## ZB5AG05

Harmony XB5, Key switch selector head, plastic, black, Ø22, key n°455, 3 positions, spring return from right to center, withdrawal left and center





#### 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 455
Key withdrawal position	Left and center

#### Complementary

CAD overall width	1.14 in (29 mm)		
CAD overall height	1.14 in (29 mm)		
CAD overall depth	2.83 in (72 mm)		
Mechanical durability	1000000 cycles		
Station name	XALD 15 cut-outs XALK 25 cut-outs		
Electrical composition code	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 C3 6 single front mounting SF1 3 single front mounting		
	SR1 3 single rear mounting		

#### **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	UL 508	
	CSA C22.2 No 14	
	EN/IEC 60947-1	
	EN/IEC 60947-5-1	
	JIS C8201-5-1	
	EN/IEC 60947-5-4	
	JIS C8201-1	
Product Certifications	BV	
	GL	
	CSA	
	LROS (Lloyds register of shipping)	
	UL Listed	
	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

0 11 0	
Category	22467 - PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
GTIN	3389110223514
Nbr. of units in pkg.	1
Package weight(Lbs)	1.76 oz (50 g)
Returnability	Yes
Country of origin	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 an lead compounds, which is known to the State of California to cause cance 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)		
Mercury free	Yes		
RoHS exemption information	₽¥Yes		
China RoHS Regulation	China RoHS Declaration		
Environmental Disclosure	☑ Product Environmental Profile		
Circularity Profile			

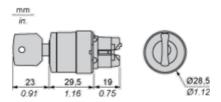
#### Contractual warranty

Warranty	18 months

# Product data sheet Dimensions Drawings

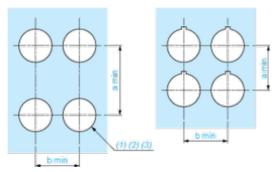
# ZB5AG05

#### **Dimensions**



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

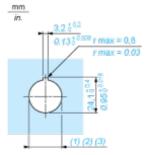
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

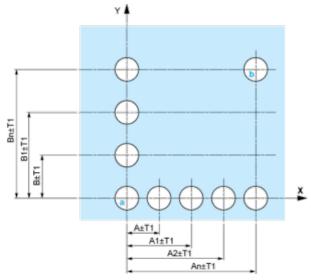
#### **Detail of Lug Recess**



- (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)

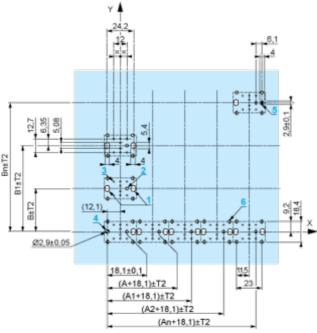


A: 30 mm min. / 1.18 in. min.

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

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

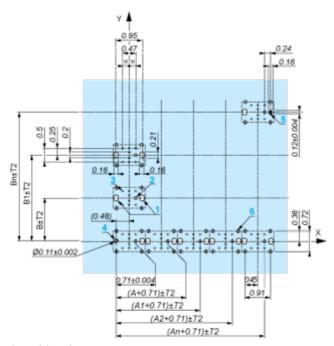
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

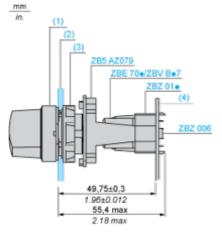
#### General Tolerances of the Panel and Printed Circuit Board

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

# ZB5AG05

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 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	