# 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



# Head for non illuminated push button, Harmony XB5, black flush, 22mm, spring return, unmarked

ZB5AH02

# Main

Range Of Product	Harmony XB5	
Product Or Component Type	nent Type Head for non-illuminated push-button	
Device Short Name	ZB5	
Bezel Material	Dark grey plastic	
Mounting Diameter	22 mm	
Head Type	Standard	
Sale Per Indivisible Quantity	1	
Shape Of Signaling Unit Head	Round	
Type Of Operator	push-push	
Operator Profile	Black flush, unmarked	

# Complementary

Cad Overall Width	29 mm	
Cad Overall Height	29 mm	
Cad Overall Depth	28 mm	
Net Weight	0.018 kg	
Mechanical Durability	2000000 cycles	
Station Name	XALD 15 cut-outs XALK 25 cut-outs	
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 C9 for <3 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 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	IEC 60947-5-1 CSA C22.2 No 14 IEC 60947-1 UL 508 JIS C8201-5-1 IEC 60947-5-4 JIS C8201-1
Product Certifications	GL DNV UL listed CSA BV LROS (Lloyds register of shipping)
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
Vibration Resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6

# **Packing Units**

•	
Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	3.000 cm
Package 1 Width	4.000 cm
Package 1 Length	5.000 cm
Package 1 Weight	18.500 g
Unit Type Of Package 2	S01
Number Of Units In Package 2	50
Package 2 Height	15.000 cm
Package 2 Width	15.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	1.056 kg
Unit Type Of Package 3	P06
Number Of Units In Package 3	1600
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	41.792 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

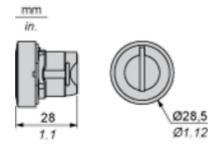
	Reach Free Of Svhc	
	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes

# **Certifications & Standards**

Reach Regulation	REACh Declaration		
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
China Rohs Regulation	China RoHS declaration		
California Proposition 65	WARNING: This product can expose you to chemicals including: Nickel compounds, which is known to the State of California to cause cancer, and 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

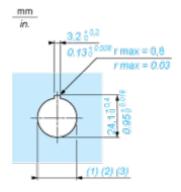
### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) Ø22.5 mm recommended (Ø22.3  $_0^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 in.  $_0^{+0.016}$ )

				•
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

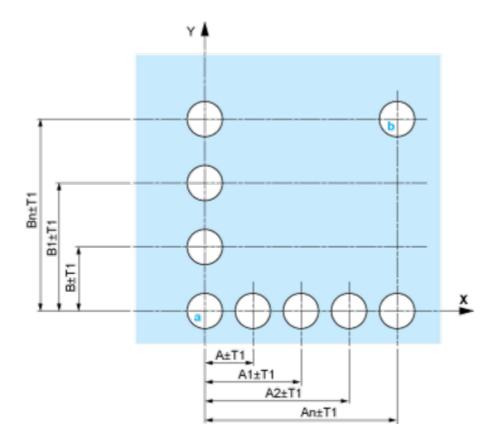
### **Detail of Lug Recess**



- (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.  $_0^{+0.016}$ )

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

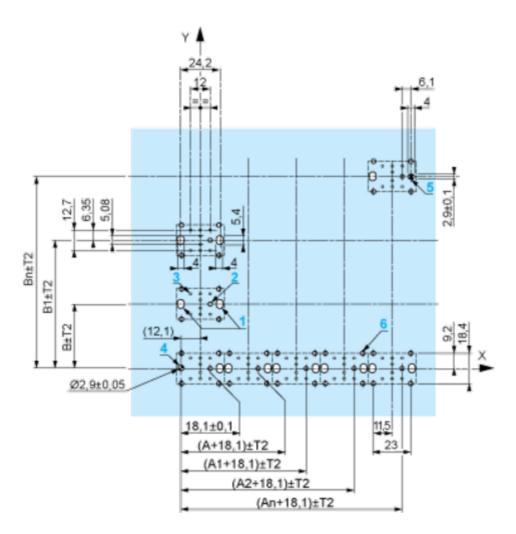
### Panel Cut-outs (Viewed from Installer's Side)



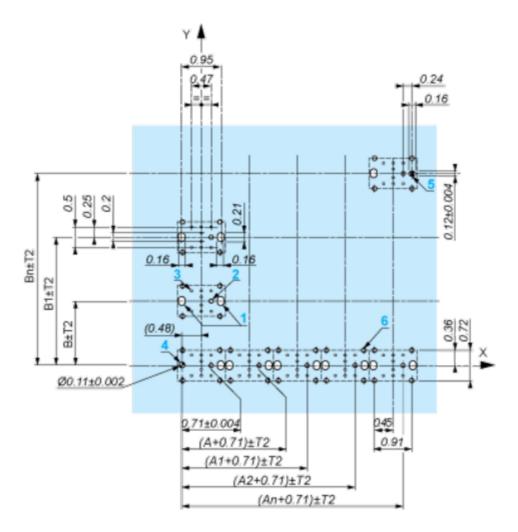
**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

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

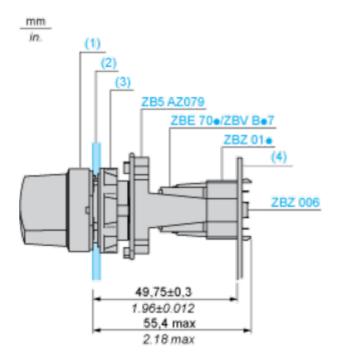
The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 mm max.

### **Installation Precautions**

- $_{\bullet}$  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.

May 11, 2024



- (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  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.

# **Product data sheet**

# **ZB5AH02**

**Technical Description** 

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

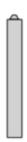


# Legend

Single contact



Double contact



Light block



Possible location

