## ZB5AD28

Harmony XB5, Toggle switch head, plastic, black, Ø22, 2 positions, stay put





#### 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)
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	Stay put
Operator profile	Black toggle switch
Operator additional information	Black lever
Operator position information	2 positions 90°

#### Complementary

Device presentation	Basic element	
	C13 6 single and double front mounting	
	SR1 3 single rear mounting	
	SF1 3 single front mounting	
	C15 1 single front mounting	
,	C12 6 single front mounting	
Electrical composition code	C11 3 single front mounting	
	XALK 25 cut-outs	
Station name	XALD 15 cut-outs	
Mechanical durability	500000 cycles	
Product Weight	0.05 lb(US) (0.023 kg)	
CAD overall depth	1.77 in (45 mm)	
CAD overall height	1.14 in (29 mm)	
CAD overall width	1.14 in (29 mm)	

### Environment

Protective treatment	TH
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Ambient Air Temperature for Operation	-40158 °F (-4070 °C)
Overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP66 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
Standards	EN/IEC 60947-5-1 EN/IEC 60947-5-4 CSA C22.2 No 14 UL 508 EN/IEC 60947-1 JIS C8201-5-1 JIS C8201-1

Product Certifications	DNV	
	GL	
	UL Listed	
	BV	
	CSA	
	LROS (Lloyds register of shipping)	
Vibration resistance	5 gn 2500 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

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Category	22467 - PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
GTIN	3389110905014
Nbr. of units in pkg.	1
Package weight(Lbs)	0.78 oz (21.98 g)
Returnability	Yes
Country of origin	FR

## Packing Units

3 - 3	
Unit Type of Package 1	PCE
Package 1 Height	1.38 in (3.5 cm)
Package 1 width	1.77 in (4.5 cm)
Package 1 Length	2.09 in (5.3 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	200
Package 2 Weight	10.62 lb(US) (4.816 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

#### Offer Sustainability

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.go		
REACh Regulation	☑ REACh Declaration		
REACh free of SVHC	Yes		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
Toxic heavy metal free	Yes		
Mercury free	Yes		
RoHS exemption information	₽¥Yes		
China RoHS Regulation	<sup>™</sup> China RoHS Declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	☑ End Of Life Information		

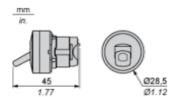
#### Contractual warranty

Warranty	18 months

# Product data sheet Dimensions Drawings

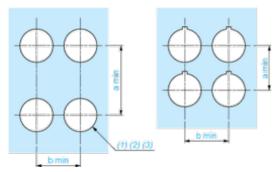
# ZB5AD28

#### **Dimensions**



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

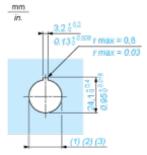
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

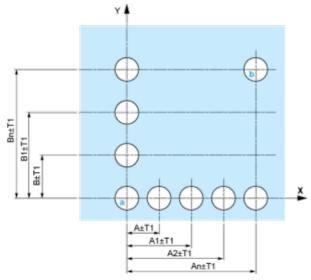
#### **Detail of Lug Recess**



- (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  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.  $_0$  <sup>+0.016</sup>)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

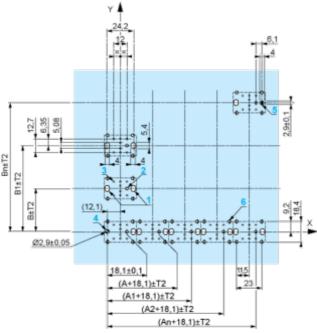


A: 30 mm min. / 1.18 in. min.

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

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

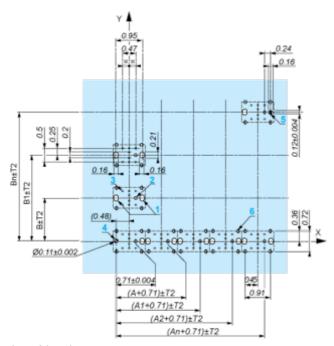
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

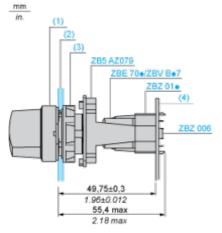
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ\quad$  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.



- (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  $\pm$  0.05 / 0.09 in.  $\pm$  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•.

# ZB5AD28

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
1 N/O + N/C 01 1 N/O + N/O 01 1 N/C + N/C
Electrical Composition Corresponding to Code C12
Electrical Composition Corresponding to Code C13
Legend
Single contact

Double contact

Light block

Possible location



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Schneider Electric: ZB5AD28