# **ZB4BA79**



## Main

Range of product	Harmony XB4
Product or component type	Head for double-headed push-button
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Rectangular
Type of operator	Spring return
Operator profile	2 flush push-buttons
Operators description	Black pushes without cap

## Complementary

Product weight	0.12 lb(US) (0.056 kg)	
Resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (55 °C),distance: 0.1 m	
Colour of marking	Black marking when white caps White marking when green, red or black caps	
Operator profile	Without cap	
Mechanical durability	1000000 cycles	
Electrical composition code	C4 6 contacts using single and double blocks in front mounting C3 6 contacts using single blocks in front mounting C14 2 contacts using single blocks in front mounting	

## **Environment**

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ambient air temperature for storage	-40158 °F (-4070 °C)
ambient air temperature for operation	-40158 °F (-4070 °C)
electrical shock protection class	Class I conforming to IEC 60536
IP degree of protection	IP67 conforming to IEC 60529 IP69 conforming to IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK03 conforming to IEC 50102
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508 CSA C22.2 No 14
product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed
shock resistance	30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27

## Offer Sustainability

WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Nickel compounds, which is known to the State of	Nickel compounds, which is known to the State of California to cause cancer, and

Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive harm.

harm.

For more information go to www.p65warnings.ca.gov

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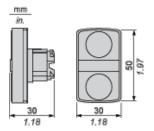
### Contractual warranty

Warranty period

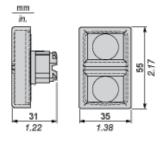
18 months

### **Dimensions**

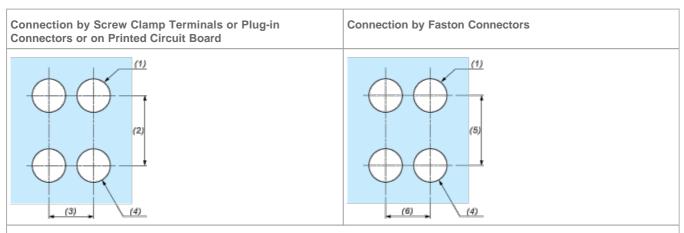
#### **Without Boot**



#### **Without Boot ZBA708**



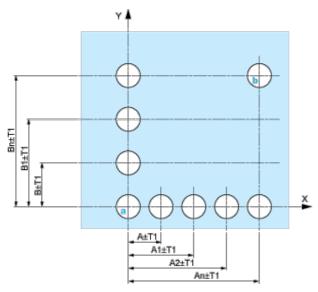
## Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



- (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

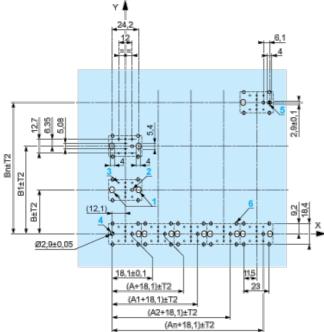
Panel Cut-outs (Viewed from Installer's Side)



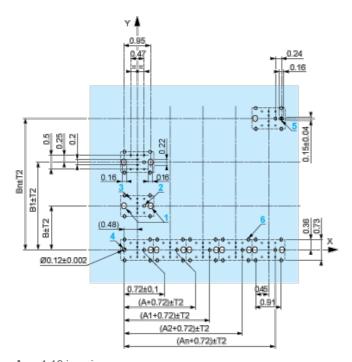
A: 30 mm min. / 1.18 in. min. B: 40 mm min. / 1.57 in. min.

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

Dimensions in mm



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



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

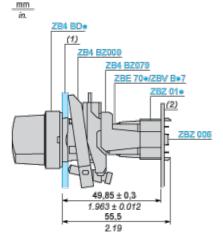
#### **General Tolerances of the Panel and Printed Circuit Board**

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 ± 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:
  - 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 Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- $\mathbf{3.8 \times \varnothing}$  1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed circuit board (with cut-out marked a)
- $\scriptstyle\rm I$  5 1 elongated hole for aligning the printed circuit board (with cut-out marked  $\it b$ )
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•



Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Codes C14, SF2 and SR2
Legend
Single contact
Double contact
Light block
Possible location