Product datasheet Characteristics

ZB4BH0183

white flush illuminated pushbutton head Ø22 push-push for integral LED





Main

(!) Discontinued	
Main	
Range of product	Harmony XB4
Product or component type	Head for illuminated push-button
Product compatibility	Integral LED
Device short name	ZB4
Bezel material	Chromium plated metal
Head type	Standard
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
oriape or signaling unit ricad	
Type of operator	push-push
Type of operator	push-push White flush, unmarked
	• •
Type of operator Operator profile	White flush, unmarked
Type of operator Operator profile	White flush, unmarked
Type of operator Operator profile Operator additional information	White flush, unmarked
Type of operator Operator profile Operator additional information Complementary	White flush, unmarked For insertion of legend
Type of operator Operator profile Operator additional information Complementary CAD overall width	White flush, unmarked For insertion of legend 29 mm
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height	White flush, unmarked For insertion of legend 29 mm 29 mm
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height CAD overall depth	White flush, unmarked For insertion of legend 29 mm 29 mm 30 mm
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height CAD overall depth Net weight	White flush, unmarked For insertion of legend 29 mm 29 mm 30 mm 0.026 kg
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height CAD overall depth Net weight Resistance to high pressure washer	White flush, unmarked For insertion of legend 29 mm 29 mm 30 mm 0.026 kg 7000000 Pa at 55 °C, distance : 0.1 m
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height CAD overall depth Net weight Resistance to high pressure washer Mechanical durability	White flush, unmarked For insertion of legend 29 mm 29 mm 30 mm 0.026 kg 7000000 Pa at 55 °C, distance : 0.1 m 500000 cycles M5 for <2 contacts using single blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height CAD overall depth Net weight Resistance to high pressure washer Mechanical durability Electrical composition code	White flush, unmarked For insertion of legend 29 mm 29 mm 30 mm 0.026 kg 7000000 Pa at 55 °C, distance : 0.1 m 500000 cycles M5 for <2 contacts using single blocks in front mounting with integral LED 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 and transformer M10 for <2 contacts using single blocks in front mounting with integral LED
Type of operator Operator profile Operator additional information Complementary CAD overall width CAD overall height CAD overall depth Net weight Resistance to high pressure washer Mechanical durability Electrical composition code	White flush, unmarked For insertion of legend 29 mm 29 mm 30 mm 0.026 kg 7000000 Pa at 55 °C, distance : 0.1 m 500000 cycles M5 for <2 contacts using single blocks in front mounting with integral LED 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 and transformer M10 for <2 contacts using single blocks in front mounting with integral LED

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	30 mm
Net weight	0.026 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	500000 cycles
Electrical composition code	M5 for <2 contacts using single blocks in front mounting with integral LED 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
Device presentation	Basic element

Environment

Protective treatment	TH	F

Ambient air temperature for storage	-4070 °C
Electrical shock protection class	Class I conforming to IEC 60536
Ambient air temperature for operation	-4070 °C
Overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 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 60947-5-4 EN/IEC 60947-5-1 UL 508 EN/IEC 60947-1 CSA C22.2 No 14 JIS C8201-5-1 JIS C8201-1
Product certifications	BV CSA LROS (Lloyds register of shipping) RINA UL listed DNV GL
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 Weight	27 g	
Package 1 Height	4.5 cm	
Package 1 width	3.4 cm	
Package 1 Length	5.4 cm	

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	

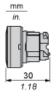
Contractual warranty

14/	40
Warranty	18 months

Product datasheet Dimensions Drawings

ZB4BH0183

Dimensions





ZB4BH0183

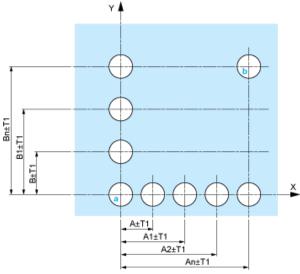
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors
(2)	(5)

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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

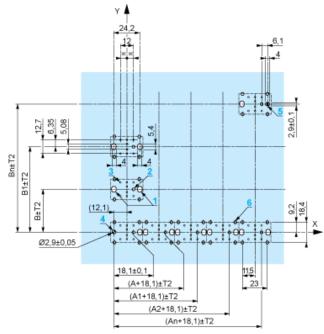
Panel Cut-outs (Viewed from Installer's Side)



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

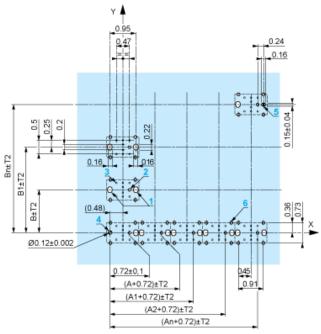
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

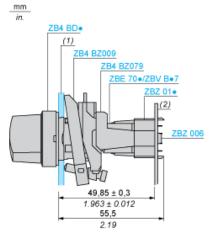
General Tolerances of the Panel and Printed Circuit Board

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 \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 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)
- 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 ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

Product datasheet Technical Description

ZB4BH0183

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



Product datasheet Technical Description

ZB4BH0183

Electrical Composition Corresponding to Codes M6 and P2



Product datasheet Technical Description

ZB4BH0183

Legend

Single contact



Double contact



Light block



Possible location



ZB4BH0183 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