Product datasheet

Specification





Head for illuminated emergency switching off push button, Harmony XB4, metal, red mushroom 40mm, 22mm, universal LED, push-pull

ZB4BW643

Main

Range of product	Harmony XB4	
Product or component type	Head for illuminated emergency switching off push-button	
Device short name	ZB4	
Product compatibility	Universal LED	
Bezel material	Chromium plated metal	
Head type	Standard	
Mounting diameter	22.5 mm	
Sale per indivisible quantity	1	
Shape of signaling unit head	Round	
Type of operator	mechanical latching	
Reset	Push-pull	
Operator profile	Red mushroom Ø 40 mm, unmarked	
Cap/operator or lens colour	Red	

Complementary

CAD overall width	40 mm	
CAD overall height	40 mm	
CAD overall depth	53 mm	
Net weight	0.051 kg	
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m	
Mechanical durability	500000 cycles	
Electrical composition code	M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED M3 for <4 contacts using single blocks in front mounting with integral LED M4 for <4 contacts using single and double blocks in front mounting with integral LED	
device presentation	Basic sub-assemblies	

Environment

protective treatment	тн
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-4070 °C

Overvoltage category	Class I conforming to IEC 60536 IP66 conforming to IEC 60529 IP69 IP69K	
IP degree of protection		
NEMA degree of protection	NEMA 13 NEMA 4X	
IK degree of protection IK05 conforming to IEC 62262		
Standards	JIS C8201-5-1 IEC 60364-5-53 IEC 60947-5-5 IEC 60947-5-1 IEC 60947-5-4 IEC 60947-1 CSA C22.2 No 14 UL 508 JIS C8201-1	
Product certifications	CSA GL UL listed BV LROS (Lloyds register of shipping) DNV	
Vibration resistance	ion 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	4.3 cm
Package 1 Width	5.2 cm
Package 1 Length	5.6 cm
Package 1 Weight	53.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	80
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.563 kg

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

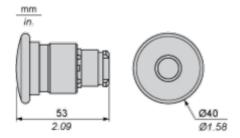
	Reach Free Of Svhc	
⊘	Mercury Free	
②	Rohs Exemption Information	Yes

Certifications & Standards

Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information

Dimensions Drawings

Dimensions



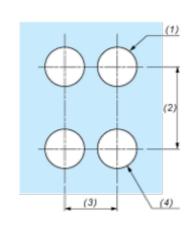
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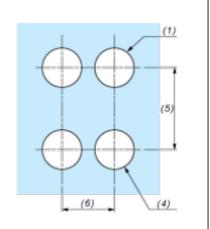
Mounting and Clearance

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

Connection by Faston Connectors

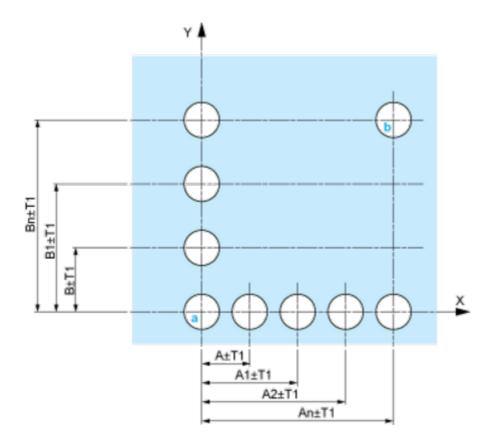




- (1) Diameter on finished panel or support
- (2) 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $_0^{+0.4}$ / 0.88 in. $_0^{+0.016}$)
- (5) 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

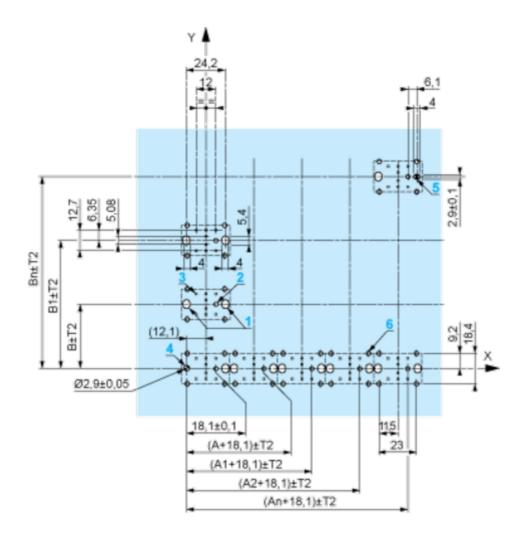
Panel Cut-outs (Viewed from Installer's Side)



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

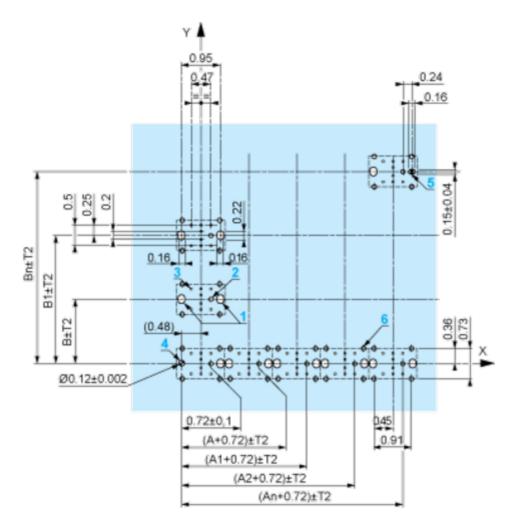
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

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

General Tolerances of the Panel and Printed Circuit Board

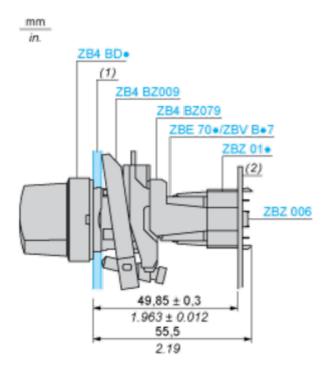
The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 mm max.

Installation Precautions

- $_{\bullet}$ 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:
 - $_{\circ}\;$ 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.

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- (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•
- 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•

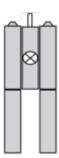
Dimensions An + 18.1 relate to the \varnothing 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ 01•.

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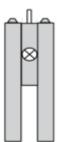
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Technical Description

Electrical Composition Corresponding to Code M3



Electrical Composition Corresponding to Code M4



Electrical Composition Corresponding to Codes M6 and P2



Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



Legend

Single contact



Double contact



Light block



Possible location

