

# Product data sheet

Specifications



## yellow selector switch head Ø22 3-position spring return

ZB4BD505

⚠ Discontinued on: Dec 2, 2020

⚠ End-of-service on: Dec 31, 2020

⚠ Discontinued

Product availability: Non-Stock - Not normally stocked in distribution facility

### 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	0.9 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	To centre spring return
Operator profile	Yellow standard handle
Operator position information	3 positions +/- 45°

### Complementary

CAD overall width	1.1 in (29 mm)
CAD overall height	1.1 in (29 mm)
CAD overall depth	1.7 in (44 mm)
Net Weight	0.09 lb(US) (0.04 kg)
Resistance to high pressure washer	1015.3 psi (7000000 Pa) 131.0000000000 °F (55 °C) 0.1 m
Mechanical durability	1000000 cycles
Electrical composition code	C3 6 single front mounting C4 6 single and double front mounting C5 5 single front mounting C6 5 single and double front mounting C7 4 single front mounting C8 4 single and double front mounting C11 3 single front mounting
device presentation	Basic element

### Environment

protective treatment	TH
Ambient Air Temperature for Storage	-40.0000000000...158.0000000000 °F (-40...70 °C)
Ambient Air Temperature for Operation	-40.0000000000...158.0000000000 °F (-40...70 °C)

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Overvoltage category	Class I IEC 60536
IP degree of protection	IP67 IEC 60529 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 UL 508 JIS C8201-5-1 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-5-4 EN/IEC 60947-1 JIS C8201-1
Product Certifications	GL DNV UL Listed LROS (Lloyds register of shipping) CSA BV
Vibration resistance	5 gn 2...500 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

Category	US10CS222468
Discount Schedule	0CS2
GTIN	00785901513292
Returnability	No
Country of origin	MX

## Contractual warranty

Warranty	18 months
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## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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 >](#)

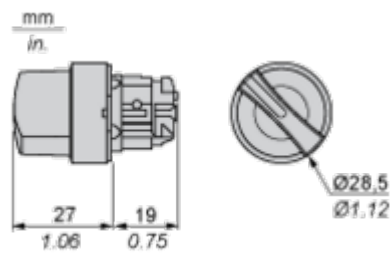
## Well-being performance

✓	Reach Free Of Svhc	
✓	Toxic Heavy Metal Free	
✓	Mercury Free	
✓	Rohs Exemption Information	Yes
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	
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>	

Dimensions Drawings

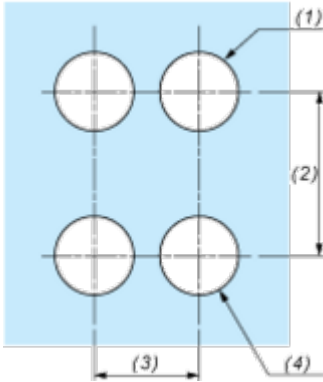
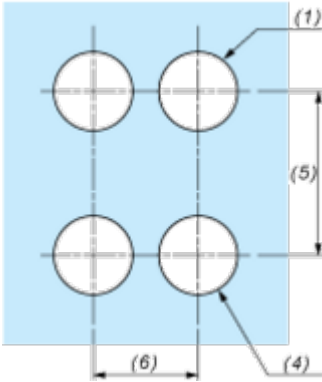
Dimensions

