Product data sheet

Specifications



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

XPSBAC14AP

Product availability: Stock - Normally stocked in distribution facility

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 ISO 13849-1 Can reach SILCL 3 for normally open relay contact IEC 62061 Can reach SIL 3 for normally open relay contact IEC 61508 Can reach PL c/category 1 for normally closed relay contact ISO 13849-1 Can reach SILCL 1 for normally closed relay contact IEC 62061 Can reach SIL 1 for normally closed relay contact IEC 61508
Safety reliability data	MTTFd > 30 years for normally open relay contact ISO 13849-1 Dcavg >= 99 % for normally open relay contact ISO 13849-1 PFHd = 0.95E-09 for normally open relay contact ISO 13849-1 HFT = 1 for normally open relay contact IEC 62061 PFHd = 0.95E-09 for normally open relay contact IEC 62061 SFF > 99% for normally open relay contact IEC 62061 HFT = 1 for normally open relay contact IEC 61508-1 PFHd = 0.95E-09 for normally open relay contact IEC 61508-1 SFF > 99% for normally open relay contact IEC 61508-1 Type = B for normally open relay contact IEC 61508-1 MTTFd > 30 years for normally closed relay contact ISO 13849-1 DC > 60 % for normally closed relay contact ISO 13849-1 PFHd = 0.95E-09 for normally closed relay contact ISO 13849-1 HFT=0 for normally closed relay contact IEC 62061 PFHd = 0.95E-09 for normally closed relay contact IEC 62061 SFF > 60% for normally closed relay contact IEC 62061 HFT=0 for normally closed relay contact IEC 61508-1 PFHd = 0.95E-09 for normally closed relay contact IEC 61508-1 SFF > 60% for normally closed relay contact IEC 61508-1 Type = B for normally closed relay contact IEC 61508-1
Electrical circuit type	NC 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	Unlimited
Type of start	Automatic/manual/monitored

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 ISO 14119 XC limit switch ISO 14119 Mechanical contact ISO 14119 Normally closed circuit ISO 13850
input terminal	Power supply
[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
control outputs	0
[Ith] conventional free air thermal current	6 A
Associated fuse rating	10 A gG NO relay output circuit IEC 60947-1
Minimum output current	10 mA relay output
Minimum output voltage	5 V relay output
Response time	150 ms at 24 V AC 80 ms at 24 V DC
[Ui] rated insulation voltage	300 V 2)IEC 60947-1
[Uimp] rated impulse withstand voltage	4 kV II IEC 60947-1
Local signalling	LED green power power ON LED red error error LED yellow state status LED yellow start1 start input LED yellow start2 start input
Mounting Support	35 mm symmetrical DIN rail
Depth	4.7 in (120 mm)
Height	3.9 in (100 mm)
Width	0.9 in (22.5 mm)
Product Weight	0.441 lb(US) (0.200 kg)

Environment

Ambient Air Temperature for Operation	-13…131 °F (-25…55 °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 cULus

IP degree of protection	IP20 terminals)IEC 60529 IP40 housing)IEC 60529 IP54 mounting area)IEC 60529
Relative Humidity	5…95 % non-condensing

Ordering and shipping details

Category	US1SAF222477
Discount Schedule	SAF2
GTIN	3606482034013
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.559 in (6.500 cm)
Package 1 Width	5.315 in (13.500 cm)
Package 1 Length	6.102 in (15.500 cm)
Package weight(Lbs)	10.511 oz (298.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	16
Package 2 Height	11.811 in (30.000 cm)
Package 2 Width	11.811 in (30.000 cm)
Package 2 Length	15.748 in (40.000 cm)
Package 2 Weight	12.086 lb(US) (5.482 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	128
Package 3 Height	29.528 in (75.000 cm)
Package 3 Width	23.622 in (60.000 cm)
Package 3 Length	31.496 in (80.000 cm)
Package 3 Weight	108.027 lb(US) (49.000 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

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	**55 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**5 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.1 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**48 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.7 kg CO2 eq.**
Environmental Disclosure	**Product Environmental Profile**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**152cf799-1df7-4892-81b4-4c890187f1d1**
EU RoHS Directive	**Compliant By Exemption**
REACh Regulation	**Reference contains Substances of Very High Concern above the threshold**
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 Longer

