# ZB5AG0814

Head for key selector switch, Harmony XB5, XB4, Ø22 mm 3 position spring return 520E





#### 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	Right to centre spring return
Operator profile	Black key switch
Operator position information	3 positions +/- 45°
Type of Keylock	Ronis 520E
Key withdrawal position	Left

#### Complementary

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			
C5 5 single front mounting C6 5 single and double front mounting			
C4 6 single and double front mounting			
1 111 111			
XALK 25 cut-outs			
XALD 15 cut-outs			
1000000 cycles			
0.13 lb(US) (0.057 kg)			
2.83 in (72 mm)			
1.14 in (29 mm)			
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 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	EN/IEC 60947-5-4	
	EN/IEC 60947-1	
	EN/IEC 60947-5-1	
	CSA C22.2 No 14	
	JIS C8201-5-1	
	UL 508	
	JIS C8201-1	
Product Certifications	DNV	
	CSA	
	BV	
	UL Listed	
	GL	
	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

22467-PUSHBUTTONS,22MM(PLASTIC) NEW		
CS2		
3389110135848		
1		
1.76 oz (50.0 g)		
No		
FR		

# Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	3.46 in (8.8 cm)	
Package 1 width	1.34 in (3.4 cm)	
Package 1 Length	2.13 in (5.4 cm)	

## Offer Sustainability

Sustainable offer status	Green Premium product		
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov		
REACh Regulation	☑ REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS  Declaration		
Mercury free	Yes		
RoHS exemption information	₽¥Yes		
China RoHS Regulation	☑ China RoHS Declaration		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	☑ End Of Life Information		

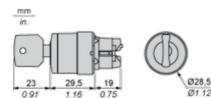
# Contractual warranty

Warranty	18 months

# Product data sheet Dimensions Drawings

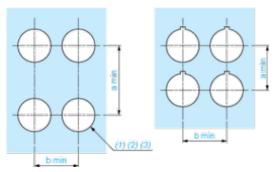
# ZB5AG0814

#### **Dimensions**



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

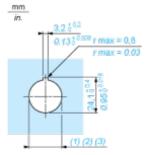
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

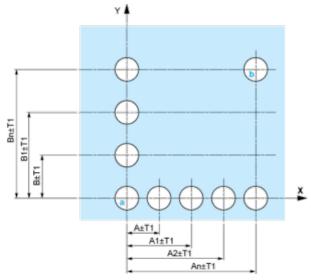
#### **Detail of Lug Recess**



- (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)

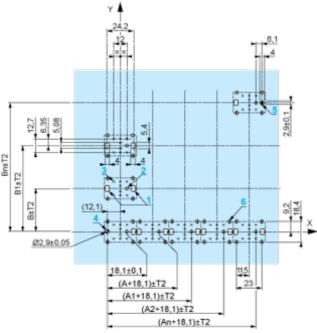


A: 30 mm min. / 1.18 in. min.

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

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

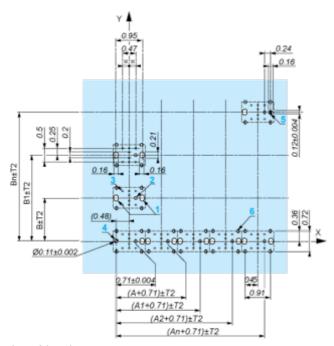
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

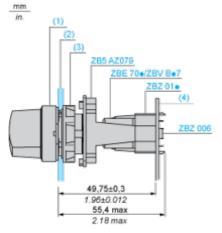
#### General Tolerances of the Panel and Printed Circuit Board

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•.

# Product data sheet Technical Description

# ZB5AG0814

Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Code CF
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 Code C3

Legend	
Single contact	
Double contact	
Light block	
Described and the	
Possible location	
Sequence of Contacts Fitted to 3-position Selector Switch Body	

## Position 315°



Push	Position	Тор			
Bottom			Δ		
Location		Left	Centre	Right	
State		1	1	0	
Contacts	N/O		closed	closed	open
N/C		open	open	closed	

# Position 0°



Push	Position	Тор			
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					
Location	,	Left	Centre	Right	
State		0	1	1	
Contacts	N/O		open	closed	closed
N/C		closed	open	open	