Product data sheet
Characteristics

ZB5AD7C0
Harmony XB5, Selector switch head, plastic, black, Ø22, 3 positions, spring return from left to center, grey bezel

Main

Range of Product	Harmony XB5
Product or Component Type	Head for selector switch
Device short name	ZB5
Bezel material	Plastic colour plated grey
Mounting diamete	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 IEC 60536
IP degree of protection	IP67 IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
IK degree of protection	IK06 conforming to IEC 50102
Standards	IEC 60947-5-1 CSA C22.2 No 14 UL 508 IEC 60947-1 IEC 60947-5-4 JIS C8201-5-1 JIS C8201-1

Product Certifications	GL[RETURN]BV[RETURN]CSA[RETURN]LROS (Lloyds register of shipping) [RETURN]DNV[RETURN]UL Listed
Vibration resistance	5 gn 2…500 Hz)IEC 60068-2-6
Shock resistance	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27 50 gn 11 ms) half sine wave acceleration IEC 60068-2-27

Ordering and shipping details

Category	US10CS222467
Discount Schedule	0CS2
GTIN	3606489763763
Returnability	No
Country of origin	FR

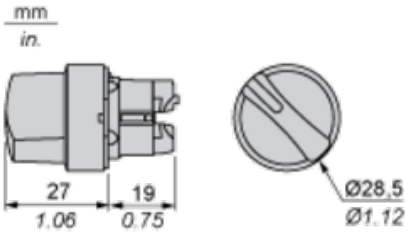
Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.65 in (4.2 cm)
Package 1 Width	1.30 in (3.3 cm)
Package 1 Length	2.05 in (5.2 cm)
Package 1 Weight	0.85 oz (24.0 g)

Offer Sustainability

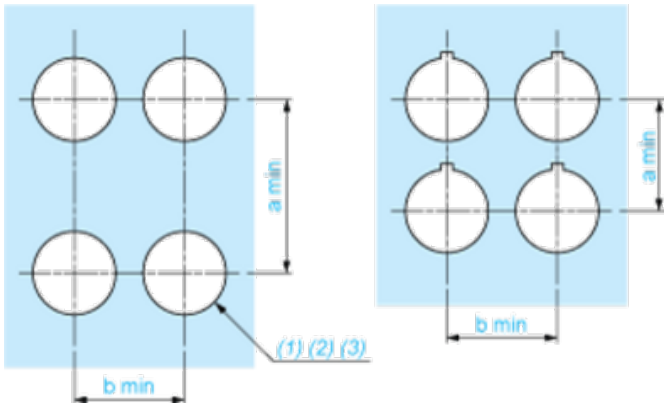
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes

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



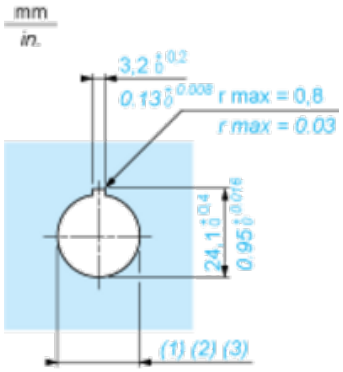
(1) Diameter on finished panel or support

(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



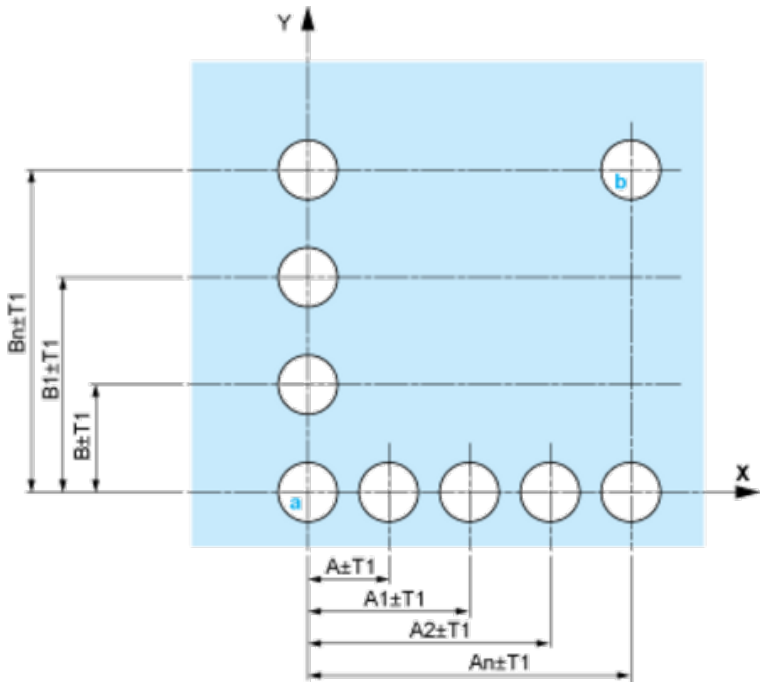
(1) Diameter on finished panel or support

(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)

