

Product data sheet

Specifications



Single contact block with body fixing collar, Harmony XB5, plastic, screw clamp terminal, 2NC

ZB5AZ104

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	2 NC
Contact operation	Slow-break
Contact block type	Single
Connections - terminals	Screw clamp terminals, <= 2 x 1.5 mm ² with cable end conforming to EN 60947-1 Screw clamp terminals, >= 1 x 0.22 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
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)
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 Ø 4 mm screwdriver Slotted compatible with flat Ø 5.5 mm screwdriver
Contacts material	Silver alloy (Ag/Ni)
Short-circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[Ith] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1

[Ui] rated insulation voltage	600 V (pollution degree 3) conforming to EN 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to EN 60947-1
[Ie] rated operational current	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
Electrical durability	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
Electrical reliability	$\Lambda < 10\exp(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4
Device presentation	Basic sub-assemblies

Environment

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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	3.4 cm
Package 1 Length	5.4 cm
Package 1 Weight	29 g
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	4.5 cm
Package 2 Width	3.4 cm
Package 2 Length	26.5 cm

Package 2 Weight	146 g
Unit Type of Package 3	S03
Number of Units in Package 3	300
Package 3 Height	30 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	9.24 kg

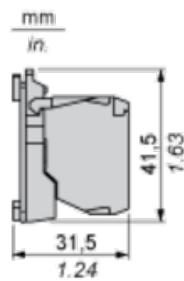
Offer Sustainability

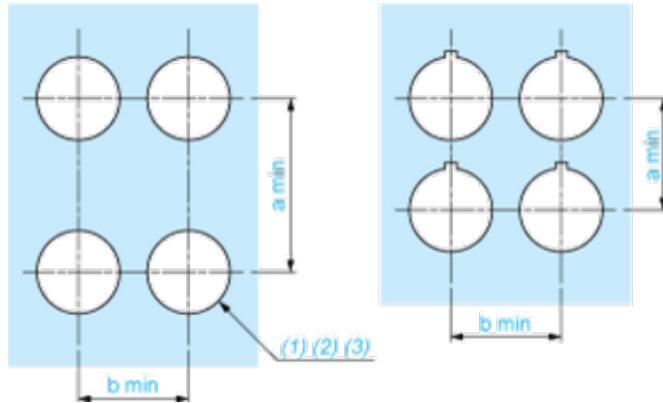
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption 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
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 www.P65Warnings.ca.gov

Contractual warranty

Warranty	18 months
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Dimensions



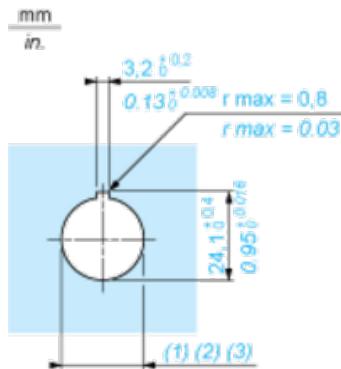
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board**

(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) Ø22.5 mm recommended ($\text{Ø}22.3 {}^{+0.4} \text{ mm}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in.} {}^{+0.016}$)

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

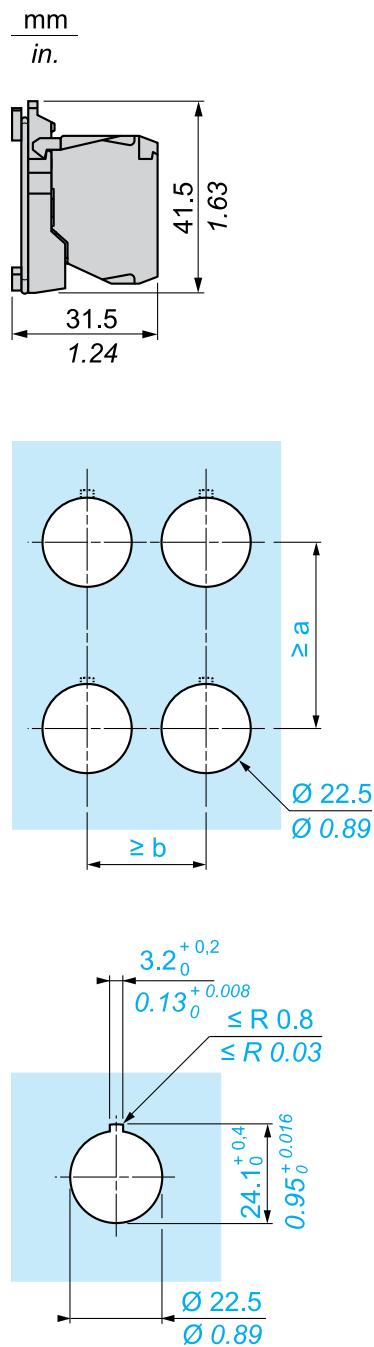
Detail of Lug Recess

(1) Diameter on finished panel or support

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Dimensions



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

Recommended replacement(s)