

Product datasheet

Specifications



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

Local distributor code: 237212551 ZB5AW0B31

❗ Discontinued on: 31 January 2023

❗ End-of-service on: 05 April 2023

❗ Discontinued

Important message : All colored LED are replaced with a single Universal LED block for use with new illuminated heads (more information at se.com/harmonyxb4 or se.com/harmonyxb5)
EAN Code : 3389110908411

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
Contact operation	Slow-break
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
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
Net weight	0.032 kg
Contacts usage	Standard
Positive opening	Without
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
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	6 kV conforming to EN 60947-1
[Ie] 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	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
Electrical reliability	$\Lambda < 10\text{exp}(-6)$ at 5 V and 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\text{exp}(-8)$ at 17 V and 5 mA in clean environment conforming to EN/IEC 60947-5-4
Signalling type	Steady
[Us] rated supply voltage	24 V AC/DC at 50/60 Hz
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
Device presentation	Basic sub-assemblies
Environment	
Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Electrical shock protection class	Class II conforming to IEC 60536
Standards	JIS C8201-5-1 UL 508 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60947-1 EN/IEC 60947-5-4 JIS C8201-1
Product certifications	CSA BV GL LROS (Lloyds register of shipping) UL listed DNV
Vibration resistance	5 gn (f= 2...500 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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.6 cm
Package 1 Width	3.4 cm
Package 1 Length	5.4 cm
Package 1 Weight	29 g
Unit Type of Package 2	S03
Number of Units in Package 2	150
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.813 kg
Unit Type of Package 3	P06
Number of Units in Package 3	1200
Package 3 Height	77 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	51.644 kg

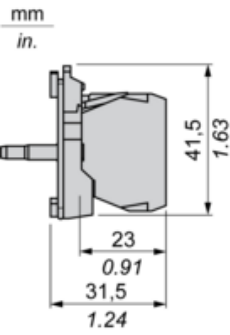
Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
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

Warranty	18 months
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Dimensions



Product datasheet

ZB5AW0B31

Mounting and Clearance

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

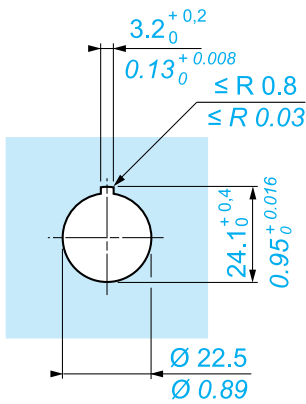
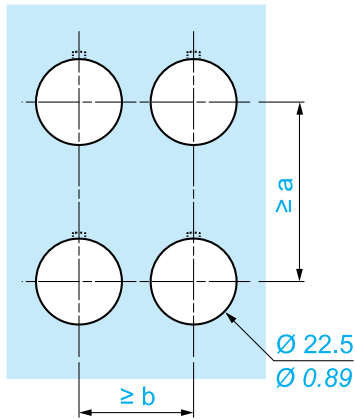
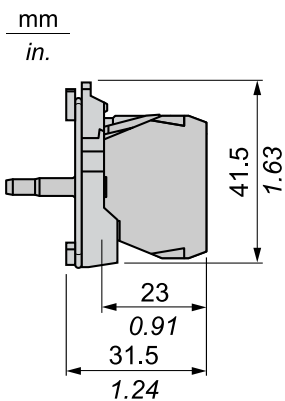
Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

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

Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		40	1.57	30	1.18
ZBE●●●●●	ZBV●●●●●				
		45	1.77	32	1.26
ZBE●●●●●3	ZBV●●●●●3				
		40	1.57	30	1.18
ZBE●●●●●4	ZBV●●●●●4				
		50	1.97	30	1.18
ZBE●●●●●5	ZBV●●●●●5				
		40	1.57	30	1.18
ZBE●●●●●9	ZBV●●●●●9				
		40	1.57	30	1.18
ZBRT●	ZBRV1				

Recommended replacement(s)

ZB5AW0B31 is replaced by:

1x



white light block with body/fixing collar with integral LED 24V 1NO
ZB5AW0B11