

Harmony XB5, Push button head, plastic, flush, red, 22mm, spring return, unmarked

ZB5AA4

Range of product	Harmony XB5
Product or component type	Head for non-illuminated push-button
Device short name	ZB5
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Red flush, unmarked

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	28 mm
Net weight	0.018 kg
Mechanical durability	10000000 cycles
Station name	XALD 15 cut-outs XALK 25 cut-outs
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 C15 for <1 contacts using single blocks in front mounting SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting
Device presentation	Basic element

Environment

Protective treatment	TH
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Overvoltage category	Class II conforming to IEC 60536

Disclaimer. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Peach Peac		
NEIAA-IX	IP degree of protection	IP67 IP69
	NEMA degree of protection	
Standards		7000000 Pa at 55 °C, distance : 0.1 m
CSA C22.2 No 14 EC G0947-5-1 US C3201-5-1 US C3201-1 US	IK degree of protection	IK03 conforming to IEC 50102
DNV	Standards	CSA C22.2 No 14 IEC 60947-5-1 JIS C8201-5-1 IEC 60947-5-4 UL 508
50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Vibration resistance 5 gn (f= 2500 Hz) conforming to IEC 60068-2-6 Packing Units	Product certifications	DNV LROS (Lloyds register of shipping) CSA BV
Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 4.400 cm Package 1 Width 3.400 cm Package 1 Length 5.400 cm Package 1 Weight 17.000 g Unit Type of Package 2 503 Number of Units in Package 2 300 Package 2 Height 30.000 cm Package 2 Width 30.000 cm Package 2 Length 40.000 cm Package 2 Weight 5.563 kg Unit Type of Package 3 P06 Number of Units in Package 3 2400 Package 3 Height 75.000 cm Package 3 Width 60.000 cm Package 3 Weight 54.524 kg Offer Sustainability Sustainable offer status Green Premium product REACh Regulation REACh Declaration REACh free of SVHC Yes	Shock resistance	
Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height	Vibration resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6
Number of Units in Package 1 1 Package 1 Height 4.400 cm Package 1 Width 3.400 cm Package 1 Length 5.400 cm Package 1 Weight 17.000 g Unit Type of Package 2 S03 Number of Units in Package 2 300 Package 2 Height 30.000 cm Package 2 Width 30.000 cm Package 2 Weight 5.563 kg Unit Type of Package 3 P06 Number of Units in Package 3 2400 Package 3 Height 75.000 cm Package 3 Weight 60.000 cm Package 3 Weight 54.524 kg Offer Sustainability Sustainable offer status Green Premium product REACh Regulation REACh Declaration REACh free of SVHC Yes	Packing Units	
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Sustainable offer status Green Premium product REACh Regulation REACh Declaration REACh free of SVHC Yes	Package 3 Weight	54.524 kg
REACh Regulation REACh Declaration REACh free of SVHC Yes	Offer Sustainability	
REACh free of SVHC Yes	Sustainable offer status	Green Premium product
	REACh Regulation	REACh Declaration
FILENHS Directive Pro-active compliance (Product out of FILENHS legal scope)	REACh free of SVHC	Yes
EU RoHS Declaration	EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free Yes	Toxic heavy metal free	Yes

Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
Contractual warranty	
Warranty	18 months

ZB5AA4

Dimensions Drawings

Dimensions

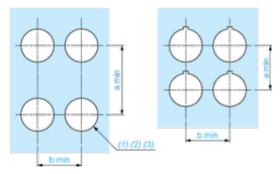




Mounting and Clearance

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

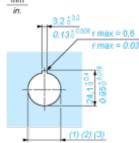
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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)** Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 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

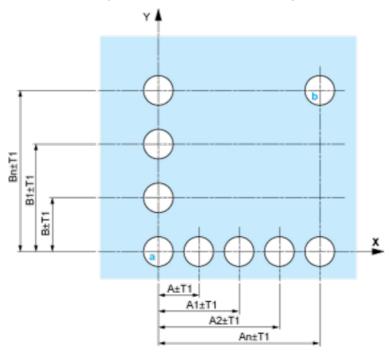
Detail of Lug Recess



- (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) Ø22.5 mm recommended (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_{0}^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

