

Head for selector switch, Harmony XB4, black metal, black, 22mm, 2 positions, stay put

ZB4BD27

### Main

Range of product	Harmony XB4			
Product or component type	Head for selector switch			
Device short name	ZB4			
Bezel material	Black 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	2 positions 90°			

# Complementary

CAD overall width	29 mm					
CAD overall height	29 mm					
CAD overall depth	44 mm					
Product weight	0.04 kg					
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m					
Mechanical durability	1000000 cycles					
Electrical composition code	C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C5 for <5 contacts using single blocks in front mounting C6 for <5 contacts using single and double blocks in front mounting C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single 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
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	IEC 60947-5-1 CSA C22.2 No 14 IEC 60947-5-4 JIS C8201-5-1 UL 508 IEC 60947-1 IEC 60947-5-5 JIS C8201-1				
Product certifications	CSA DNV BV LROS (Lloyds register of shipping) UL listed				
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	5.200 cm
Package 1 Width	3.400 cm
Package 1 Length	5.400 cm
Package 1 Weight	43.800 g
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	5.200 cm
Package 2 Width	3.400 cm
Package 2 Length	26.500 cm
Package 2 Weight	219.000 g
Unit Type of Package 3	S03
Number of Units in Package 3	200
Package 3 Height	30.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	9.290 kg

# **Contractual warranty**

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Total lifecycle Carbon footprint	1
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

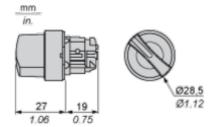
Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
California proposition 65	WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), 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

#### **Use Again**

○ Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No

# **Dimensions Drawings**

# **Dimensions**

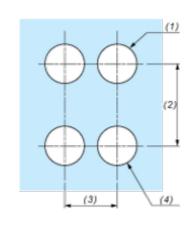


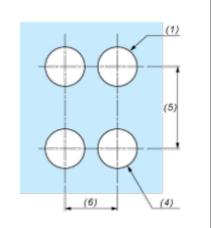
#### Mounting and Clearance

# 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** 

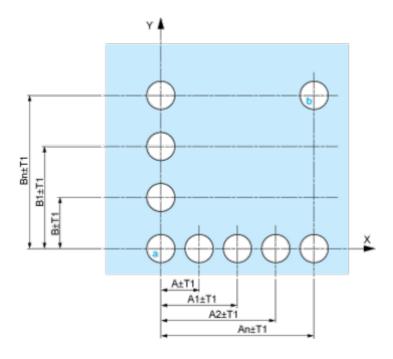




- (1) Diameter on finished panel or support
- (2) 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm  $_0^{+0.4}$  / 0.88 in.  $_0^{+0.016}$ )
- (5) 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

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

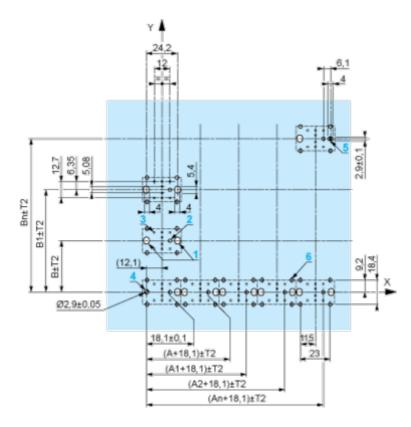
#### Panel Cut-outs (Viewed from Installer's Side)



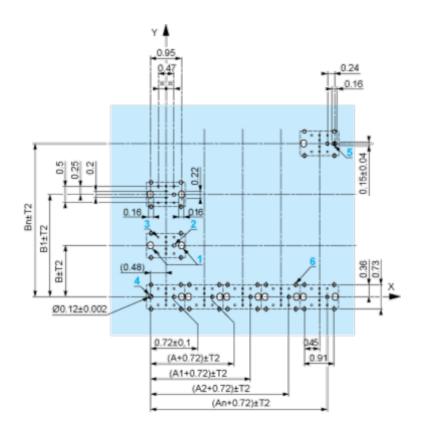
**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

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

Dimensions in mm



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



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

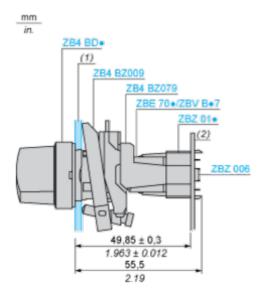
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - $_{\circ}\;$  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  ${\bf a}$  and  ${\bf b}$  are diagonally opposed and must align with those marked  ${\bf 4}$  and  ${\bf 5}$ .



- (1) Panel
- (2) Printed circuit board

#### Mounting of Adapter (Socket) ZBZ 01•

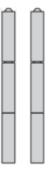
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- $_{ullet}$  4 1 hole Ø 2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated 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•.

# **Product data sheet**

# **ZB4BD27**

**Technical Description** 

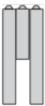




# **Product data sheet**

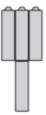
**ZB4BD27** 

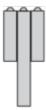




# Product data sheet

**ZB4BD27** 





# **Product data sheet**

# **ZB4BD27**

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



# **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



# Sequence of Contacts Fitted to 2-position Selector Switch Body

#### Position 315°



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

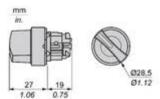
#### Position 45°

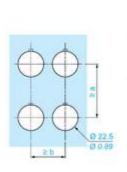


Push		Тор			
	Position	Bottom			
	Location		Left	Centre	Right
	State		1	1	1
Contacts	N/O		closed	closed	closed
	N/C		open	open	open

# **Technical Illustration**

# **Dimensions**



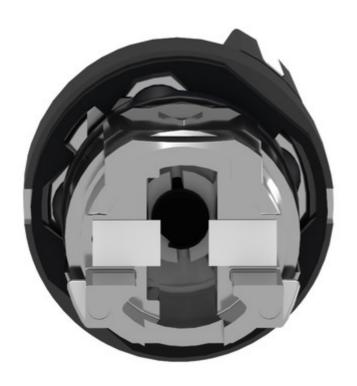


		a (mm)	a (in.)	b (mm)	b (in.)
ZBE•••••	ZBV	40	1.57	30	1,18
ZBE3	ZBV••••3	45	1.77	32	1.26
ZBE4	ZBV••••4	40	1.57	30	1.18
ZBE5	ZBV	50	1.97	30	1,18
ZBE9	ZBV••••9	40	1.57	30	1.18
ZBRT•	ZBRV1	40	1.57	30	1.18

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Image of product / Alternate images

### **Alternative**









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