

# Product datasheet

Specifications



red Ø60 Emergency stop, switching  
off head Ø22 trigger and latching  
key release

Local distributor code: 237183130    ZB5AS964

## 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 60 mm, unmarked         |
| Type of keylock               | Ronis 455                              |
| Key withdrawal position       | Center                                 |
| Device presentation           | Basic element                          |

## Complementary

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width           | 60 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CAD overall height          | 60 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CAD overall depth           | 79 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Net weight                  | 0.092 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Mechanical durability       | 300000 cycles                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Station name                | XALD 1 cut-out<br>XALK 1 cut-out                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Electrical composition code | C7 for <4 contacts using single blocks in front mounting<br>C8 for <4 contacts using single and double blocks in front mounting<br>C11 for <3 contacts using single blocks in front mounting<br>C15 for <1 contacts using single blocks in front mounting<br>SF1 for <3 contacts using single blocks in front mounting<br>SR1 for <3 contacts using single blocks in rear mounting<br>C10 for <4 contacts using single and double blocks in front mounting |
| Compatibility code          | ZB5                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

Environment

|                                       |                                                                                                                                                                                                           |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                  | TH                                                                                                                                                                                                        |
| Ambient air temperature for storage   | -40...70 °C                                                                                                                                                                                               |
| Ambient air temperature for operation | -40...70 °C                                                                                                                                                                                               |
| Overvoltage category                  | Class II conforming to IEC 60536                                                                                                                                                                          |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K                                                                                                                                                     |
| NEMA degree of protection             | NEMA 13<br>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/ISO 13850<br>IEC 60364-5-53<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-5<br>UL 508<br>EN/IEC 60204-1<br>GB 14048.5<br>EN/IEC 60947-1<br>JIS C8201-5-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-4<br>JIS C8201-1 |
| Product certifications                | UL listed<br>DNV<br>GL<br>BV<br>LROS (Lloyds register of shipping)<br>CSA                                                                                                                                 |
| Vibration resistance                  | 5 gn (f= 2...500 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<br>50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27                            |

Packing Units

|                              |        |
|------------------------------|--------|
| Unit Type of Package 1       | PCE    |
| Number of Units in Package 1 | 1      |
| Package 1 Weight             | 92.0 g |
| Package 1 Height             | 9 cm   |
| Package 1 width              | 7.2 cm |
| Package 1 Length             | 7.2 cm |

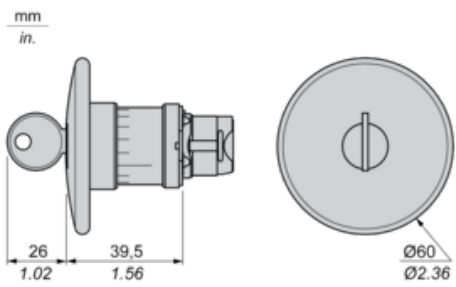
Offer Sustainability

|                            |                                                                                                   |
|----------------------------|---------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                             |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                 |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a> |
| Mercury free               | Yes                                                                                               |
| RoHS exemption information | <a href="#">Yes</a>                                                                               |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>                                                            |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                     |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                           |

Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|

Dimensions



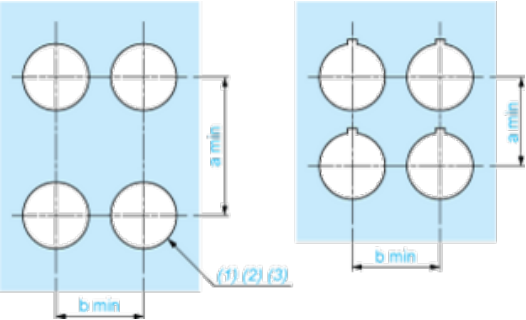
Product datasheet

ZB5AS964

Mounting and Clearance

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

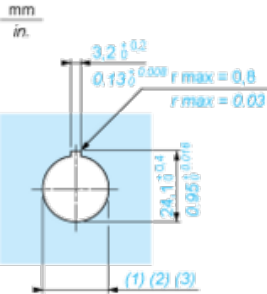
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 ( $\text{Ø}22.3 \text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

| 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     |

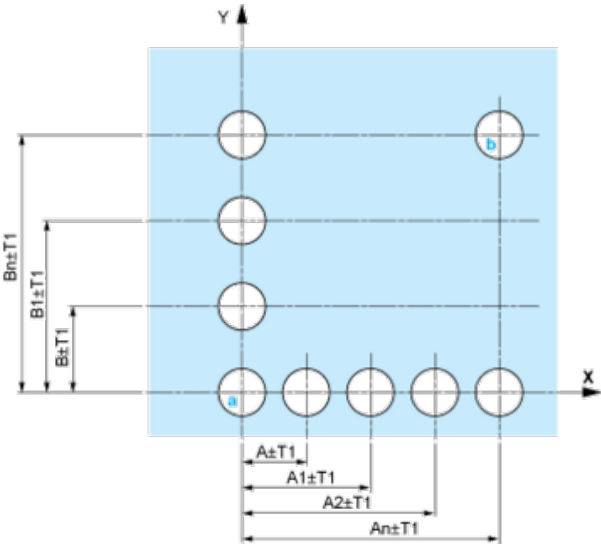
Detail of Lug Recess



- (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 ( $\text{Ø}22.3 \text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

