



Main

Commercial Status	Commercialised
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	1 NO + 1 NC
Contacts operation	Slow-break
Contact block type	Single
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

CAD overall width	30 mm
CAD overall height	42 mm
CAD overall depth	32 mm
Terminals description ISO n°1	(11-12)NC
Product weight	0.03 kg
Additional information	With body/fixing collar
Contacts usage	Standard contacts
Positive opening	With positive opening conforming to EN/IEC 60947-5-1 appendix K
Operating travel	4.3 mm (total travel) 2.6 mm (NO changing electrical state) 1.5 mm (NC changing electrical state)
Operating torque	0.05 N.m (NO changing electrical state)
Mechanical durability	5000000 cycles
Tightening torque	0.8...1.2 N.m conforming to EN 60947-1
Shape of screw head	Slotted head compatible with flat $\varnothing 5.5 \text{ mm}$ screwdriver Slotted head compatible with flat $\varnothing 4 \text{ mm}$ screwdriver Cross head compatible with pozidriv No 1 screwdriver Cross head compatible with Philips no 1 screwdriver
Contacts material	Silver alloy (Ag/Ni)
Short circuit protection	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
[I _{th}] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1
[U _i] rated insulation voltage	600 V (degree of pollution: 3) conforming to EN 60947-1
[U _{imp}] rated impulse withstand voltage	6 kV conforming to EN 60947-1
[I _e] rated operational current	1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.55 A at 125 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 0.1 A at 600 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 6 A at 120 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

Electrical durability	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 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
Electrical reliability IEC 60947-5-4	$\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\exp(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4

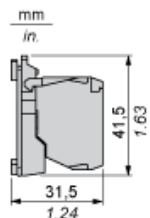
Environment

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 60947-1 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 GL LROS (Lloyds register of shipping) RINA UL
Vibration resistance	5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6
Shock resistance	50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27

Dimensions of Bodies for Pushbuttons and Switches

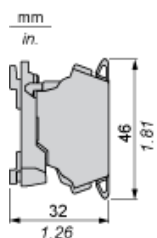
Screw Clamp Terminal Connections

ZB5 AZ10•, ZB5 AZ141



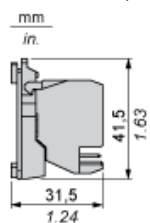
Spring Terminal Connections

ZB5 AZ10•5



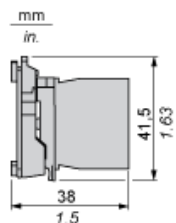
Plug-in Connector

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)

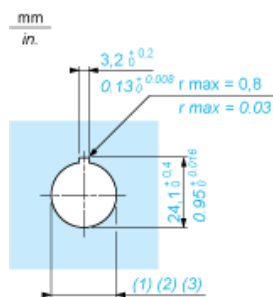
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)