Specifications





Toggle switch head, Harmony XB4, metal, black, 22mm, 2 positions, stay put

ZB4BD28

#### 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	

## Complementary

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Cad Overall Width	29 mm	
Cad Overall Height	29 mm	
Cad Overall Depth	45 mm	
Net Weight	0.026 kg	
Overvoltage Category	Class I conforming to IEC 60536	
Resistance To High Pressure Washer	7000000 Pa at 55 °C, distance : 0.1 m	
Shape Of Signaling Unit Head	Round	
Type Of Operator	stay put	
Operator Profile	Black toggle switch	
Operator Position Information	2 positions 90°	
Mechanical Durability	500000 cycles	
Electrical Composition Code	le C11 for <3 contacts using single blocks in front mounting C12 for <6 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting C13 for <6 contacts using single and double blocks in front mounting	
Device Presentation	Basic element	

#### Environment

Protective Treatment	тн
Ambient Air Temperature For Storage	-4070 °C
Ambient Air Temperature For Operation	-4070 °C
Ip Degree Of Protection	IP69 conforming to IEC 60529 IP69K
Nema Degree Of Protection	NEMA 13 NEMA 4X

Ik Degree Of Protection	IK06 conforming to IEC 50102
Standards	UL 508
	IEC 60947-5-4
	CSA C22.2 No 14
	JIS C8201-5-1
	IEC 60947-1
	IEC 60947-5-5
	IEC 60947-5-1
	JIS C8201-1
Product Certifications	CSA
	UL listed
	BV
	GL
	LROS (Lloyds register of shipping)
	DNV
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	3.6 cm
Package 1 Width	4.7 cm
Package 1 Length	5.4 cm
Package 1 Weight	32.0 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	200
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	6.878 kg

# **Contractual warranty**

Warranty

18 months

## Sustainability Screen Premium

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

### Well-being performance

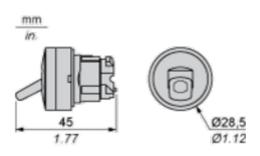
Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes

#### **Certifications & Standards**

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

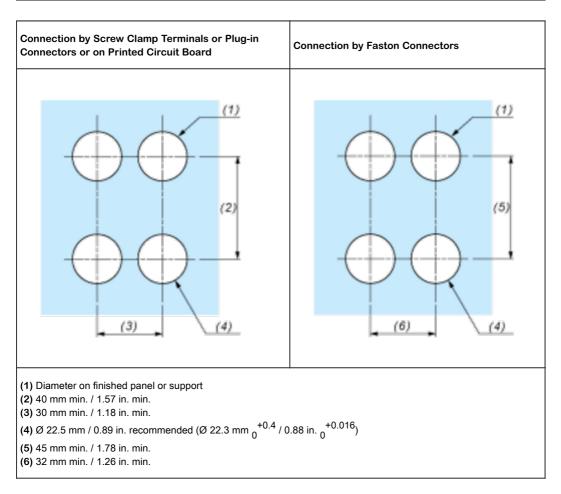
#### **Dimensions Drawings**

#### Dimensions



Mounting and Clearance

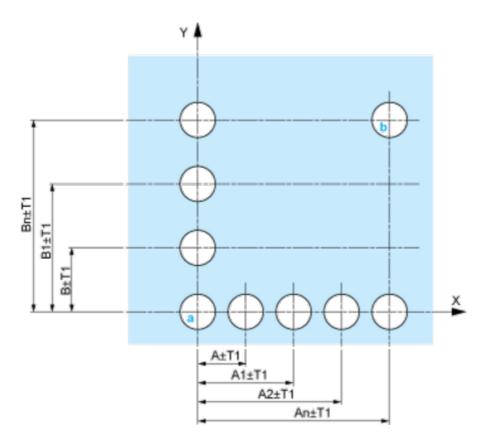
# Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



#### **ZB4BD28**

#### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

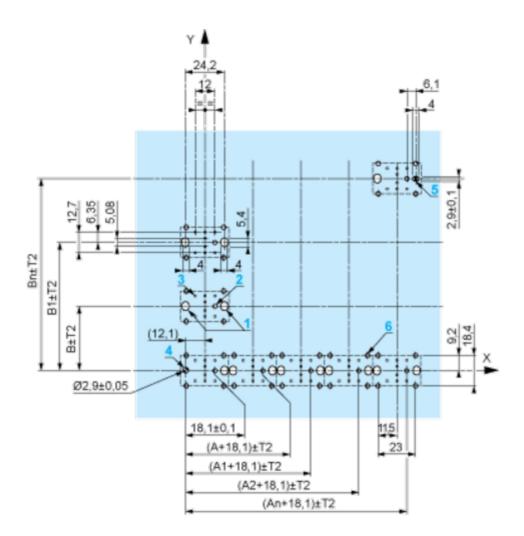
Panel Cut-outs (Viewed from Installer's Side)



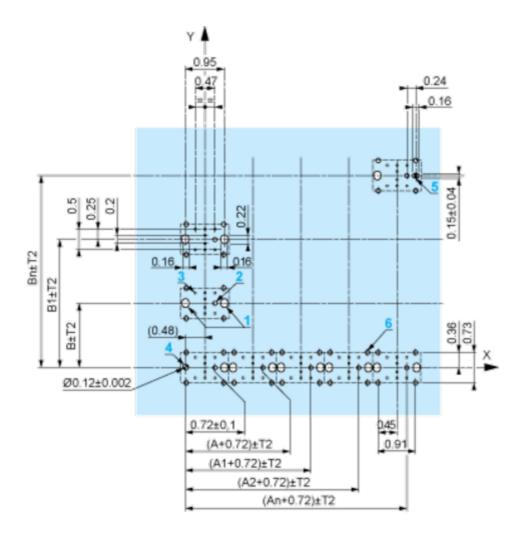
**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

#### 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.

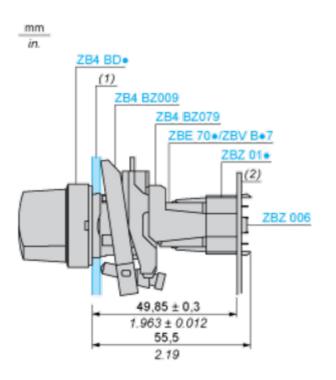
#### General Tolerances of the Panel and Printed Circuit Board

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<sup>°</sup>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.



(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•

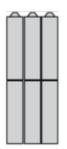
Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.

**Technical Description** 

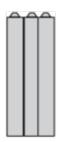
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



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



#### Legend

Single contact



Double contact



Light block



Possible location

