## Product data sheet Characteristics

## **ZB4BD487**

# black selector switch head Ø22 2-position spring return



Main	
Range of product	Harmony XB4
Product or component type	Head for selector switch
Device short name	ZB4
Bezel material	Black metal
Mounting diameter	0.87 in (22 mm)
Sale per indivisible quantity	1

Complementary	Com	plementa	ary
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Complementary		
CAD overall width	1.14 in (29 mm)	
CAD overall height	1.14 in (29 mm)	
CAD overall depth	1.77 in (45 mm)	
Net Weight	0.06 lb(US) (0.026 kg)	
Overvoltage category	Class I IEC 60536	
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m	
Shape of signaling unit head	Round	
Type of operator	Spring return	
Operator profile	Black toggle switch	
Operator position information	2 positions 90°	
Mechanical durability	500000 cycles	
Electrical composition code	C11 3 single front mounting C12 6 single front mounting C15 1 single front mounting C13 6 single and double front mounting	
Device presentation	Basic element	

#### **Environment**

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Protective treatment	TH
Ambient air temperature for storage	-40158 °F (-4070 °C)
Ambient air temperature for operation	-40158 °F (-4070 °C)
IP degree of protection	IP69K IP67 IEC 60529 IP69
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 IEC 50102
Standards	EN/IEC 60947-5-4 EN/IEC 60947-5-5 EN/IEC 60947-1 CSA C22.2 No 14 JIS C8201-5-1 UL 508 EN/IEC 60947-5-1 JIS C8201-1

Product certifications	UL Listed
1 Toddet certifications	CSA
	RINA
	LROS (Lloyds register of shipping)
	GL
	DNV
	BV
Vibration resistance	5 gn 2500 Hz)IEC 60068-2-6
Shock resistance	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27
	50 gn 11 ms) half sine wave acceleration IEC 60068-2-27

#### Ordering and shipping details

GTIN	03389110837759
Package weight(Lbs)	0.06 lb(US) (0.026 kg)

### Packing Units

Package 1 Height	0.560 dm
Package 1 width	0.340 dm
Package 1 Length	0.540 dm

### Contractual warranty

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# Product data sheet Dimensions Drawings

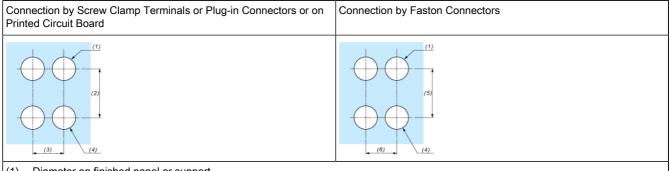
# **ZB4BD487**

#### **Dimensions**





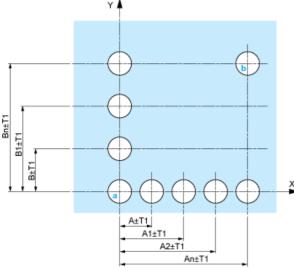
#### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



- Diameter on finished panel or support
- 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm  $_0$  <sup>+0.4</sup> / 0.88 in.  $_0$  <sup>+0.016</sup>) (4)
- (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

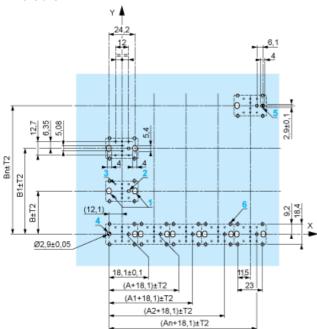
#### Panel Cut-outs (Viewed from Installer's Side)



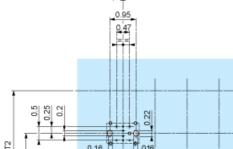
- 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

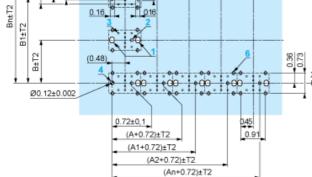
#### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

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.

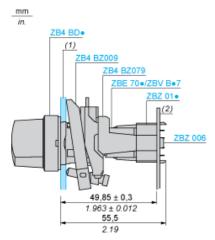
#### Installation Precautions

- 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).

0.16

- 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•
- 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  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.

# **ZB4BD487**

Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1
Electrical Composition Corresponding to Code C12
Electrical Composition Corresponding to Code C13
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
Logand
Legend
Single contact

Double contact



Light block



Possible location

