

# ZB5AZ104

single contact block with body/fixing collar 2NC  
screw clamp terminal



## 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
Contacts type and composition	2 NC
Contacts operation	Slow-break
Contact block type	Single
Connections - terminals	Screw clamp terminals $\leq 2 \times 1.5 \text{ mm}^2$ with cable end EN 60947-1 Screw clamp terminals $\geq 1 \times 0.22 \text{ mm}^2$ without cable end 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 positive opening 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	5000000 cycles
Tightening torque	0.8...1.2 N.m conforming to EN 60947-1
Shape of screw head	Cross head compatible with Philips no 1 screwdriver Cross head compatible with pozidriv No 1 screwdriver Slotted head compatible with flat $\varnothing 4 \text{ mm}$ screwdriver Slotted head compatible with flat $\varnothing 5.5 \text{ mm}$ screwdriver
Contacts material	Silver alloy (Ag/Ni)

Short circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[I <sub>th</sub> ] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1
[U <sub>i</sub> ] rated insulation voltage	600 V (degree of pollution: 3) conforming to EN 60947-1
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV conforming to EN 60947-1
[I <sub>e</sub> ] 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 IEC 60947-5-4	$\Lambda < 10\exp(-6)$ 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

## Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...70 °C
IP degree of protection	IP20 conforming to IEC 60529
Standards	CSA C22.2 No 14 EN/IEC 60947-5-4 UL 508 JIS C 4520 EN/IEC 60947-1 EN/IEC 60947-5-1
Product certifications	BV GL LROS (Lloyds register of shipping) RINA DNV CSA UL
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

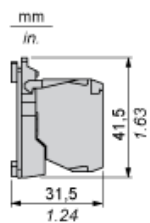
## Contractual warranty

Warranty period	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 ( $\varnothing 22.3_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88$  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 ( $\varnothing 22.3_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88$  in.  $_0^{+0.016}$ )