Lifetime extension

Repair	**No**

Use Again

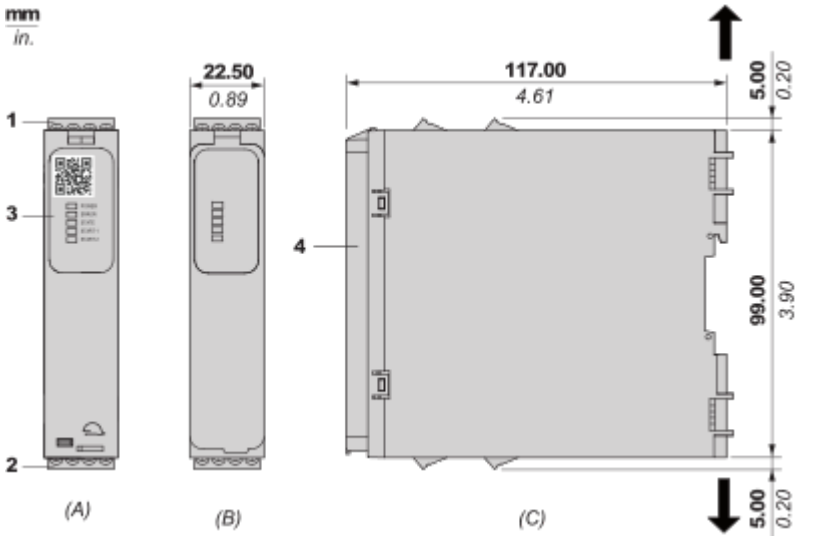
Repack and remanufacture

Recyclability potential, in %	**0**
Circularity Profile	**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

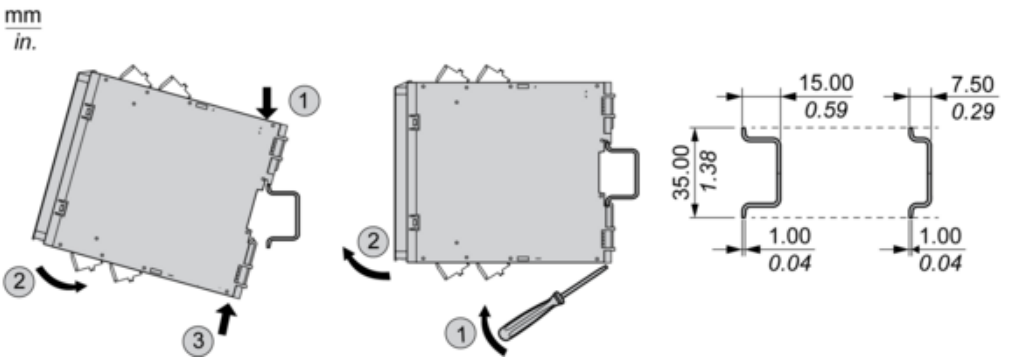


(A) : Product drawing
(B) : Screw clamp terminal
(C) : Side view
(1) : Removable terminal blocks, top
(2) : Removable terminal blocks, bottom
(3) : LED indicators
(4) : Sealable transparent cover

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*)		C		Nm	0.5... 0.6
				lb-in	*4,4... 5,3*