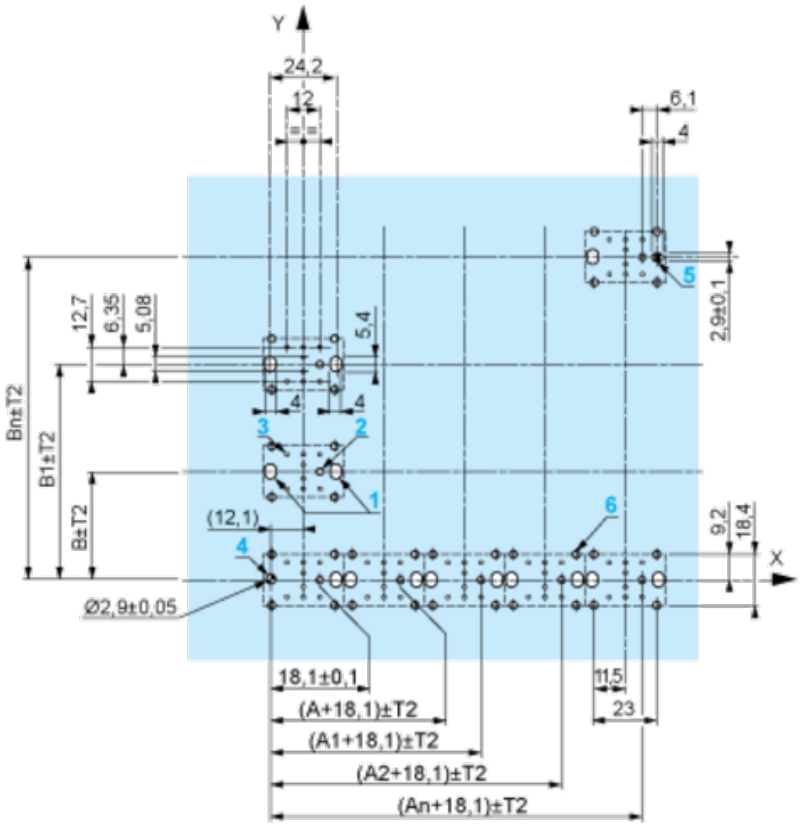


A: 30 mm min. / 1.18 in. min.

B: 40 mm min. / 1.57 in. min.

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

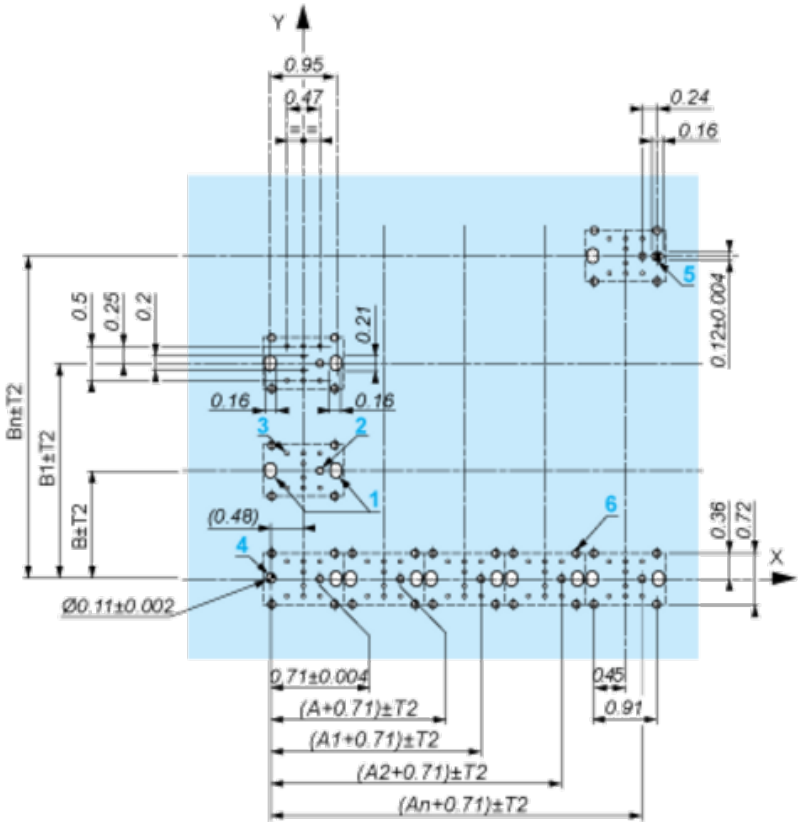
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

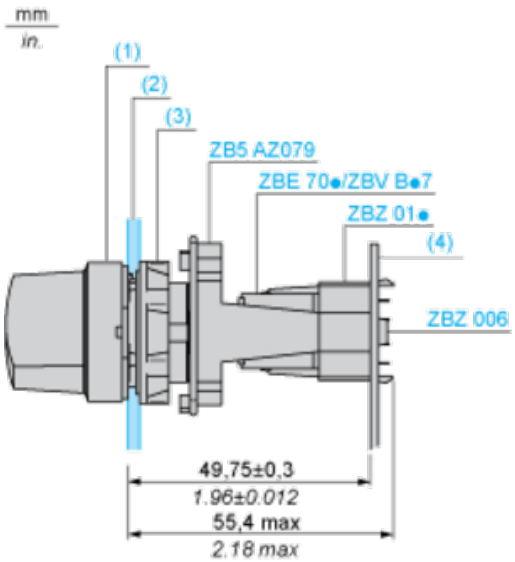
General Tolerances of the Panel and Printed Circuit Board

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

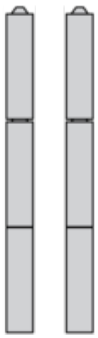
(4) Printed circuit board

Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole 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•

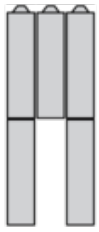
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

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	