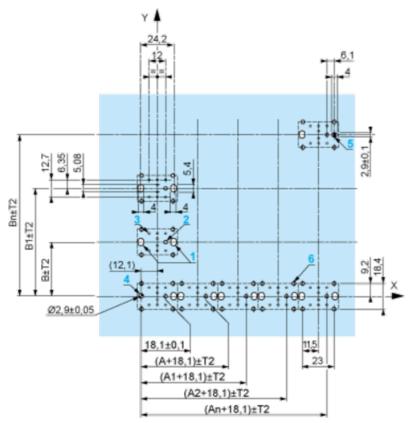
Panel Cut-outs (Viewed from Installer's Side)



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)

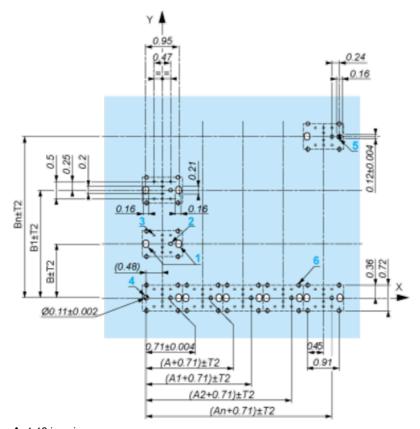
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

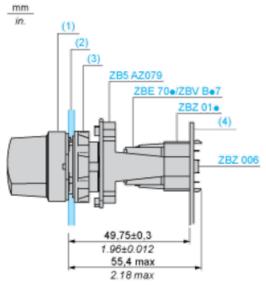
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 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 ZB5AZ009: ± 2 30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 fixing collar/pillar and its fixing screws:
 - \circ every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - \circ $\;$ with each selector switch head (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked ${\bf a}$ and ${\bf b}$ are diagonally opposed and must align with those marked ${\bf 4}$ and ${\bf 5}$.



- (1) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- $3.8 \times \emptyset 1.2 \text{ mm} / 0.05 \text{ in. holes}$
- 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 ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

ZB5AA4

Technical Description

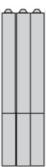
Electrical Composition Corresponding to Code C1



ZB5AA4

Technical Description

Electrical Composition Corresponding to Code C2



ZB5AA4

Technical Description

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



Technical Description

Electrical Composition Corresponding to Code C15

1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



ZB5AA4

Technical Description

Lea	en	C
LUM	(1)	·

Single contact



Double contact



Light block

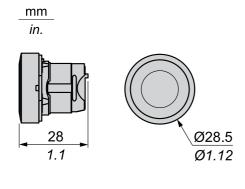


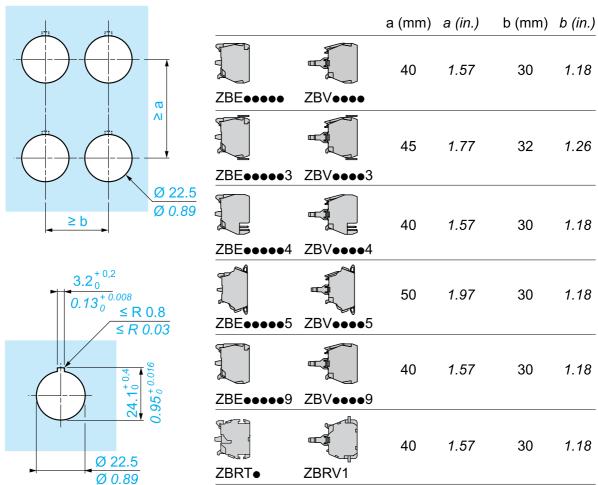
Possible location



Technical Illustration

Dimensions





Recommended replacement(s)