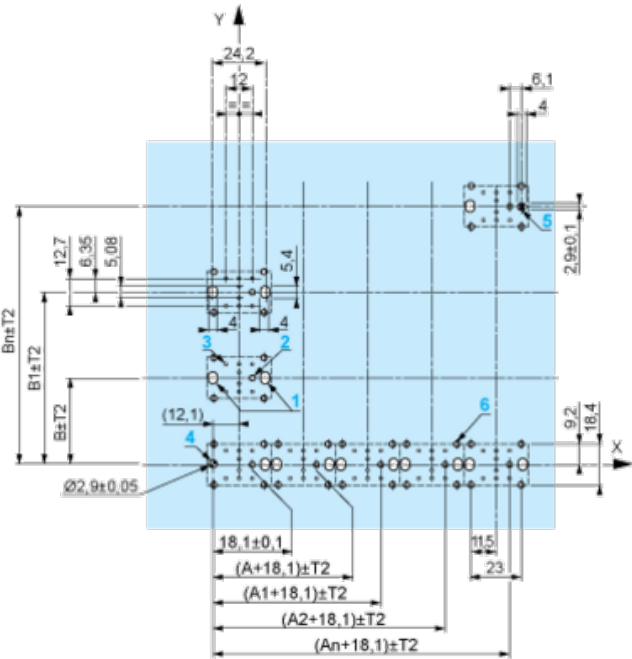
Panel Cut-outs (Viewed from Installer’s Side)



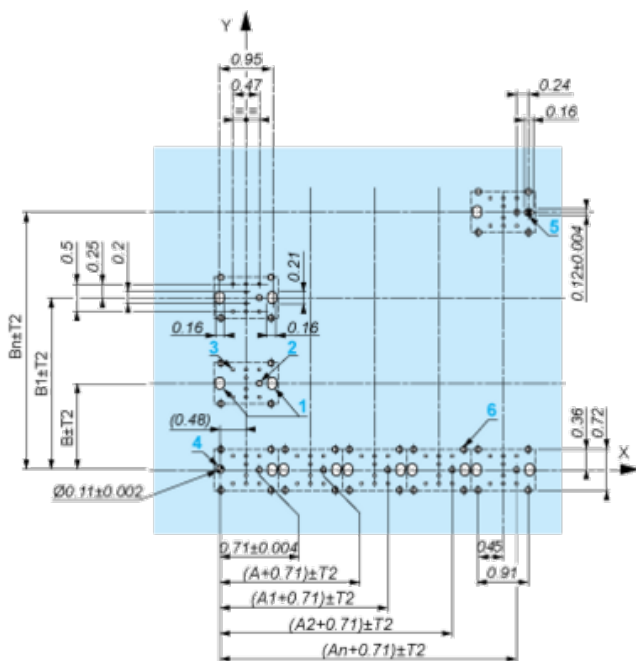
- A: 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

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.

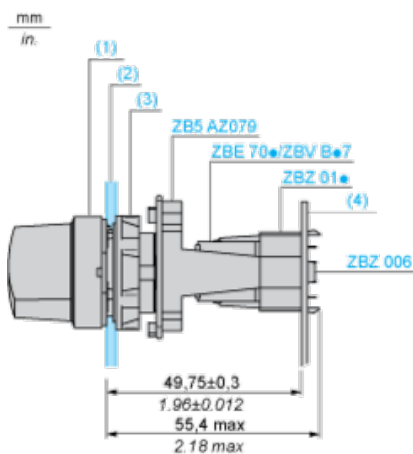
## General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.:  $T_1 + T_2 = 0.3 \text{ mm max.}$

## Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm 0.1$  / 0.88 in.  $\pm 0.004$
- Orientation of body/fixing collar ZB5AZ009:  $\pm 2^\circ 30'$  (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:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - 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  $\varnothing 2.4 \text{ mm} \pm 0.05$  / 0.09 in.  $\pm 0.002$  for centring adapter ZBZ01•
- 3 8  $\times \varnothing 1.2 \text{ mm}$  / 0.05 in. holes
- 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05$  / 0.11 in.  $\pm 0.002$ , 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  $\varnothing 2.4 \text{ mm}$  / 0.09 in. for clipping in adapter ZBZ01•

Dimensions  $A_n + 18.1$  relate to the  $\varnothing 2.4 \text{ mm} \pm 0.05$  / 0.09 in.  $\pm 0.002$  holes for centring adapter ZBZ01•.

Electrical Composition Corresponding to Code C7

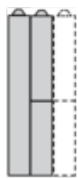
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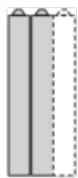
Electrical Compositions Corresponding to Code C8

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Electrical Compositions Corresponding to Code C10

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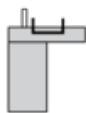
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

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Electrical Composition Corresponding to Code C15

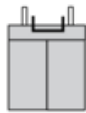
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Legend

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Single contact



Double contact



Light block



Possible location

