



❗ Discontinued

Main

Range of product	Harmony XB4
Product or component type	Head for triple-headed push-button
Device short name	ZB4
Bezel material	Black metal
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Rectangular
Type of operator	spring return
Operator profile	2 flush - 1 central projecting STOP push-buttons
Operators description	Green "+" - green "-" - red "STOP"

Complementary

Net weight	0.056 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	Red projecting, STOP (white) Green flush, - (white) Green flush, + (white)
Mechanical durability	1000000 cycles
Electrical composition code	C1 for <9 contacts using single blocks in front mounting C2 for <9 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting
Device presentation	Basic element

Environment

Ambient air temperature for storage	-40...70 °C
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Ambient air temperature for operation	-25...70 °C
Electrical shock protection class	Class I conforming to IEC 60536
IP degree of protection	IP69 conforming to IEC 60529 IP69K conforming to IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
Standards	CSA C22.2 No 14 EN/IEC 60947-5-5 JIS C8201-5-1 EN/IEC 60947-1 UL 508 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C8201-1
Product certifications	RINA UL listed DNV LROS (Lloyds register of shipping) BV GL CSA
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

Packing Units

Package 1 Weight	0.050 kg
Package 1 Height	0.450 dm
Package 1 width	0.330 dm
Package 1 Length	0.530 dm

Offer Sustainability

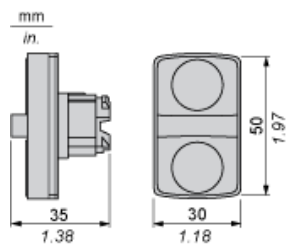
Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Contractual warranty

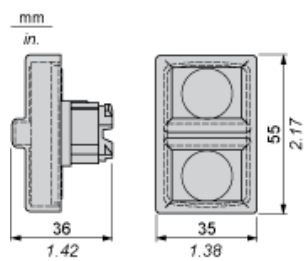
Warranty	18 months
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Dimensions

Without Boot



With Boot ZBA709

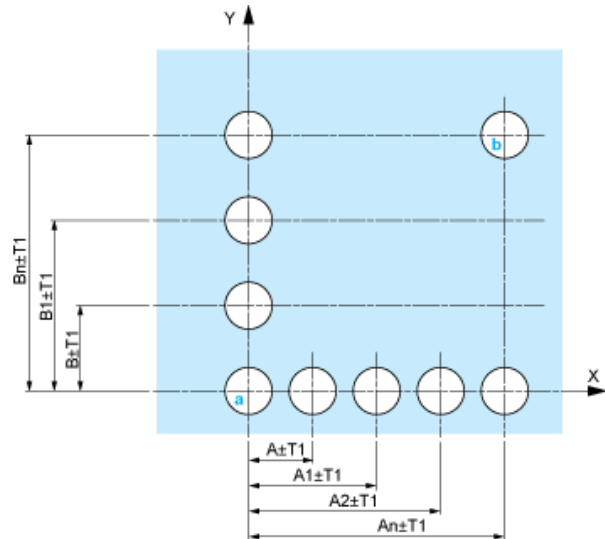


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

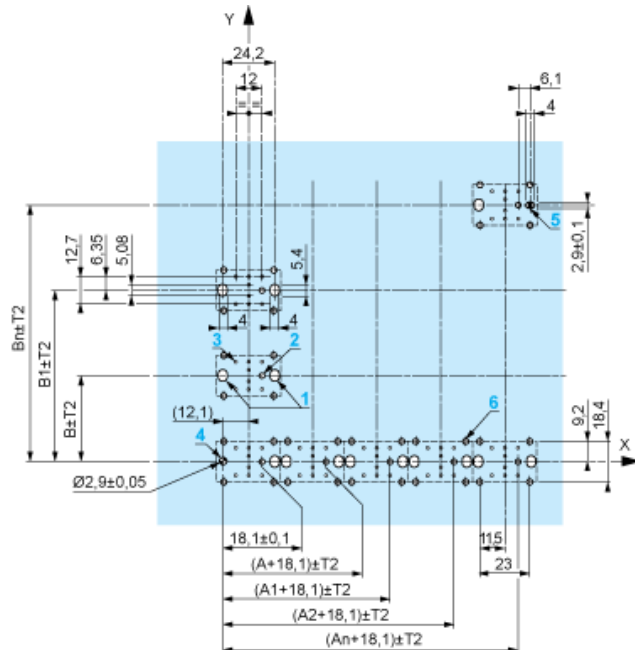
Panel Cut-outs (Viewed from Installer's Side)



- 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.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

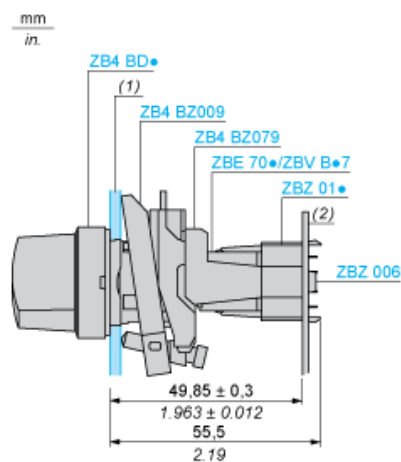
General Tolerances of the Panel and Printed Circuit Board

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

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•.

Electrical Composition Corresponding to Code C1



Electrical Composition Corresponding to Code C2



Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Legend

Single contact



Double contact



Light block



Possible location



ZB4BA731357 is replaced by the following product range:



Harmony XB4

Ø 22 mm modular metal pushbuttons, switches, and pilot lights

The modular range of Ø 22 mm metal control and signaling units combines simplicity of installation, efficiency, modern design, flexibility, and robustness, high level of customization to meet most industrial applications

Reason for Substitution: End of life | Substitution date: 20 November 2020