



### 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
Additional information	With body/fixing collar
Contacts usage	Standard contacts
Connections - terminals	Screw clamp terminals : $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN 60947-1 Screw clamp terminals : $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN 60947-1

### Complementary

Product weight	0.03 kg
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	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 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
Electrical durability	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 , 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 , 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 , 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 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
Electrical reliability IEC 60947-5-4	$\Lambda < 10\text{exp}(-6)$ 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
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 pozidriv No 1 screwdriver Cross head compatible with Philips no 1 screwdriver Slotted head compatible with flat $\varnothing$ 4 mm screwdriver Slotted head compatible with flat $\varnothing$ 5.5 mm screwdriver
Contacts material	Silver alloy (Ag/Ni)

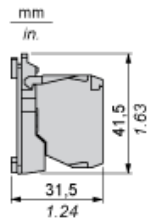
## Environment

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 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508
Product certifications	BV CSA DNV (Det Norske Veritas) GL LROS (Lloyds register of shipping) RINA UL
Vibration resistance	5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27 50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27
RoHS EUR conformity date	0727
RoHS EUR status	Compliant

Dimensions of Bodies for Pushbuttons and Switches

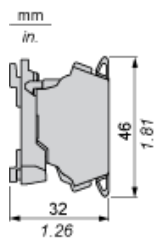
Screw Clamp Terminal Connections

ZB5 AZ10•, ZB5 AZ141



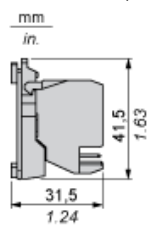
Spring Terminal Connections

ZB5 AZ10•5



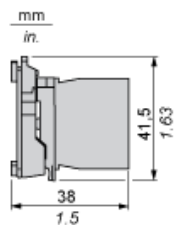
Plug-in Connector

ZB5 AZ10•4, ZB5 AZ1414



High Power Switching with Screw Clamp Terminal Connections

ZB5 50• block + ZB5 AZ009 body



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

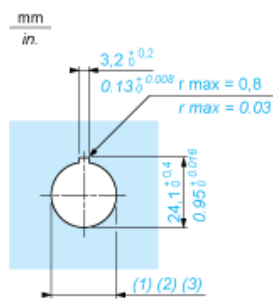
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5 AZ902 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 ZB5 AZ902 is recommended.
- (3)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )