



**Main**

|                                 |                      |
|---------------------------------|----------------------|
| Range of product                | Harmony XB5          |
| Product or component type       | Head for pilot light |
| Product compatibility           | BA 9s                |
| Device short name               | ZB5                  |
| Bezel material                  | Dark grey plastic    |
| Mounting diameter               | 22 mm                |
| Head type                       | Standard             |
| Sale per indivisible quantity   | 1                    |
| Shape of signaling unit head    | Round                |
| Cap/operator or lens colour     | Red                  |
| Operator additional information | With plain lens      |

**Complementary**

|                             |  |
|-----------------------------|--|
| CAD overall width           | 29 mm  |
| CAD overall height          | 29 mm  |
| CAD overall depth           | 31 mm  |
| Net weight                  | 0.018 kg   |
| Station name                | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs   |
| Electrical composition code | P3 in front mounting with BA 9s<br>P4 in front mounting with BA 9s and transformer<br>PF2 in front mounting with BA 9s |
| Device presentation         | Basic element  |

**Environment**

|                                       |   |
|---------------------------------------|---|
| Protective treatment                  | TH  |
| Ambient air temperature for storage   | -40...70 °C   |
| Ambient air temperature for operation | -40...70 °C   |
| Oversupply category                   | Class II conforming to IEC 60536  |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529<br>IP69 conforming to IEC 60529<br>IP69K conforming to ISO 20653           |
| 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               | IK05 conforming to IEC 50102  |
| Standards                             | EN/IEC 60947-5-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-5<br>EN/IEC 60947-5-4<br>JIS C8201-5-1<br>EN/IEC 60947-1<br>UL 508<br>JIS C8201-1 |

|                      |   |
|----------------------|---|
| 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 |
|                      | 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             | 15 g     |
| Package 1 Height             | 3.4 cm   |
| Package 1 width              | 4.5 cm   |
| Package 1 Length             | 5.4 cm   |
| Unit Type of Package 2       | BB1      |
| Number of Units in Package 2 | 5        |
| Package 2 Weight             | 75 g     |
| Package 2 Height             | 3.4 cm   |
| Package 2 width              | 4.5 cm   |
| Package 2 Length             | 26.5 cm  |
| Unit Type of Package 3       | S03      |
| Number of Units in Package 3 | 300      |
| Package 3 Weight             | 5.006 kg |
| Package 3 Height             | 30 cm    |
| Package 3 width              | 30 cm    |
| Package 3 Length             | 40 cm    |

### Offer Sustainability

|                            |  |
|----------------------------|--|
| Sustainable offer status   | Green Premium product  |
| REACH Regulation           |  <a href="#">REACH Declaration</a>  |
| REACH free of SVHC         | Yes  |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes  |
| Mercury free               | Yes  |
| RoHS exemption information |  Yes  |
| 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>  |

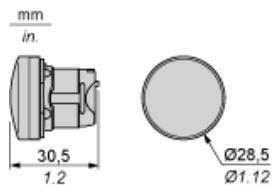
### Contractual warranty

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

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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 ( $\varnothing 22.3 \text{ mm}^{+0.4}$ ) / Ø0.89 in. recommended ( $\varnothing 0.88 \text{ in.}^{+0.016}$ )

| 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     |

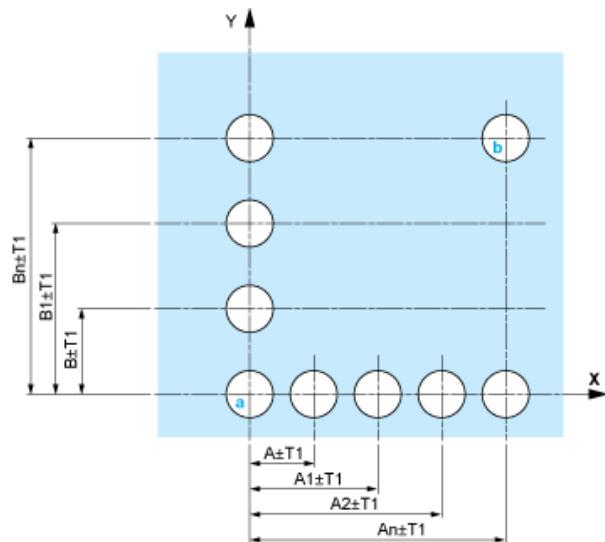
Detail of Lug Recess



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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

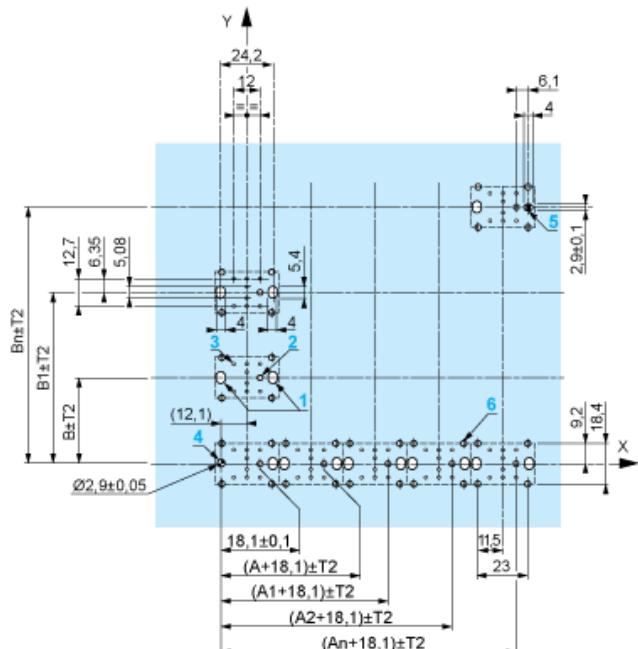


A: 30 mm min. / 1.18 in. min.

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:  $22.4 \text{ mm} \pm 0.1$  /  $0.88 \text{ in.} \pm 0.004$
- 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 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 ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

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**Electrical Composition Corresponding to Codes P1, P3, PF1, PR1 and PF2**

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Light block



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**Electrical Composition Corresponding to Code P4**

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**Legend**

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Single contact



Double contact



Light block



Possible location

