# ZB5AS94412

Head for emergency stop push button, Harmony XB5, switching off, plastic, red mushroom 40mm, 22mm, trigger/latching key release, key 421E





#### Main

Range of product	Harmony XB5
Product or component type	Head for emergency stop push-button
Product destination	Emergency stop push-button
Device short name	ZB5
Bezel material	Dark grey plastic
Head type	Standard
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Trigger action and mechanical latching
Reset	Key release
Operator profile	Red mushroom Ø 40 mm, unmarked
Type of keylock	Key 421E
Key withdrawal position	Center
Device presentation	Basic element

#### Complementary

Compatibility code	ZB5
	C10 for <4 contacts using single and double blocks in front mounting
	SR1 for <3 contacts using single blocks in rear mounting
	SF1 for <3 contacts using single blocks in front mounting
	C15 for <1 contacts using single blocks in front mounting
	C11 for <3 contacts using single blocks in front mounting
,	C8 for <4 contacts using single and double blocks in front mounting
Electrical composition code	C7 for <4 contacts using single blocks in front mounting
	XALK 1 cut-out
Station name	XALD 1 cut-out
Mechanical durability	300000 cycles
Net weight	0.071 kg
CAD overall depth	79 mm
CAD overall height	40 mm
CAD averall baight	
CAD overall width	40 mm

#### Environment

Protective treatment	TH			
Ambient air temperature for storage	-4070 °C			
Ambient air temperature for operation	-4070 °C			
Overvoltage category	Class II conforming to IEC 60536			
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 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	IK03 conforming to IEC 50102		
Standards	EN/IEC 60947-5-1		
	GB 14048.5		
	EN/IEC 60947-5-4		
	CSA C22.2 No 14		
	EN/IEC 60947-5-5		
	JIS C8201-5-1		
	EN/ISO 13850		
	EN/IEC 60204-1		
	IEC 60364-5-53		
	UL 508		
	EN/IEC 60947-1		
	JIS C8201-1		
Product certifications	LROS (Lloyds register of shipping)[RETURN]UL		
	listed[RETURN]GL[RETURN]CSA[RETURN]DNV[RETURN]BV		
Vibration resistance	5 gn (f= 2500 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		

# Packing Units

<b>3</b>	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.3 cm
Package 1 Width	5.2 cm
Package 1 Length	8.8 cm
Package 1 Weight	70 g
Unit Type of Package 2	S01
Number of Units in Package 2	6
Package 2 Height	15 cm
Package 2 Width	15 cm
Package 2 Length	40 cm
Package 2 Weight	604 g

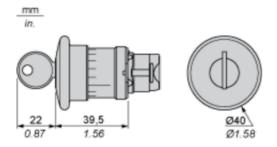
## Offer Sustainability

Sustainable offer status Green Premium product				
REACh Regulation	FEACh 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			

## Contractual warranty

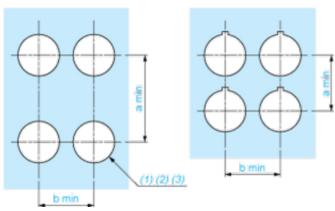
Warranty	18 months

#### **Dimensions**



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

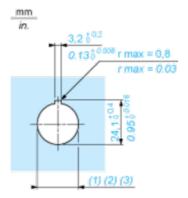
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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  $_0$  <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

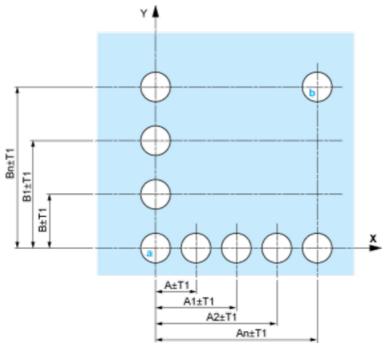
#### **Detail of Lug Recess**



- (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)

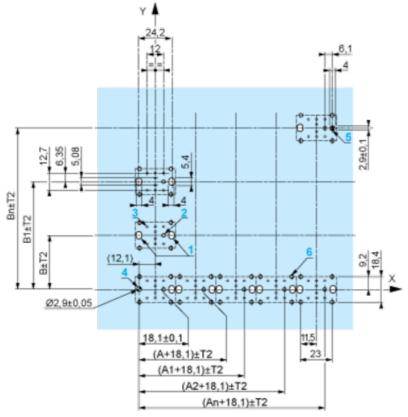


A: 30 mm min. / 1.18 in. min.

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

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

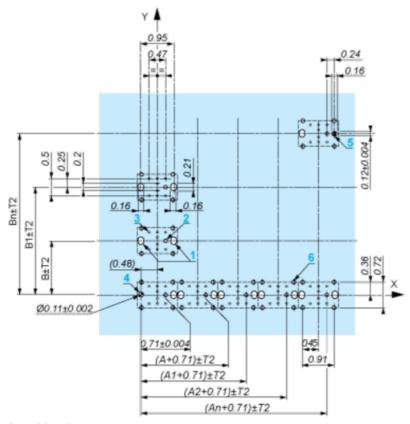
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

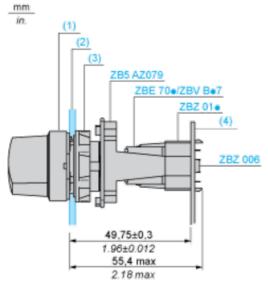
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ \quad$  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

#### 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•.

# ZB5AS94412

Electrical Composition Corresponding to Code C7
Electrical Compositions Corresponding to Code C8
Electrical Compositions Corresponding to Code C10
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1
Floatrical Commonition Common and institute Code CAF
Electrical Composition Corresponding to Code C15
1 N/O

1 N/C

Legend		
Single contact		
Double contact		
Light block		
Light stoot		
Possible location		
LJ		