

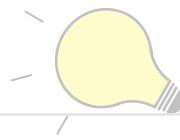
# Product data sheet

Specifications



Harmony XB4, Illuminated double-headed push button, metal, Ø22, 1 green flush I + 1 pilot light + 1 red projecting O, 1 NO + 1 NC

XB4BW73731B5



## Main

Range of product	Harmony XB4
Product or component type	Illuminated double-headed push-button
Device short name	XB4
Bezel material	Chromium plated metal
Head type	Standard
Mounting diameter	22 mm
Colour of marking	White marking when green, red or black caps Black marking when white caps
Light source	Protected LED
Light source colour	White
Device presentation	Complete product

## Complementary

Fixing collar material	Zamak
Product weight	0.13 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Shape of signaling unit head	Rectangular
Type of operator	spring return
Operator profile	1 flush - 1 projecting push-buttons - 1 central pilot light
Operators description	Green "I" - red "O"
Operator profile	Green flush, I (white) Red projecting, O (white)
Contacts type and composition	1 NO + 1 NC
Contact operation	Slow-break
Contacts usage	Standard contacts
Positive opening	With 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 force	3.5 N NC changing electrical state 3.8 N NO changing electrical state

<b>Mechanical durability</b>	1000000 cycles
<b>Connections - terminals</b>	Screw clamp terminals, $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1 Screw clamp terminals, $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1
<b>Tightening torque</b>	0.8...1.2 N.m conforming to EN 60947-1
<b>Shape of screw head</b>	Cross compatible with JIS No 1 screwdriver Cross compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat $\varnothing 4 \text{ mm}$ screwdriver Slotted compatible with flat $\varnothing 5.5 \text{ mm}$ screwdriver
<b>Contacts material</b>	Silver alloy (Ag/Ni)
<b>Short-circuit protection</b>	10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1
<b>[I<sub>th</sub>] conventional free air thermal current</b>	10 A conforming to EN/IEC 60947-5-1
<b>[U<sub>i</sub>] rated insulation voltage</b>	600 V (pollution degree 3) conforming to EN 60947-1
<b>[U<sub>imp</sub>] rated impulse withstand voltage</b>	6 kV conforming to EN 60947-1
<b>[I<sub>e</sub>] rated operational current</b>	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
<b>Electrical durability</b>	1000000 cycles, AC-15, 2 A at 230 V, operating rate $< 3600 \text{ cyc/h}$ , load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 3 A at 120 V, operating rate $< 3600 \text{ cyc/h}$ , load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 4 A at 24 V, operating rate $< 3600 \text{ cyc/h}$ , 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 $< 3600 \text{ cyc/h}$ , 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 $< 3600 \text{ cyc/h}$ , load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C
<b>Electrical reliability</b>	$\Lambda < 10\text{exp}(-6)$ 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
<b>Signalling type</b>	Steady
<b>Bulb base</b>	Integral LED
<b>[U<sub>s</sub>] rated supply voltage</b>	24 V AC/DC at 50/60 Hz
<b>Supply voltage limits</b>	19.2...30 V DC 21.6...26.4 V AC
<b>Current consumption</b>	18 mA
<b>Service life</b>	100000 h at rated voltage and 25 °C
<b>Surge withstand</b>	1 kV conforming to IEC 61000-4-5
<b>Compatibility code</b>	XB4
<b>Environment</b>	
<b>Protective treatment</b>	TH
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-40...70 °C
<b>Electrical shock protection class</b>	Class I conforming to IEC 60536
<b>IP degree of protection</b>	IP66 conforming to IEC 60529 IP69K conforming to IEC 60529 IP69 conforming to IEC 60529
<b>NEMA degree of protection</b>	NEMA 13 NEMA 4X
<b>IK degree of protection</b>	IK06 conforming to IEC 50102
<b>Standards</b>	EN/IEC 60947-1