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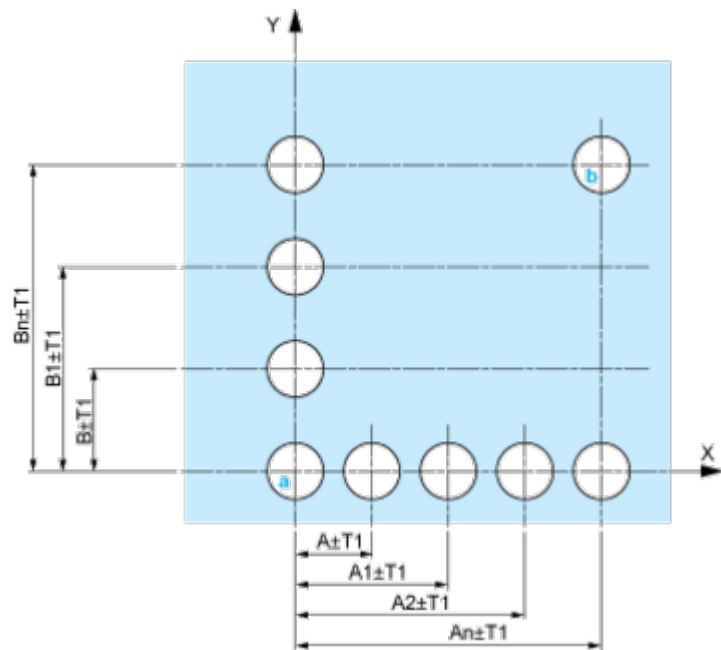
Mounting and Clearance

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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

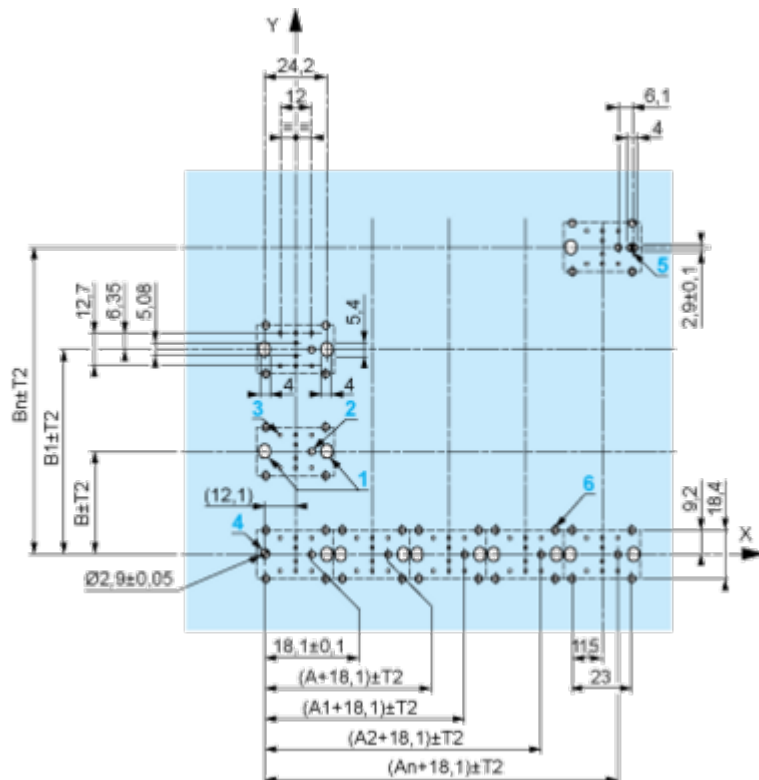
Panel Cut-outs (Viewed from Installer’s Side)



