



Main

Range of product	Harmony XB5
Product or component type	Head for selector switch
Device short name	ZB5
Bezel material	Dark grey plastic
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Left to centre spring return
Operator profile	Black standard handle
Operator position information	3 positions +/- 45°

Complementary

CAD overall width	1.14 in (29 mm)
CAD overall height	1.14 in (29 mm)
CAD overall depth	1.81 in (46 mm)
Net Weight	0.04 lb(US) (0.017 kg)
Mechanical durability	1000000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
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 SF1 3 single front mounting SR1 3 single rear mounting
Device presentation	Basic element

Environment

Protective treatment	TH
Ambient air temperature for storage	-40...158 °F (-40...70 °C)
Ambient air temperature for operation	-40...158 °F (-40...70 °C)
Overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP67 conforming to IEC 60529 IP69 IEC 60529 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	IK06 conforming to IEC 50102

Standards	EN/IEC 60947-5-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-1 EN/IEC 60947-5-4 JIS C8201-5-1 JIS C8201-1
Product certifications	GL BV CSA LROS (Lloyds register of shipping) RINA DNV UL Listed
Vibration resistance	5 gn (f= 2...500 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

Ordering and shipping details

Category	22467 - PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
GTIN	00785901376330
Nbr. of units in pkg.	1
Package weight(Lbs)	0.05 lb(US) (0.02 kg)
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.09 in (5.3 cm)
Package 1 width	1.34 in (3.4 cm)
Package 1 Length	2.28 in (5.8 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	100
Package 2 Weight	6.01 lb(US) (2.725 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

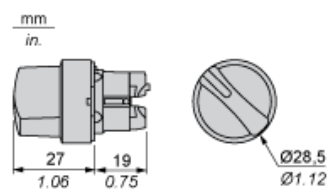
Offer Sustainability

Sustainable offer status	Green Premium product
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
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information

Contractual warranty

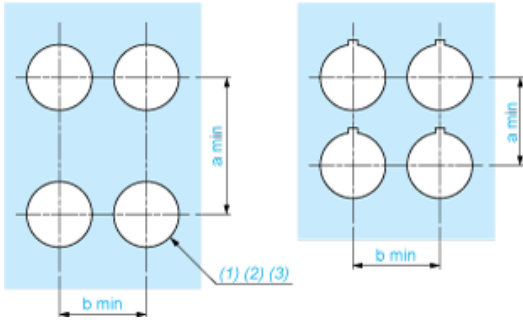
Warranty	18 months
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Dimensions



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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

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

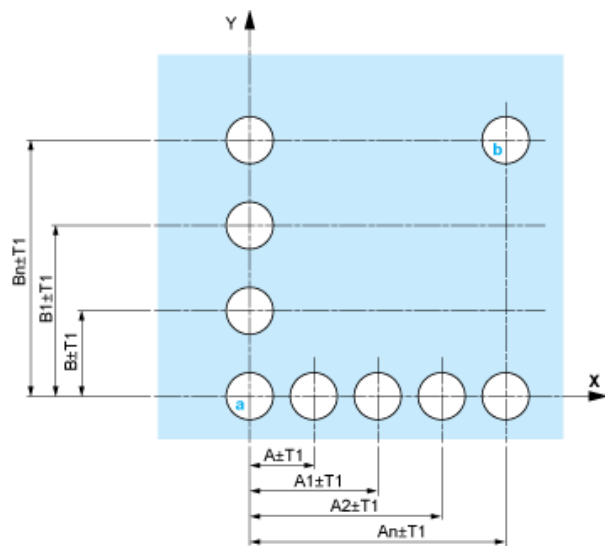
Detail of Lug Recess



- (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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

