# Product datasheet Characteristics

# ZB5AH43

red projecting illuminated pushbutton head Ø22 pushpush for integral LED



### Main

Harmony XB5
Head for illuminated push-button
Integral LED
ZB5
Dark grey plastic
22 mm
Standard
1
Round
Push-push
Red projecting unmarked

# Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	33 mm
Product weight	0.017 kg
Mechanical durability	5000000 cycles
Station name	XALD 15 cut-outs XALK 25 cut-outs
Electrical composition code	M6 for 2 contacts using single blocks in front mounting with integral LED and transformer M10 for 2 contacts using single blocks in front mounting with integral LED MF1 for 2 contacts using single blocks in front mounting with integral LED MR1 for 2 contacts using single blocks in rear mounting with integral LED M5 for 2 contacts using single blocks in front mounting with integral LED
Customizable	Yes
GCR BRIDGE	ZB5AHCUST08

### **Environment**

protective treatment	TH			
ambient air temperature for storage	-4070 °C			
ambient air temperature for operation	-2570 °C			
electrical shock protection class	Class II conforming to IEC 60536			
IP degree of protection	IP66 conforming to IEC 60529			
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	IK05 conforming to IEC 50102			
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508 CSA C22.2 No 14			
product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA			

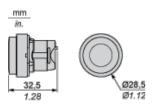


	UL listed	
vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6	
shock resistance	30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2- 27	
	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2- 27	

Contractual warranty

Contractaan warranty		
Warranty period	18 months 18 months	

# Dimensions



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

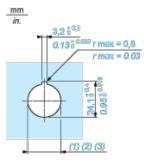
(1) Diameter on finished panel or support

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

- (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 0.4) / Ø0.89 in. recommended (Ø0.88 in. 0.40.016)

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**

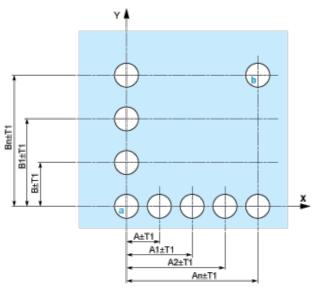


- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended (Ø22.3  $_{0}^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 in.  $_{0}^{+0.016}$ )



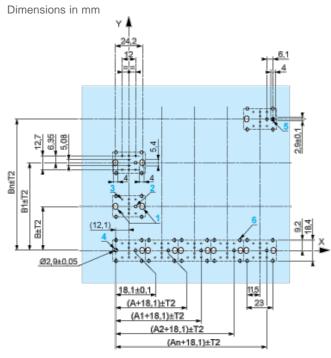
# Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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



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

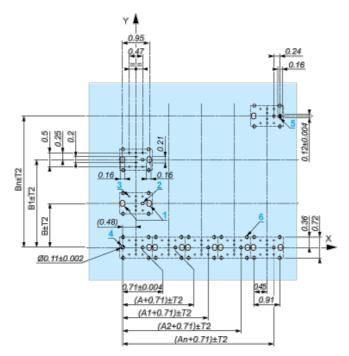
### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)



- A: 30 mm min.
- B: 40 mm min.

Dimensions in in.





A: 1.18 in. min.

B: 1.57 in. min.

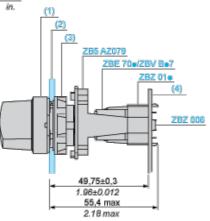
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - i every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - i 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**.  $\frac{mm}{m}$ 



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

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

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



- 1 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•.

## Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



# **Electrical Composition Corresponding to Codes M6 and P2**



# Legend

Single contact



Double contact







Possible location



