ZB4BD3

Selector switch head, Harmony XB4, metal, black, 22mm, 3 positions, stay put





Main

Range of product	Harmony XB4
Product or component type	Head for selector switch
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Stay put
Operator profile	Black standard handle
Operator position information	3 positions +/- 45°

Complementary

Basic element			
C11 for <3 contacts using single blocks in front mounting			
C8 for <4 contacts using single and double blocks in front mounting			
C7 for <4 contacts using single blocks in front mounting			
C6 for <5 contacts using single and double blocks in front mounting			
C5 for <5 contacts using single blocks in front mounting			
C4 for <6 contacts using single and double blocks in front mounting			
C3 for <6 contacts using single blocks in front mounting			
1000000 cycles			
7000000 Pa at 55 °C, distance : 0.1 m			
0.04 kg			
44 mm			
29 mm			
29 mm			

Environment

Protective treatment	TH
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C
Overvoltage category	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	EN/IEC 60947-5-5 EN/IEC 60947-1 UL 508 CSA C22.2 No 14 EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-5-1 JIS C8201-1

Product certifications	LROS (Lloyds register of shipping) DNV GL		
	BV UL listed CSA		
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 Height	3.600 cm		
Package 1 Width	5.300 cm		
Package 1 Length	5.300 cm		
Package 1 Weight	44.000 g		
Unit Type of Package 2	BB1		
Number of Units in Package 2	5		
Package 2 Height	5.000 cm		
Package 2 Width	3.400 cm		
Package 2 Length	26.500 cm		
Package 2 Weight	222.000 g		
Unit Type of Package 3	S03		
Number of Units in Package 3	250		
Package 3 Height	30.000 cm		
Package 3 Width	30.000 cm		
Package 3 Length	40.000 cm		
Package 3 Weight	11.686 kg		
Offer Sustainability			
Sustainable offer status	Green Premium product		
REACh Regulation	☐ REACh Declaration		

Pro-active compliance (Product out of EU RoHS legal scope) [☑] EU RoHS			
Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS			
Yes			
Yes			
☑ China RoHS Declaration			
€Yes			
Product Environmental Profile			
End Of Life Information			
WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov			

Contractual warranty

Warranty	18 months

Product data sheet Dimensions Drawings

ZB4BD3

Dimensions





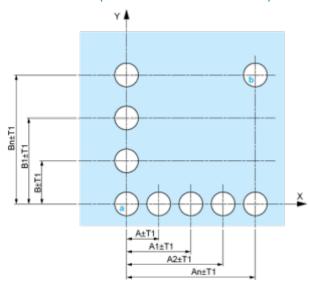
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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)

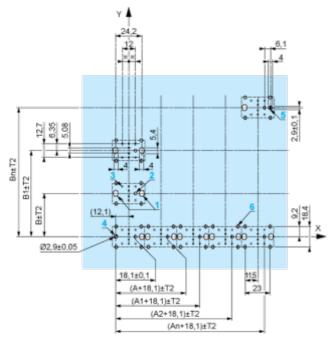


A: 30 mm min. / 1.18 in. min.

B: 40 mm min. / 1.57 in. min.

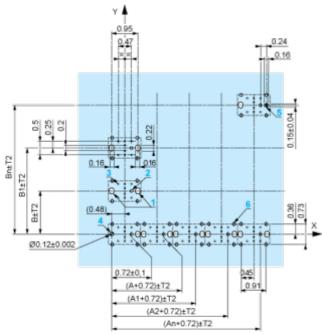
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

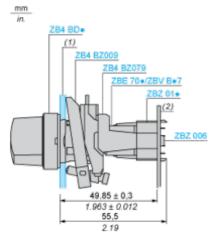
General Tolerances of the Panel and Printed Circuit Board

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:
 - 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 ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 38 × 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 \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ 01•.

Product data sheet Technical Description

ZB4BD3

Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Code C5
Electrical Composition Corresponding to Code C6
Electrical Composition Corresponding to Code C7
Electrical Composition Corresponding to Code Of

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

Legend Single contact

Light block

Double contact

Possible location



Sequence of Contacts Fitted to 3-position Selector Switch Body

Position 315°



Push	Position	Тор			
Bottom			Δ		
Location		Left	Centre	Right	
State		1	1	0	
Contacts	N/O		closed	closed	open
N/C		open	open	closed	

Position 0°



Push	Position	Тор			
Bottom					
Location		Left	Centre	Right	
State		0	0	0	
Contacts	N/O		open	open	open
N/C		closed	closed	closed	

Position 45°



Push	Position	Тор			
Bottom	Δ				
Location		Left	Centre	Right	
State		0	1	1	
Contacts	N/O		open	closed	closed
N/C		closed	open	open	