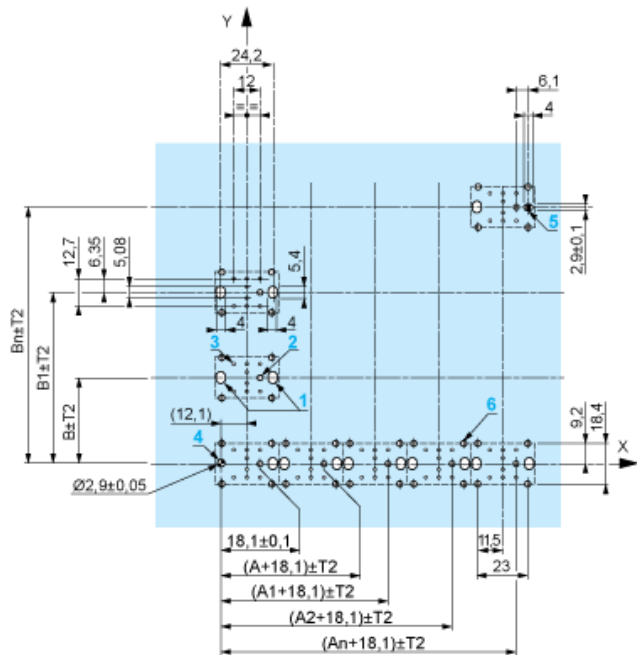
Panel Cut-outs (Viewed from Installer's Side)



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

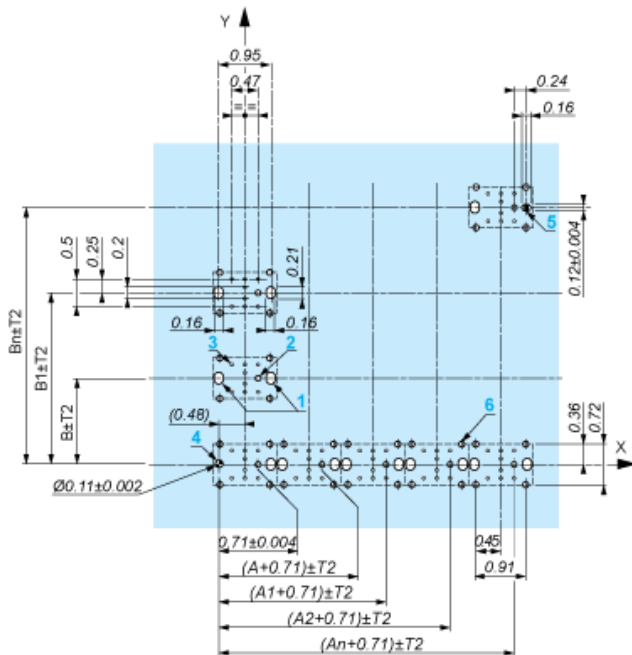
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



- A: 1.18 in. min.
- B: 1.57 in. min.

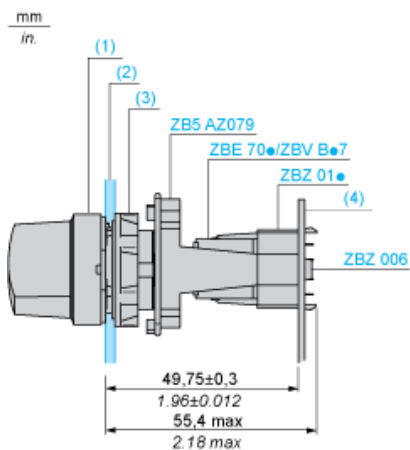
General Tolerances of the Panel and Printed Circuit Board

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

Installation Precautions

- 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:
 - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - 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•

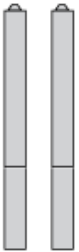
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole \varnothing 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ01•
- 3 8 \times \varnothing 1.2 mm / 0.05 in. holes
- 4 1 hole \varnothing 2.9 mm \pm 0.05 / 0.11 in. \pm 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- 6 4 holes \varnothing 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

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

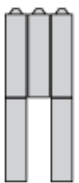
Electrical Composition Corresponding to Code C3



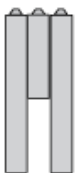
Electrical Composition Corresponding to Code C4



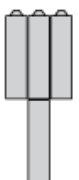
Electrical Composition Corresponding to Code C5



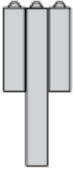
Electrical Composition Corresponding to Code C6



Electrical Composition Corresponding to Code C7



Electrical Composition Corresponding to Code C8

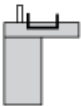


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Electrical Composition Corresponding to Code C15

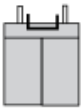
1 N/O



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



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	