## ZB5AG5

Head for key selector switch, Harmony XB5, Harmony XB4, 22mm 3 positions stay put key 455





#### Main

Range of Product	Harmony XB5
Product or Component Type	Head for key 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	Stay put
Operator profile	Black key switch
Operator position information	3 positions +/- 45°
Type of Keylock	Key 455
Key withdrawal position	Left and right

#### Complementary

Device presentation	Basic element		
	SR1 3 single rear mounting		
	SF1 3 single front mounting		
	C3 6 single front mounting		
	C11 3 single front mounting		
	C8 4 single and double front mounting		
	C7 4 single front mounting		
	C6 5 single and double front mounting		
	C5 5 single front mounting		
Electrical composition code	C4 6 single and double front mounting		
	XALK 25 cut-outs		
Station name	XALD 15 cut-outs		
Mechanical durability	1000000 cycles		
Net Weight	0.13 lb(US) (0.057 kg)		
CAD overall depth	2.83 in (72 mm)		
CAD overall height	1.14 in (29 mm)		
	1.14 in (29 mm)		
CAD overall width	1 14 in (20 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 IEC 60536	
IP degree of protection	IP66 IEC 60529 IP67 IP69 IP69K	
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 IEC 50102	

Standards	IEC 60947-5-4	
	IEC 60947-5-1	
	CSA C22.2 No 14	
	IEC 60947-1	
	UL 508	
	JIS C8201-5-1	
	JIS C8201-1	
Product Certifications	UL Listed[RETURN]LROS (Lloyds register of shipping) [RETURN]CSA[RETURN]GL[RETURN]BV[RETURN]DNV	
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

Category	22467-PUSHBUTTONS,22MM(PLASTIC) NEW		
Discount Schedule	CS2		
GTIN	3389110905830		
Returnability	No		
Country of origin	FR		

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.30 in (3.3 cm)
Package 1 Width	2.05 in (5.2 cm)
Package 1 Length	3.39 in (8.6 cm)
Package 1 Weight	2.33 oz (66 g)
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	3.39 in (8.6 cm)
Package 2 Width	2.05 in (5.2 cm)
Package 2 Length	6.50 in (16.5 cm)
Package 2 Weight	11.64 oz (330 g)
Unit Type of Package 3	S03
Number of Units in Package 3	150
Package 3 Height	11.81 in (30 cm)
Package 3 Width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)
Package 3 Weight	23.44 lb(US) (10.63 kg)

### Offer Sustainability

Sustainable offer status	Green Premium product		
California proposition 65	WARNING: This product can expose you to chemicals including: Lea lead compounds, which is known to the State of California to cause and birth defects or other reproductive harm. For more information gwww.P65Warnings.ca.gov		
REACh Regulation	<sup>™</sup> REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
Mercury free	Yes		
China RoHS Regulation	☑ China RoHS Declaration		
RoHS exemption information	₫Yes		
Environmental Disclosure	☐ Product Environmental Profile		
Circularity Profile			

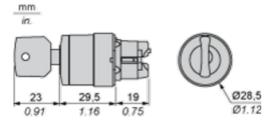
#### Contractual warranty

101	10 11	
Warrantv	18 months	

# Product data sheet Dimensions Drawings

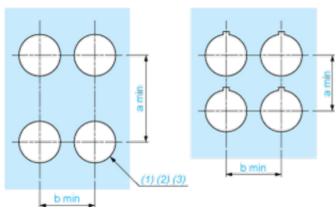
# ZB5AG5

#### **Dimensions**



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

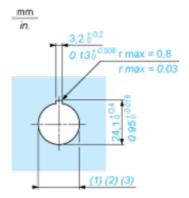
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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

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

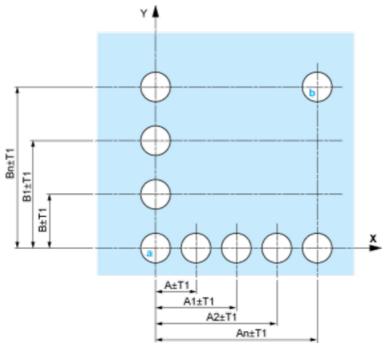
#### **Detail of Lug Recess**



- (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)

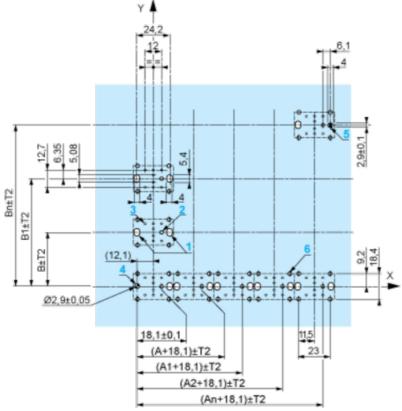


A: 30 mm min. / 1.18 in. min.

