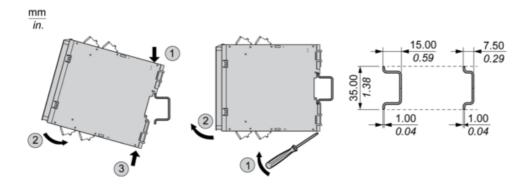
(3): LED indicators

(4): Sealable transparent cover

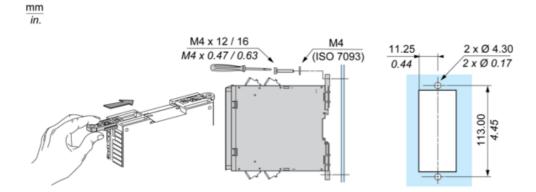
mm in.	0.47					
	mm²	0,22,5	0,252,5	0,21,5	0,251	0,51,5
	AWG	2412	2412	2416	2418	2016

XPSBAC14AC

Mounting to DIN rail



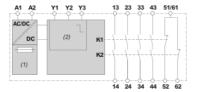
Screw-mounting



Product data sheet Connections and Schema

XPSBAC14AC

Wiring Diagram



(1): A1-A2 (Power supply)

(2): Y1 (Control output of Start/Restart input), Y2 (Input channel for automatic/manual start/restart), Y3 (Input channel for monitored start/restart with falling edge)

13-14-23-24-33-34-43-44-51/61-52-62 : Terminals of the safety-related outputs