EN/IEC 60947-5-1  
 CSA C22.2 No 14  
 JIS C8201-5-1  
 EN/IEC 60947-5-5  
 EN/IEC 60947-5-4  
 UL 508  
 JIS C8201-1

<b>Product certifications</b>	DNV LROS (Lloyds register of shipping) CSA BV UL listed GL
<b>Vibration resistance</b>	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	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
<b>Resistance to fast transients</b>	2 kV conforming to IEC 61000-4-4
<b>Resistance to electromagnetic fields</b>	10 V/m conforming to IEC 61000-4-3
<b>Resistance to electrostatic discharge</b>	6 kV on contact (on metal parts) conforming to IEC 61000-4-2 8 kV in free air (in insulating parts) conforming to IEC 61000-4-2
<b>Electromagnetic emission</b>	Class B conforming to IEC 55011

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	124.8 g
<b>Package 1 Height</b>	3.5 cm
<b>Package 1 width</b>	5.5 cm
<b>Package 1 Length</b>	9 cm
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	100
<b>Package 2 Weight</b>	12.905 kg
<b>Package 2 Height</b>	30 cm
<b>Package 2 width</b>	30 cm
<b>Package 2 Length</b>	40 cm
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	800
<b>Package 3 Weight</b>	111.24 kg
<b>Package 3 Height</b>	75 cm
<b>Package 3 width</b>	80 cm
<b>Package 3 Length</b>	60 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>

<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

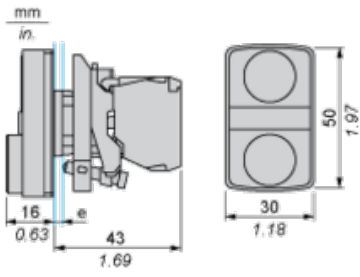
## Contractual warranty

<b>Warranty</b>	18 months
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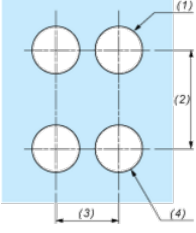
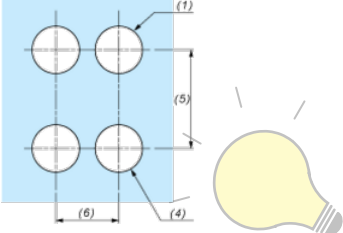
**Dimensions**

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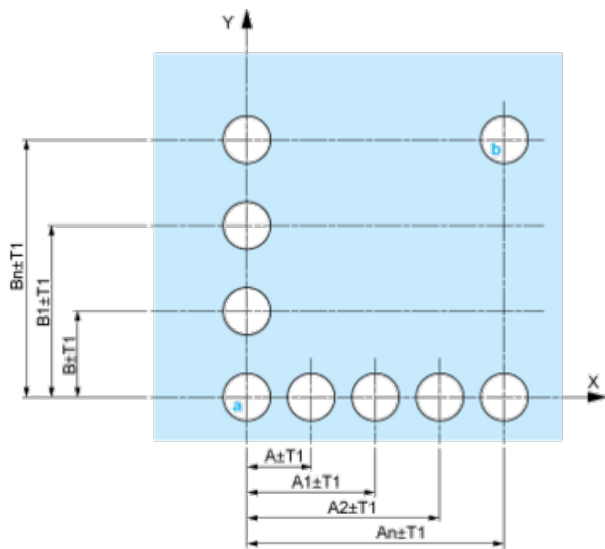
**BABA EDISON**

**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	Connection by Faston Connectors
	
<p>(1) Diameter on finished panel or support                  (2) 40 mm min. / 1.57 in. min.                  (3) 30 mm min. / 1.18 in. min.                  (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm<sub>0</sub><sup>+0.4</sup> / 0.88 in.<sub>0</sub><sup>+0.016</sup>)                  (5) 45 mm min. / 1.78 in. min.                  (6) 32 mm min. / 1.26 in. min.</p>	



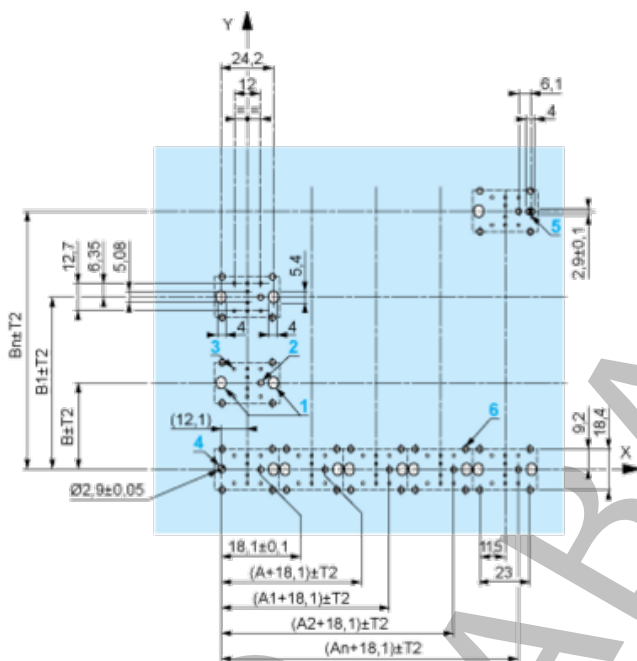
**Panel Cut-outs (Viewed from Installer's Side)**



