## Product datasheet Characteristics

# ZB5CV033



## Main

Range of product	Harmony XB5
Product or component type	Head for pilot light
Product compatibility	Integral LED
Device short name	ZB5
Bezel material	Plastic
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Square
Cap/operator or lens colour	Green
Operator additional information	With plain lens

### Complementary

CAD overall width	1.18 in (30 mm)	
CAD overall height	1.18 in (30 mm)	
CAD overall depth	1.14 in (29 mm)	
Product weight	0.04 lb(US) (0.02 kg)	
Station name	XALD 15 cut-outs XALK 25 cut-outs	
Electrical composition code	P1 in front mounting with integral LED P2 in front mounting with integral LED and transformer PF1 in front mounting with integral LED PR1 in rear mounting with integral LED	

## Environment

protective treatment	TH			
ambient air temperature for storage	-40158 °F (-4070 °C)			
ambient air temperature for operation	-13158 °F (-2570 °C)			
overvoltage category	Class II IEC 60536			
IP degree of protection	IP66 conforming to IEC 60529			
NEMA degree of protection	NEMA 13 NEMA 4X			
resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (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			
vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6			
shock resistance	30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC 60068-2-27 50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27			

#### **Offer Sustainability**

WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:	
Nickel compounds, which is known to the State of California to cause cancer, and	Nickel compounds, which is known to the State of California to cause cancer, and	

Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm.

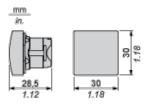


#### Contractual warranty

Warranty period

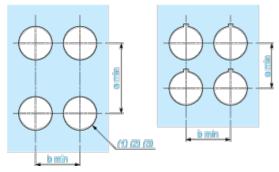
18 months

## Dimensions



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

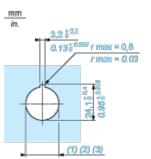
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) 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**

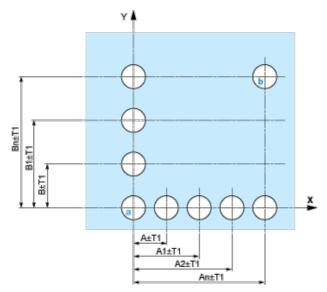


- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended (Ø22.3  $_{0}^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 in.  $_{0}^{+0.016}$ )

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

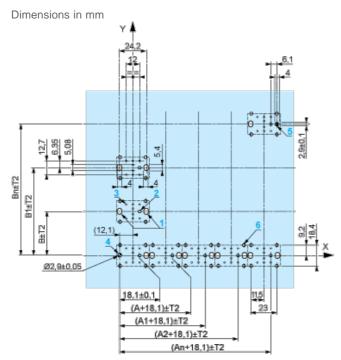
Panel Cut-outs (Viewed from Installer's Side)





- 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)

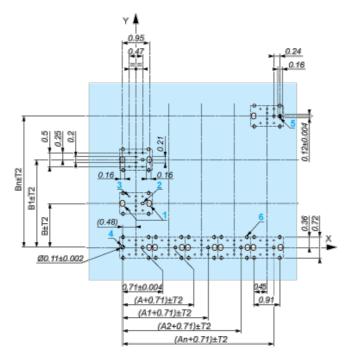


A: 30 mm min.

**B:** 40 mm min.

Dimensions in in.





A: 1.18 in. min.

B: 1.57 in. min.

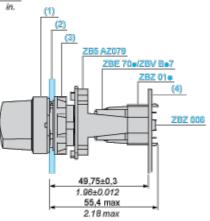
#### General Tolerances of the Panel and Printed Circuit Board

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 P1, P3, PF1, PR1 and PF2

Light block



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



## Legend

Single contact



Double contact



Light block



Possible location