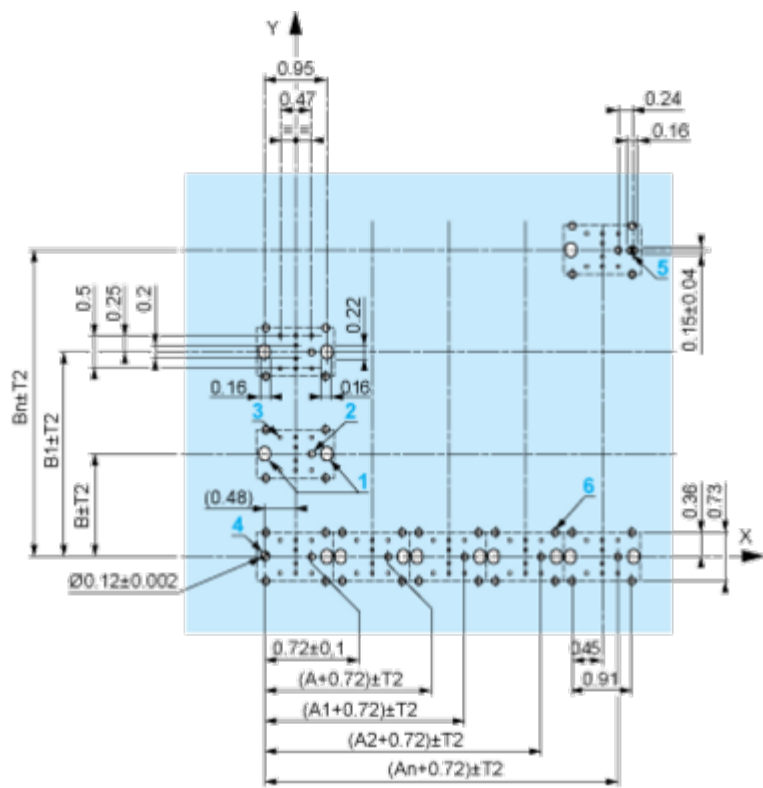
A: 30 mm min. / 1.18 in. min.  
B: 40 mm min. / 1.57 in. min.

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.

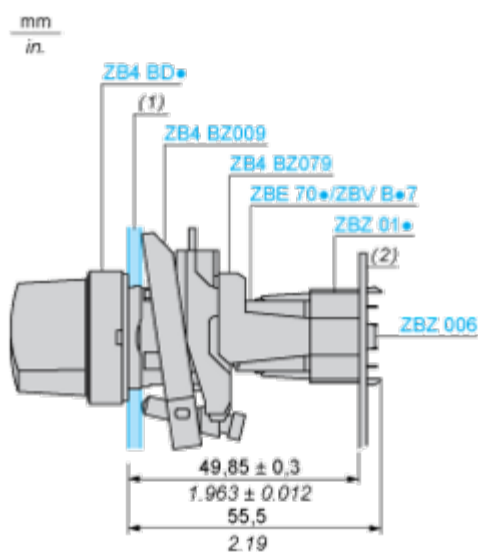
**General Tolerances of the Panel and Printed Circuit Board**

The cumulative tolerance must not exceed 0.3 mm / 0.012 in:  $T1 + T2 = 0.3 \text{ mm max.}$

**Installation Precautions**

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^\circ 30'$  (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:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - 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•

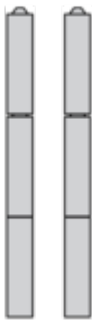
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.



Technical Description

Electrical Composition Corresponding to Code C3

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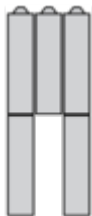
Electrical Composition Corresponding to Code C4

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Electrical Composition Corresponding to Code C5

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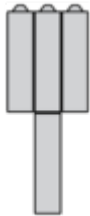
Electrical Composition Corresponding to Code C6

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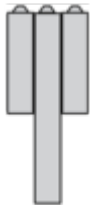
Electrical Composition Corresponding to Code C7

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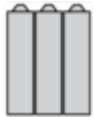


Electrical Composition Corresponding to Code C8

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



Legend

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Single contact



Double contact



Light block



Possible location





Sequence of Contacts Fitted to 3-position Selector Switch Body

Position 315°



Push	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		1	1	0
Contacts	N/O		closed	closed	open
	N/C		open	open	closed




Position 0°



Push	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		0	0	0
Contacts	N/O		open	open	open
	N/C		closed	closed	closed

Position 45°



Push	Position	Top			
		Bottom			
	Location		Left	Centre	Right
	State		0	1	1
Contacts	N/O		open	closed	closed
	N/C		closed	open	open