Product datasheet Characteristics

ZB5AW0B31

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



Main

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 : <= $2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN 60947-1 Screw clamp terminals : >= $1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN 60947-1	
Light source	Protected LED	-
Bulb base	Integral LED	
Light block supply	Direct	
Light source colour	Green	
Complementary		
CAD overall width	30 mm	
CAD overall height	42 mm	
CAD overall depth	32 mm	
Terminals description ISO n°1	(13-14)NO	

Complementary

CAD overall width	30 mm	ă
CAD overall height	42 mm	
CAD overall depth	32 mm	4
Terminals description ISO n°1	(13-14)NO	0 0 0
Product weight	0.032 kg	
Contacts usage	Standard	
Positive opening	Without positive opening	5 2
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	0.81.2 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 $Ø$ 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		
[le] 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	100000 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, 0.2 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	Λ < 10exp(-6) at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 Λ < 10exp(-8) at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4		
Signalling type	Steady		
[Us] rated supply voltage	24 V AC/DC, 50/60 Hz		
Supply voltage limits	19.230 V DC 21.626.4 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		

Environment

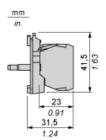
Linnont	
Protective treatment	TH
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Class of protection against electric shock	Class II conforming to IEC 60536
Standards	EN/IEC 60947-5-4 UL 508 JIS C 4520 EN/IEC 60947-5-1 EN/IEC 60947-1 CSA C22.2 No 14
Product certifications	RINA CSA DNV GL LROS (Lloyds register of shipping) BV UL listed
Vibration resistance	5 gn (f = 2500 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
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

Contractual warranty	
Warranty period	18 months

Product datasheet Dimensions Drawings

ZB5AW0B31

Dimensions

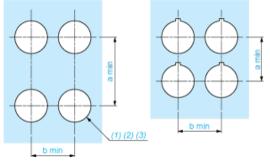


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ZB5AW0B31

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

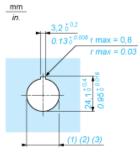
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support (1)
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. \emptyset 22.5 mm recommended (\emptyset 22.3 $_0^{+0.4}$) / \emptyset 0.89 in. recommended (\emptyset 0.88 in. $_0^{+0.016}$) (2)
- (3)

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 ZB5AZ902 is recommended. \emptyset 22.5 mm recommended (\emptyset 22.3 $_0^{+0.4}$) / \emptyset 0.89 in. recommended (\emptyset 0.88 in. $_0^{+0.016}$) (2)
- (3)