

# Product data sheet

Specifications



Single contact block with body fixing collar, Harmony XB5, plastic, screw clamp terminal, 1NC

ZB5AZ102

## Main

Range of product	Harmony XB5
Product or component type	Complete body/contact assembly
Device short name	ZB5
Fixing collar material	Plastic
Sale per indivisible quantity	1
Head type	Standard
Contacts type and composition	1 NC
Contact operation	Slow-break
Contact block type	Single
Connections - terminals	Screw clamp terminals, $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN 60947-1 Screw clamp terminals, $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN 60947-1

## Complementary

CAD overall width	30 mm
CAD overall height	42 mm
CAD overall depth	32 mm
Terminals description ISO n°1	(11-12)NC
Net weight	0.021 kg
Device composition	Body Fixing collar
Contacts usage	Standard contacts
Positive opening	With conforming to EN/IEC 60947-5-1 appendix K
Operating travel	1.5 mm (NC changing electrical state) 4.3 mm (total travel)
Operating force	2 N NC changing electrical state
Mechanical durability	10000000 cycles
Tightening torque	0.8...1.2 N.m conforming to EN 60947-1
Shape of screw head	Cross compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat $\varnothing 4 \text{ mm}$ screwdriver Slotted compatible with flat $\varnothing 5.5 \text{ mm}$ screwdriver
Contacts material	Silver alloy (Ag/Ni)

<b>Short-circuit protection</b>	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
<b>[I<sub>th</sub>] conventional free air thermal current</b>	10 A conforming to EN/IEC 60947-5-1
<b>[U<sub>i</sub>] rated insulation voltage</b>	600 V (pollution degree 3) conforming to EN 60947-1
<b>[U<sub>imp</sub>] rated impulse withstand voltage</b>	6 kV conforming to EN 60947-1
<b>[I<sub>e</sub>] rated operational current</b>	3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1 6 A at 120 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.1 A at 600 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.55 A at 125 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1
<b>Electrical durability</b>	1000000 cycles, AC-15, 2 A at 230 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 3 A at 120 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 4 A at 24 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.2 A at 110 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, DC-13, 0.5 A at 24 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C
<b>Electrical reliability</b>	$\Lambda < 10\text{exp}(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\text{exp}(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4
<b>Device presentation</b>	Basic sub-assemblies

## Environment

<b>Protective treatment</b>	TH
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-40...70 °C
<b>IP degree of protection</b>	IP20 conforming to IEC 60529
<b>Standards</b>	UL 508 EN/IEC 60947-5-1 JIS C8201-5-1 EN/IEC 60947-1 CSA C22.2 No 14 EN/IEC 60947-5-4 JIS C8201-1
<b>Product certifications</b>	CSA UL GL LROS (Lloyds register of shipping) BV DNV
<b>Vibration resistance</b>	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.500 cm
<b>Package 1 Width</b>	3.400 cm
<b>Package 1 Length</b>	5.400 cm
<b>Package 1 Weight</b>	20.000 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	300
<b>Package 2 Height</b>	30.000 cm

Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.512 kg
Unit Type of Package 3	P06
Number of Units in Package 3	2400
Package 3 Height	77.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	64.604 kg

## Offer Sustainability

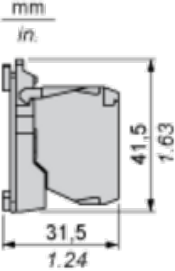
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

Warranty	18 months
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Dimensions

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**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

**Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board**



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

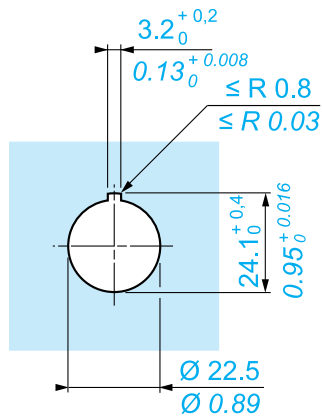
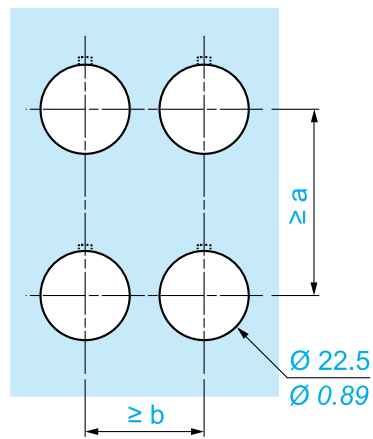
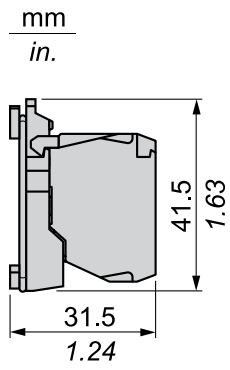
Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

**Detail of Lug Recess**



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		40	1.57	30	1.18
ZBE●●●●●	ZBV●●●●●				
		45	1.77	32	1.26
ZBE●●●●●3	ZBV●●●●●3				
		40	1.57	30	1.18
ZBE●●●●●4	ZBV●●●●●4				
		50	1.97	30	1.18
ZBE●●●●●5	ZBV●●●●●5				
		40	1.57	30	1.18
ZBE●●●●●9	ZBV●●●●●9				
		40	1.57	30	1.18
ZBRT●	ZBRV1				

Recommended replacement(s)