## Product data sheet Characteristics

### **ZB5AZ105**

# single contact block with body/fixing collar 1NO +1NC 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	1 NO + 1 NC
Contacts operation	Slow-break
Contact block type	Single
Connections - terminals	Screw clamp terminals: <= 2 x 1.5 mm² with cable end conforming to EN 60947-1 Screw clamp terminals: >= 1 x 0.22 mm² without cable end conforming to EN 60947-1

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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	1.5 mm (NC changing electrical state) 2.6 mm (NO changing electrical state) 4.3 mm (total travel)		
Operating torque	0.05 N.m (NO changing electrical state)		
Mechanical durability	5000000 cycles		
Tightening torque	0.81.2 N.m conforming to EN 60947-1		
Shape of screw head	Slotted head compatible with flat Ø 4 mm screwdriver Slotted head compatible with flat Ø 5.5 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		
[Ith] conventional free air thermal current	10 A conforming to EN/IEC 60947-5-1		
[Ui] rated insulation voltage	600 V (degree of pollution: 3) conforming to EN 60947-1		
[Uimp] rated impulse withstand voltage	6 kV conforming to EN 60947-1		
[le] rated operational current	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 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 1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1		

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

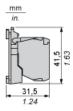
#### Environment

Protective treatment	TH		
Ambient air temperature for storage	-4070 °C		
Ambient air temperature for operation	-2570 °C		
IP degree of protection	IP20 conforming to IEC 60529		
Standards	EN/IEC 60947-5-4 EN/IEC 60947-5-1 EN/IEC 60947-5-5 EN/IEC 60947-1 UL 508 JIS C 4520 CSA C22-2 No 14		
Product certifications	UL LROS (Lloyds register of shipping) CSA DNV (Det Norske Veritas) GL RINA BV		
Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6		
Shock resistance 50 gn for 11 ms half sine wave acceleration conforming to IEC 600 30 gn for 18 ms half sine wave acceleration conforming to IEC 600 18 ms half sine wave acceleration conforming to I			

#### Dimensions of Bodies for Pushbuttons and Switches

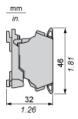
#### **Screw Clamp Terminal Connections**

ZB5 AZ10•, ZB5 AZ141



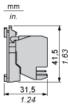
#### **Spring Terminal Connections**

ZB5 AZ10•5



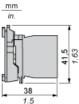
#### Plug-in Connector

ZB5 AZ10•4, ZB5 AZ1414



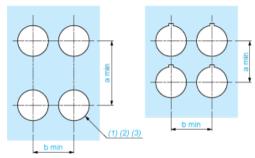
#### High Power Switching with Screw Clamp Terminal Connections

ZB5 50• block + ZB5 AZ009 body



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

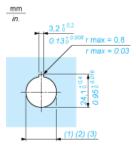
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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



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