# **ZB5AG220**

# selector switch head Ø22 2-position stay put Ronis 3131A





#### Main

Range of Product	Harmony XALF 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	2 positions 90°
Type of Keylock	Ronis 3131A
Key withdrawal position	Left

#### Complementary

Device presentation	Basic element		
	C15 1 single front mounting		
	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		
Licetical composition code	C5 5 single and double north modifying		
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)		
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 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			

JIS C8201-5-1	
EN/IEC 60947-5-4	
EN/IEC 60947-1	
CSA C22.2 No 14	
UL 508	
EN/IEC 60947-5-1	
JIS C8201-1	
BV	
CSA	
DNV	
UL Listed	
LROS (Lloyds register of shipping)	
GL	
5 gn 2500 Hz)IEC 60068-2-6	
30 gn 18 ms) half sine wave acceleration IEC 60068-2-27	
50 gn 11 ms) half sine wave acceleration IEC 60068-2-27	
	EN/IEC 60947-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-5-1 JIS C8201-1  BV CSA DNV UL Listed LROS (Lloyds register of shipping) GL  5 gn 2500 Hz)IEC 60068-2-6 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27

## Ordering and shipping details

Category	22467 - PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
GTIN	3389110135343
Nbr. of units in pkg.	1
Package weight(Lbs)	2.36 oz (67 g)
Returnability	Yes
Country of origin	FR

## Packing Units

· coming come	
Unit Type of Package 1	PCE
Package 1 Height	3.43 in (8.7 cm)
Package 1 width	1.34 in (3.4 cm)
Package 1 Length	2.05 in (5.2 cm)
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Weight	11.89 oz (337 g)
Package 2 Height	3.43 in (8.7 cm)
Package 2 width	1.34 in (3.4 cm)
Package 2 Length	10.43 in (26.5 cm)
Unit Type of Package 3	S02
Number of Units in Package 3	50
Package 3 Weight	8.14 lb(US) (3.694 kg)
Package 3 Height	5.91 in (15 cm)
Package 3 width	11.81 in (30 cm)
Package 3 Length	15.75 in (40 cm)

### Offer Sustainability

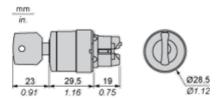
Sustainable offer status Green Premium product				
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov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

Warranty 18 months

# Product data sheet Dimensions Drawings

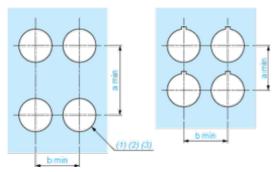
# **ZB5AG220**

#### **Dimensions**



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

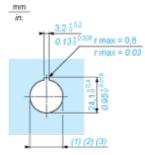
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

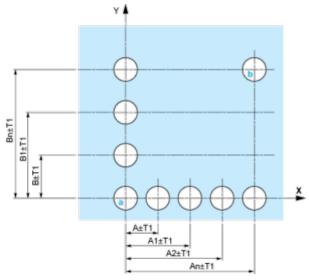
#### **Detail of Lug Recess**



- (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  $_0$   $^{+0.4})$  / Ø0.89 in. recommended (Ø0.88 in.  $_0$   $^{+0.016})$

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

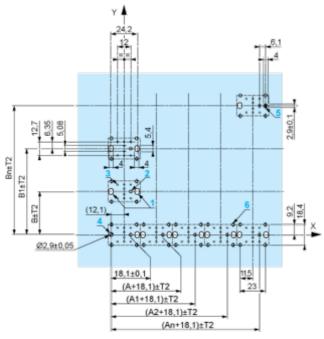


A: 30 mm min. / 1.18 in. min.

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

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

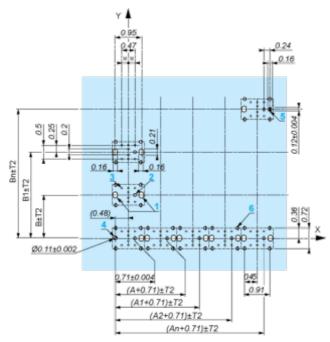
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

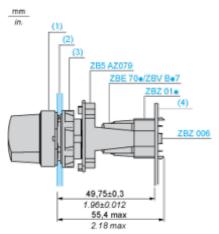
#### General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ~$  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

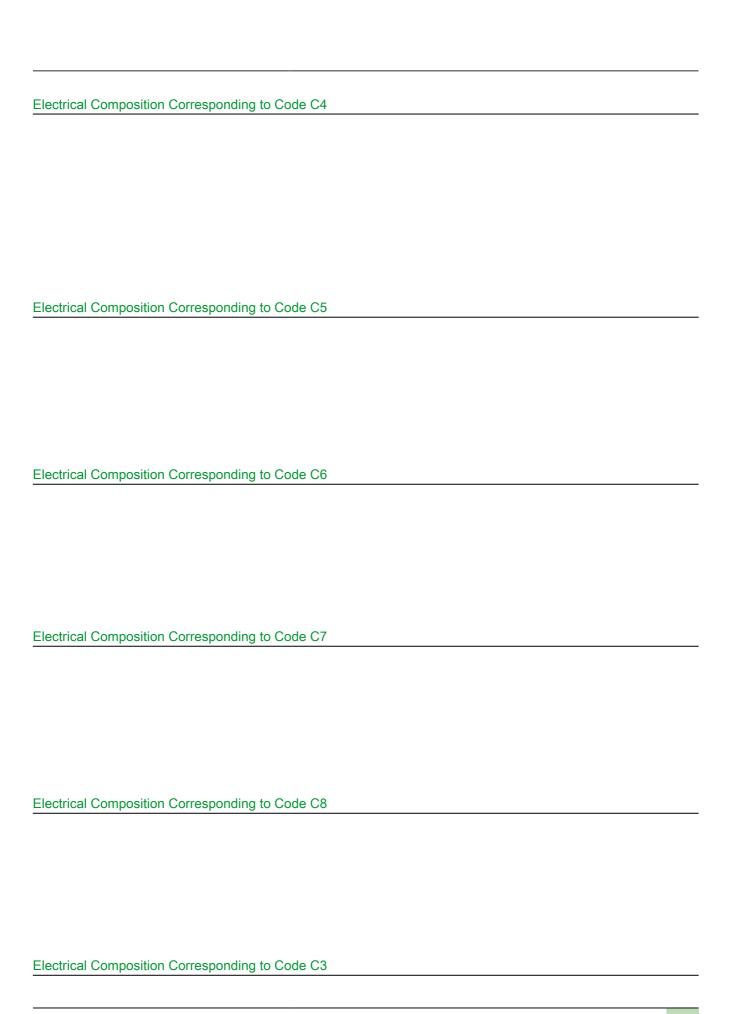
#### Mounting of Adapter (Socket) ZBZ01•

- 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•.

# Product data sheet Technical Description

# **ZB5AG220**



_egend		
Single contact		
Double contact		
ight block		
Possible location		

# Sequence of Contacts Fitted to 2-position Selector Switch Body

#### Position 315°



Push	Position	Тор			
Bottom		Δ	Δ		
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		1	1	1	
Contacts	N/O		closed	closed	closed
N/C		open	open	open	