## XB4BL73415

Harmony XB4, Double-headed push button, metal, Ø22, 1 green flush marked I + 1 red projecting marked O, 1 NO + 1 NC





#### Main

Range of product	Harmony XB4
Product or component type	Double-headed push-button
Device short name	XB4
Bezel material	Chromium plated metal
Fixing collar material	Zamak
Head type	Standard
Mounting diameter	22 mm
Shape of signaling unit head	Rectangular
Type of operator	Spring return
Operator profile	1 flush - 1 projecting push-buttons
Operators description	Green "I" - red "O"
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/IEC 60947-1 Screw clamp terminals, >= 1 x 0.22 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1

#### Complementary

Complementary		
Net weight	0.116 kg	
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m	
Colour of marking	Black marking when white caps White marking when green, red or black caps	
Operator profile	Green flush, I (white) Red projecting, O (white)	
Contacts usage	Standard contacts	
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	3.5 N NC changing electrical state 3.8 N NO changing electrical state	
Mechanical durability	1000000 cycles	
Tightening torque	0.81.2 N.m conforming to EN 60947-1	
Shape of screw head	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 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 EN 60947-1	

[le] rated operational current	3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1
[10] . Stor operational content	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/mn, 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/mn, 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/mn, 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/mn, 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/mn, load factor:
	0.5 conforming to EN/IEC 60947-5-1: appendix C
Electrical reliability	Λ < 10exp(-6) at 5 V and 1 mA in clean environment conforming to EN/IEC
	60947-5-4
	Λ < 10exp(-8) at 17 V and 5 mA in clean environment conforming to EN/IEC
	60947-5-4
Device presentation	Complete product

#### Environment

Environment	
Protective treatment	TH
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Electrical shock protection class	Class I conforming to IEC 60536
IP degree of protection	IP67 conforming to IEC 60529 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
Standards	UL 508 JIS C8201-5-1 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C8201-1
Product certifications	BV GL LROS (Lloyds register of shipping) DNV CSA RINA 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

### Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	116 g	
Package 1 Height	3.6 cm	
Package 1 width	5.2 cm	
Package 1 Length	8.6 cm	
Unit Type of Package 2	S03	
Number of Units in Package 2	100	
Package 2 Weight	12.142 kg	
Package 2 Height	30 cm	
Package 2 width	30 cm	

Package 2 Length	40 cm	
Unit Type of Package 3	P06	
Number of Units in Package 3	800	
Package 3 Weight	110.204 kg	
Package 3 Height	80 cm	
Package 3 width	80 cm	
Package 3 Length	60 cm	

Offer Sustainability

Green Premium product
☑ REACh Declaration
Yes
Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS
Yes
₫Yes
☑ China RoHS Declaration
Product Environmental Profile
End Of Life Information
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

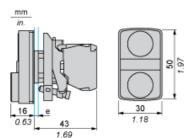
Contractual warranty

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Warranty	18 months		

# Product data sheet Dimensions Drawings

# XB4BL73415

#### **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

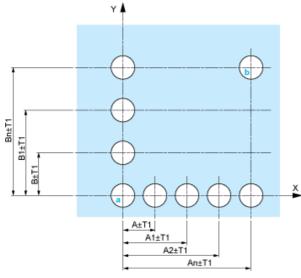
Connection by Faston Connectors

Connection by Faston Connectors

- (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  $_0$  +0.4 / 0.88 in.  $_0$  +0.016)
- (5) 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

#### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

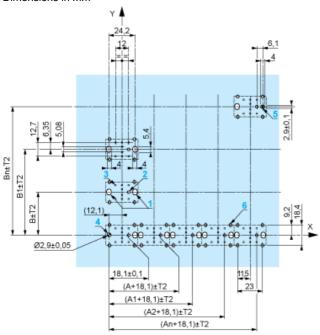
#### Panel Cut-outs (Viewed from Installer's Side)



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

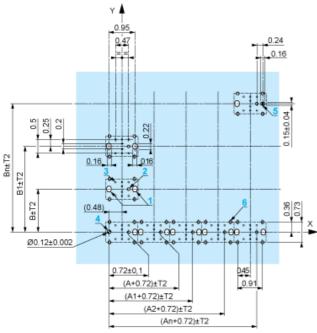
#### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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





A: 1.18 in. min. B: 1.57 in. min.

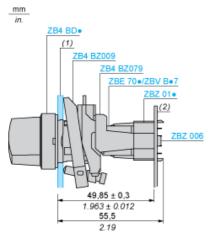
#### General Tolerances of the Panel and Printed Circuit Board

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 ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB4 BZ009: ± 2 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:
  - o every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - o 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 Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 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 Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.