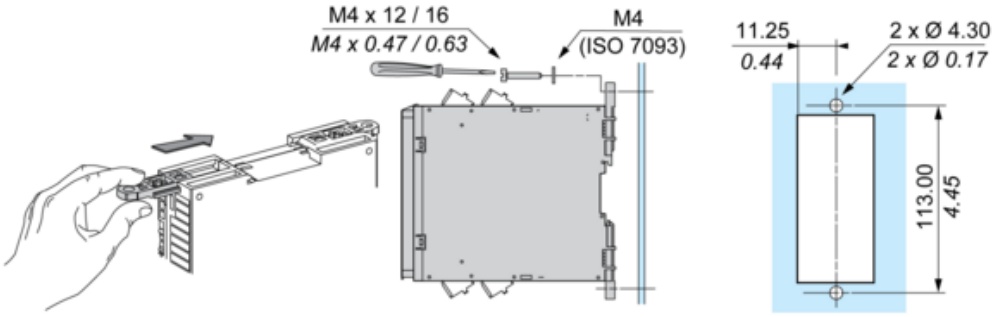
Mounting and Clearance

Mounting to DIN rail



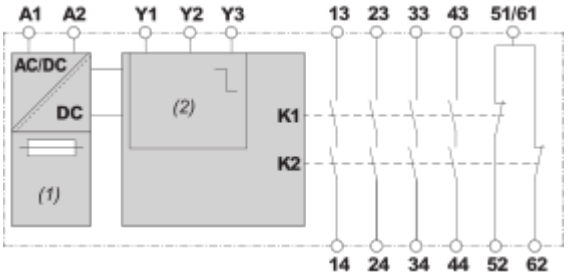
Screw-mounting

mm
in.



Connections and Schema

Wiring Diagram

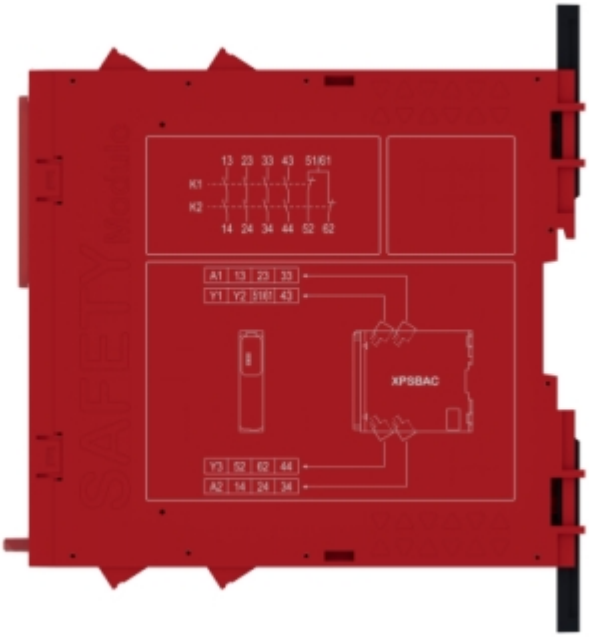


(1) : A1-A2 (Power supply)
(2) : Y1 (Control output of Start/Restart input), Y2 (Input channel for automatic/manual start/restart), Y3 (Input channel for monitored start/restart with falling edge)
13-14-23-24-33-34-43-44-51/61-52-62 : Terminals of the safety-related outputs

Image of product / Alternate images

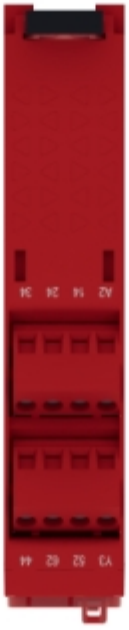
Alternative






Harmony
XPSBAC14AP
Safety module
Rated Voltage Un : 24 V AC +10%/-15% DC +/-20%
Frequency range AC : 50 Hz -5% ... 60 Hz +5%
Power consumption : 3 W / 6.5 VA
AC-15 : Ue 250 V AC, Ie 3 A (NO), Ie 1 A (NC)
DC-13 : Ue 24 V DC, Ie 3 A (NO), Ie 1 A (NC)
∑ Ith <= 2 x 10 A
IEC 60947-5-1
GB/T 14048.5
IEC 61508 : up to SIL 3
ISO 13849-1 : PL e Category 4
Response time : <= 20 ms
See instruction sheet
Surrounding air temperature : -25 °C to +55 °C
Degree of Protection : IP 40 / IP 20 (Terminals)
Use minimum 75°C copper conductors only
SN: XXXXXXXXX
PV: 00 RL: 00 SV: 00
PP-YYYY-Www
Schneider Electric
Schneiderplatz 1
DE 97828 Marktheidenfeld


A1 13 23 33
Y1 Y2 51/61 43


A2 14 24 34
Y3 S2 62 44


Harmony
POWER
ERROR
STATE
START1
START2
Schneider Electric
XPSBAC