# **ZB5AW0B45**

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





#### 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
Head type	Standard
Contacts type and composition	1 NO + 1 NC
Contact operation	Slow-break
Connections - terminals	Screw clamp terminals, <= 2 x 1.5 mm <sup>2</sup> with cable end conforming to EN 60947-1 Screw clamp terminals, >= 1 x 0.22 mm <sup>2</sup> without cable end conforming to EN 60947-1
Light source	Protected LED
Bulb base	Integral LED
Light block supply	Direct
Light source colour	Red

#### Complementary

Complementary				
CAD overall width	30 mm			
CAD overall height	42 mm			
CAD overall depth	32 mm			
Terminals description ISO n°1	(11-12)NC (13-14)NO			
Net weight	0.042 kg			
Contacts usage	Standard			
Positive opening	With conforming to EN/IEC 60947-5-1 appendix K			
Operating travel	<ul><li>1.5 Mm (NC changing electrical state)</li><li>2.6 Mm (NO changing electrical state)</li><li>4.3 mm (total travel)</li></ul>			
Operating force	2 N NC changing electrical state 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 compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat Ø 4 mm screwdriver Slotted 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 (pollution degree 3) conforming to EN 60947-1			
[Uimp] rated impulse withstand voltage	EN 60947-1 6 kV			
[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

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, 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, 0.5 A at 24 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C		
$\Lambda$ < 10exp(-6) at 5 V and 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda$ < 10exp(-8) at 17 V and 5 mA in clean environment conforming to EN/IEC 60947-5-4		
Steady		
24 V AC/DC at 50/60 Hz		
19.230 V DC 21.626.4 V AC		
18 mA		
100000 h at rated voltage and 25 °C		
1 kV conforming to IEC 61000-4-5		
Basic sub-assemblies		

### Environment

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Protective treatment	TH
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Electrical shock protection class	Class II conforming to IEC 60536
Standards	UL 508 EN/IEC 60947-1 EN/IEC 60947-5-4 JIS C8201-5-1 EN/IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-1
Product certifications	RINA BV CSA UL listed GL DNV LROS (Lloyds register of shipping)
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

# Packing Units

. c.cg cc		
Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	39 g	
Package 1 Height	3.4 cm	
Package 1 width	5.4 cm	
Package 1 Length	5.8 cm	
Unit Type of Package 2	BB1	
Number of Units in Package 2	5	
Package 2 Weight	195 g	
Package 2 Height	3.4 cm	

Package 2 width	5.8 cm
Package 2 Length	26.5 cm
Unit Type of Package 3	S02
Number of Units in Package 3	100
Package 3 Weight	4.377 kg
Package 3 Height	15 cm
Package 3 width	30 cm
Package 3 Length	40 cm

## Offer Sustainability

Sustainable offer status	Green Premium product  REACh Declaration		
REACh Regulation			
REACh free of SVHC	Yes		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS  Declaration		
Mercury free	Yes		
RoHS exemption information	€Yes		
China RoHS Regulation	☑ China RoHS Declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	☑ End Of Life Information		
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		

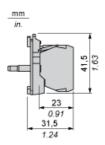
#### Contractual warranty

Contractad Warranty	
Warranty	18 months

# Product data sheet Dimensions Drawings

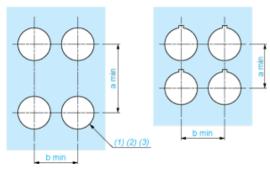
# ZB5AW0B45

### **Dimensions**



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

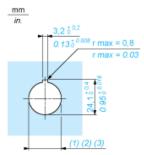
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
   (3) Ø22.5 mm recommended (Ø22.3 0 +0.4) / Ø0.89 in. recommended (Ø0.88 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
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- Ø22.5 mm recommended (Ø22.3  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.  $_0$  <sup>+0.016</sup>)