Specifications



Head for non illuminated push button, Harmony XB5, black Ø 40 mushroom pushbutton Ø22 mm latching key release

ZB5AS12

## Main

Range Of Product	Harmony XB5	
Product Or Component Type	Head for non-illuminated push-button	
Device Short Name	ZB5	
Bezel Material	Dark grey plastic	
Head Type	Standard	
Mounting Diameter	22 mm	
Sale Per Indivisible Quantity	1	
Shape Of Signaling Unit Head	Round	
Type Of Operator	latching	
Reset	Key release	
Operator Profile	Black mushroom Ø 40 mm, unmarked	
Type Of Keylock	Key 455	
Key Withdrawal Position	Center	
Device Presentation	Basic element	

# Complementary

Cad Overall Width	40 mm			
Cad Overall Height 40 mm				
Cad Overall Depth	79 mm			
Net Weight	0.044 kg			
Mechanical Durability	500000 cycles			
Station Name	XALD 1 cut-out XALK 1 cut-out			
Electrical Composition Code	C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting C10 for <4 contacts using single and double blocks in front mounting			
Compatibility Code	ZB5			

## Environment

Protective Treatment	тн
Ambient Air Temperature For Storage	-4070 °C

Ambient Air Temperature For Operation	-4070 °C			
Overvoltage Category	Class II conforming to IEC 60536			
Ip Degree Of Protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K			
Nema Degree Of Protection	NEMA 13 NEMA 4X			
Resistance To High Pressure Washer	7000000 Pa at 55 °C, distance : 0.1 m			
Ik Degree Of Protection	IK03 conforming to IEC 50102			
Standards	JIS C8201-5-1 CSA C22.2 No 14 EN/IEC 60947-1 UL 508 EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-1			
Product Certifications UL listed DNV LROS (Lloyds register of shipping) BV GL CSA				
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	4.5 cm
Package 1 Width	5.3 cm
Package 1 Length	8.8 cm
Package 1 Weight	69.0 g
Unit Type Of Package 2	\$03
Number Of Units In Package 2	100
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	7.302 kg

# **Contractual warranty**

Warranty

18 months

## Sustainability

**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 >



RoHS/REACh

## Well-being performance

Reach Free Of Svhc

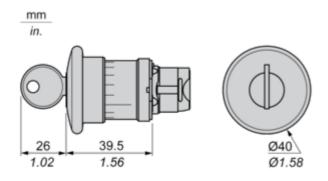
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes

## **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			
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			

## **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

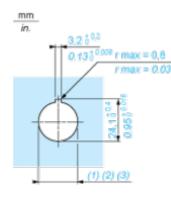


(1) Diameter on finished panel or support

(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended. (3)  $\emptyset$ 22.5 mm recommended ( $\emptyset$ 22.3  $_0^{+0.4}$ ) /  $\emptyset$ 0.89 in. recommended ( $\emptyset$ 0.88 in.  $_0^{+0.016}$ )

				0
Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

#### **Detail of Lug Recess**

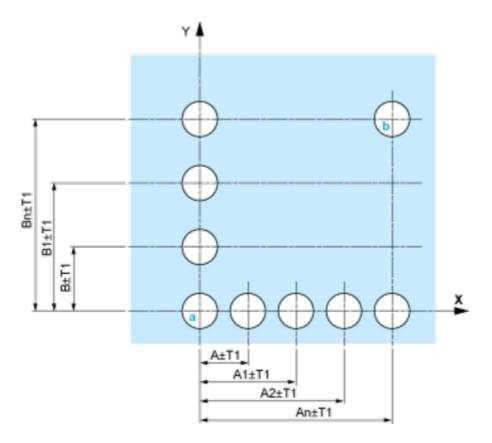


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#### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

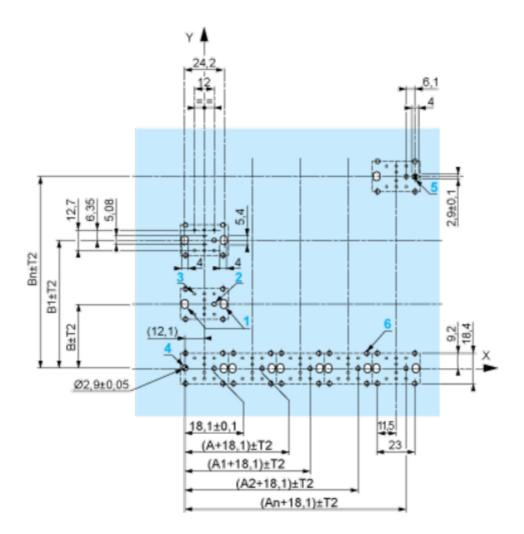
Panel Cut-outs (Viewed from Installer's Side)



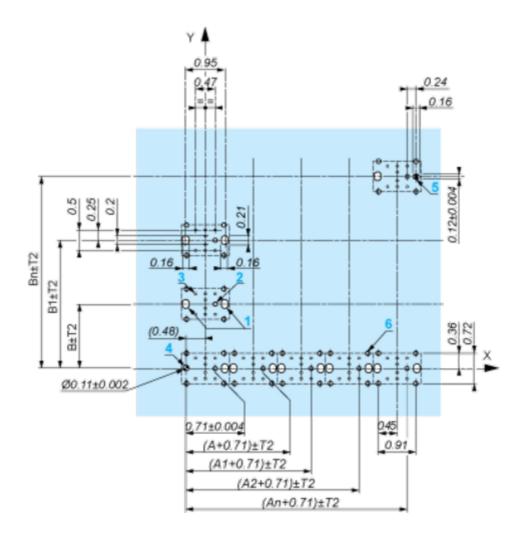
**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

### 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.

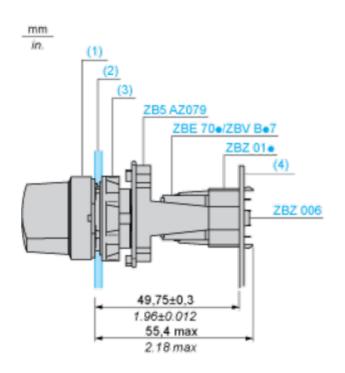
#### General Tolerances of the Panel and Printed Circuit Board

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 ZB5AZ009: ± 2 30' (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 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 (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



- (1) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

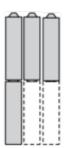
#### Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- **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 ZBZ01•

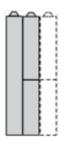
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

**Technical Description** 

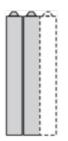
Electrical Composition Corresponding to Code C7



Electrical Compositions Corresponding to Code C8



Electrical Compositions Corresponding to Code C10



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