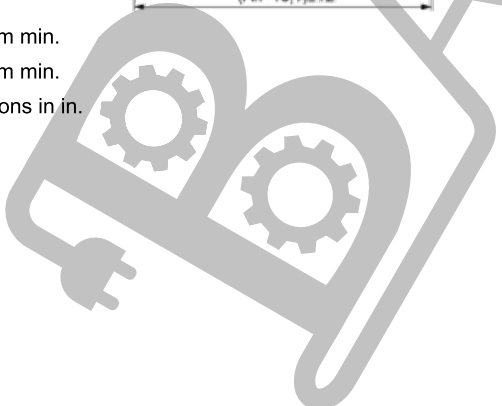
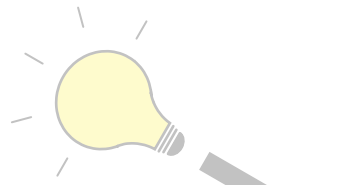
A: 30 mm min. / 1.18 in. min.  
B: 40 mm min. / 1.57 in. min.

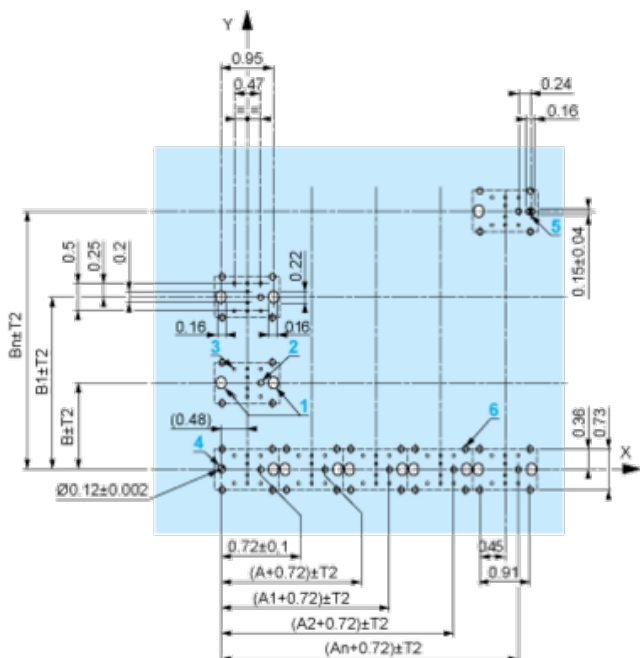
**Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)**

Dimensions in mm



A: 30 mm min.  
B: 40 mm min.  
Dimensions in in.





A: 1.18 in. min.

B: 1.57 in. min.

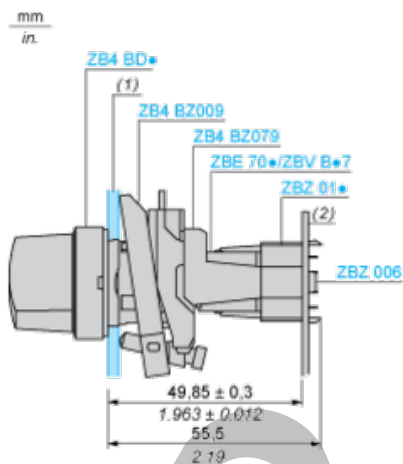
### General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in:  $T1 + T2 = 0.3$  mm max.

### Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^\circ 30'$  (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



(1) Panel

(2) Printed circuit board

### Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed circuit board (with cut-out marked **a**)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**)
- 6 4 holes  $\varnothing$  2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions  $An + 18.1$  relate to the  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.