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

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

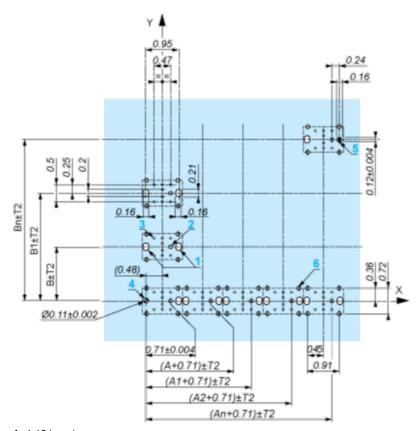
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

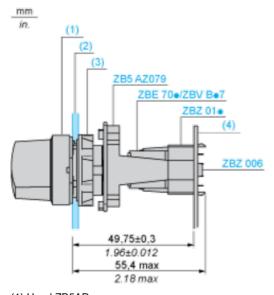
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - o 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

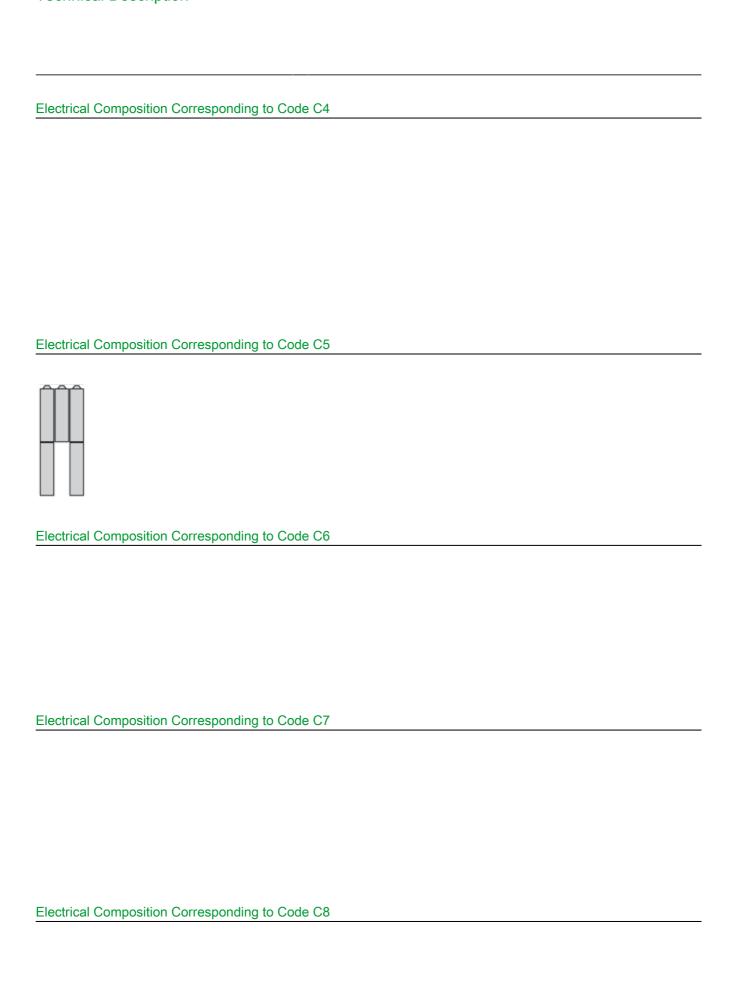
#### (4) Printed circuit board

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

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

# ZB5AG5



Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1
Electrical Composition Corresponding to Codes C5, C11, Si 1 and SiX1
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	Тор			
Bottom	$\triangle$				
Location		Left	Centre	Right	
State		0	1	1	
Contacts	N/O		open	closed	closed
N/C		closed	open	open	