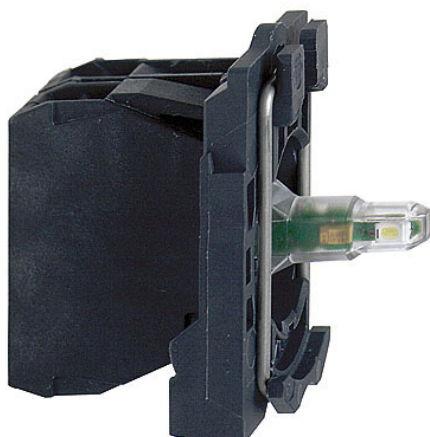


ZB5AW0B41

red light block with body/fixing collar with
integral LED 24V 1NO



Main

Range of product	Harmony XB5
Product or component type	Complete body/contact assembly and light block
Device short name	ZB5
Fixing collar material	Plastic
Sale per indivisible quantity	1
Contacts type and composition	1 NO
Contacts operation	Slow-break
Connections - terminals	Screw clamp terminals : $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN 60947-1 Screw clamp terminals : $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN 60947-1
Light source	Protected LED
Bulb base	Integral LED
Light block supply	Direct
Light source colour	Red
[Us] rated supply voltage	24 V AC/DC , 50/60 Hz

Complementary

Product weight	0.032 kg
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 Ø 4 mm screwdriver Slotted head 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 (degree of pollution: 3) conforming to EN 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to EN 60947-1
[Ie] 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
Signalling type	Steady
Supply voltage limits	19.2...30 V DC 21.6...26.4 V AC
Current consumption	18 mA

Service life	100000 h at rated voltage and 25 °C
Surge withstand	1 kV conforming to IEC 61000-4-5
Contacts usage	Standard
Positive opening	Without positive opening
Operating travel	2.6 mm (NO changing electrical state) 4.3 mm (total travel)
Operating force	2.3 N (NO 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

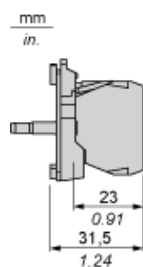
Environment

Protective treatment	TH
Resistance to fast transients	2 kV conforming to IEC 61000-4-4
Resistance to electromagnetic fields	10 V/m conforming to IEC 61000-4-3
Resistance to electrostatic discharge	6 kV on contact (on metal parts) conforming to IEC 61000-2-6 8 kV in free air (in insulating parts) conforming to IEC 61000-2-6
Electromagnetic emission	Class B conforming to IEC 55011
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-25...70 °C
Class of protection against electric shock	Class II conforming to IEC 60536
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 listed
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	0810
RoHS EUR status	Compliant

Dimensions of Bodies for Illuminated Pushbuttons and Selector Switches

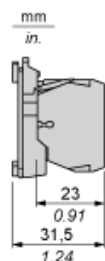
Screw Clamp Terminal Connections, Integral LED

ZB5 AW0...



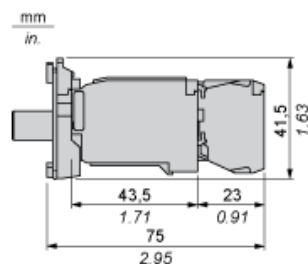
Screw Clamp Terminal Connections, Direct supply for BA9s Bulb

ZB5 AW06•



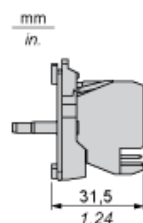
Screw Clamp Terminal Connections, with Integral Transformer for BA9s Bulb

ZB5 AW0••, ZB5 AW0•D••



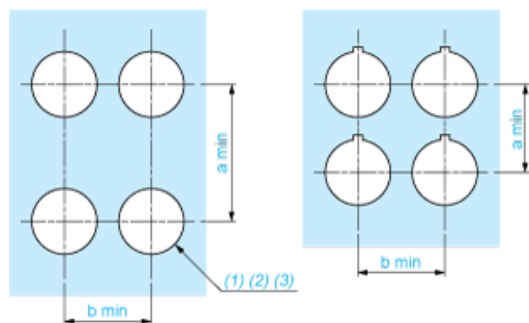
Plug-in Connector, Integral LED

ZB5 AW0•••4



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

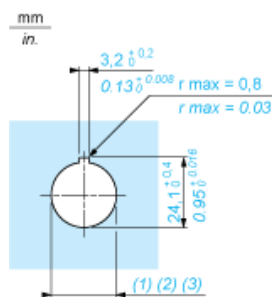
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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