

## ZB5AG7C0

Harmony XB5, Key switch selector head, plastic, black, Ø22, key 455, 3 positions, spring return to center, grey bezel



### Main

|                               |                              |
|-------------------------------|------------------------------|
| Range of Product              | Harmony XB5                  |
| Product or Component Type     | Head for key selector switch |
| Device short name             | ZB5                          |
| Bezel material                | Plastic colour plated grey   |
| Mounting diameter             | 0.87 in (22 mm)              |
| Head type                     | Standard                     |
| Sale per indivisible quantity | 1                            |
| Shape of signaling unit head  | Round                        |
| Type of operator              | To centre spring return      |
| Operator profile              | Black key switch             |
| Operator position information | 3 positions +/- 45°          |
| Type of keylock               | Key 455                      |
| Key withdrawal position       | 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)                                                                                                                                                                                                                                                                                               |
| Net Weight                  | 0.13 lb(US) (0.057 kg)                                                                                                                                                                                                                                                                                        |
| Mechanical durability       | 1000000 cycles                                                                                                                                                                                                                                                                                                |
| Station name                | XALD 1...5 cut-outs<br>XALK 2...5 cut-outs                                                                                                                                                                                                                                                                    |
| Electrical composition code | C4 6 single and double front mounting<br>C5 5 single front mounting<br>C6 5 single and double front mounting<br>C7 4 single front mounting<br>C8 4 single and double front mounting<br>C11 3 single front mounting<br>C3 6 single front mounting<br>SF1 3 single front mounting<br>SR1 3 single rear mounting |
| Device presentation         | Basic element                                                                                                                                                                                                                                                                                                 |

### Environment

|                                       |                                               |
|---------------------------------------|-----------------------------------------------|
| Protective treatment                  | TH                                            |
| Ambient Air Temperature for Storage   | -40...158 °F (-40...70 °C)                    |
| Ambient Air Temperature for Operation | -40...158 °F (-40...70 °C)                    |
| Overvoltage category                  | Class II IEC 60536                            |
| IP degree of protection               | IP66 IEC 60529<br>IP67                        |
| NEMA degree of protection             | NEMA 13<br>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 60947-5-1<br>JIS C8201-5-1<br>EN/IEC 60947-1<br>UL 508<br>EN/IEC 60947-5-4<br>CSA C22.2 No 14<br>JIS C8201-1 |
| Product Certifications | CSA<br>DNV<br>LROS (Lloyds register of shipping)<br>UL Listed<br>BV<br>GL                                           |
| Vibration resistance   | 5 gn 2...500 Hz)IEC 60068-2-6                                                                                       |
| Shock resistance       | 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27<br>50 gn 11 ms) half sine wave acceleration IEC 60068-2-27  |

## Ordering and shipping details

|                   |                                     |
|-------------------|-------------------------------------|
| Category          | 22467-PUSHBUTTONS,22MM(PLASTIC) NEW |
| Discount Schedule | CS2                                 |
| GTIN              | 3606489766108                       |
| Returnability     | No                                  |

## Packing Units

|                              |                  |
|------------------------------|------------------|
| Unit Type of Package 1       | PCE              |
| Number of Units in Package 1 | 1                |
| Package 1 Height             | 3.39 in (8.6 cm) |
| Package 1 Width              | 1.30 in (3.3 cm) |
| Package 1 Length             | 2.05 in (5.2 cm) |
| Package 1 Weight             | 2.40 oz (68.0 g) |

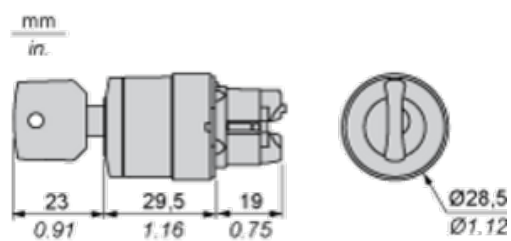
## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           |  <a href="#">REACH Declaration</a>                                                                                                                                                                       |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  <a href="#">EU RoHS Declaration</a>                                                                                                        |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      |  <a href="#">China RoHS Declaration</a>                                                                                                                                                                  |
| RoHS exemption information |  <a href="#">Yes</a>                                                                                                                                                                                     |

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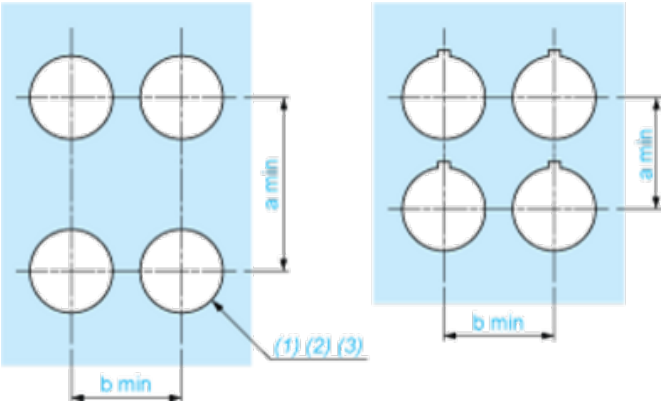
Dimensions

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

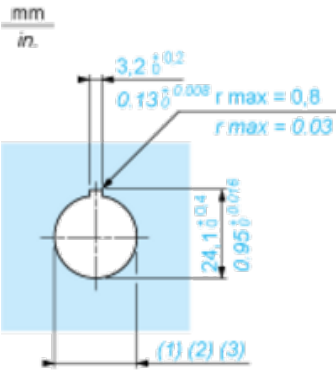
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 ( $\text{Ø}22.3_0^{+0.4}$ ) / 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     |

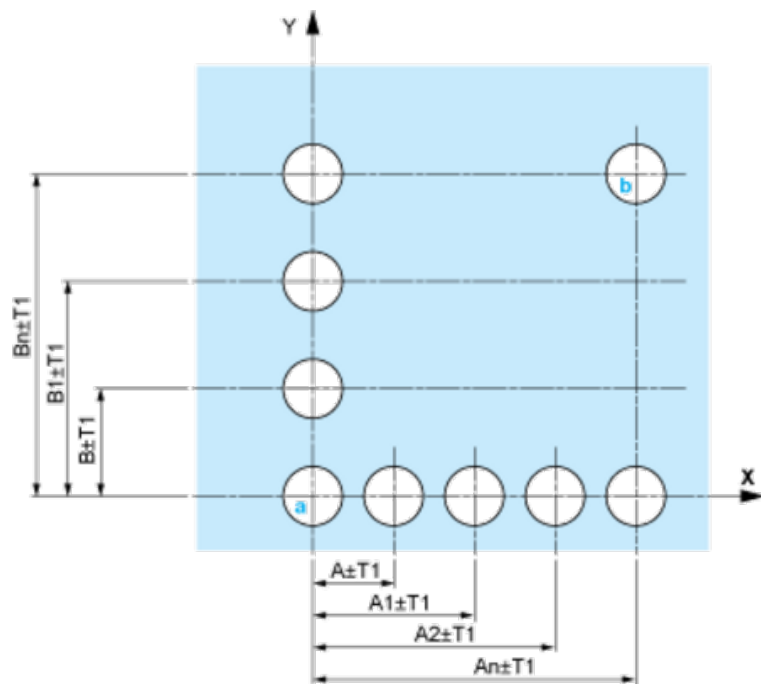
Detail of Lug Recess



- (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 ( $\text{Ø}22.3_0^{+0.4}$ ) / 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)

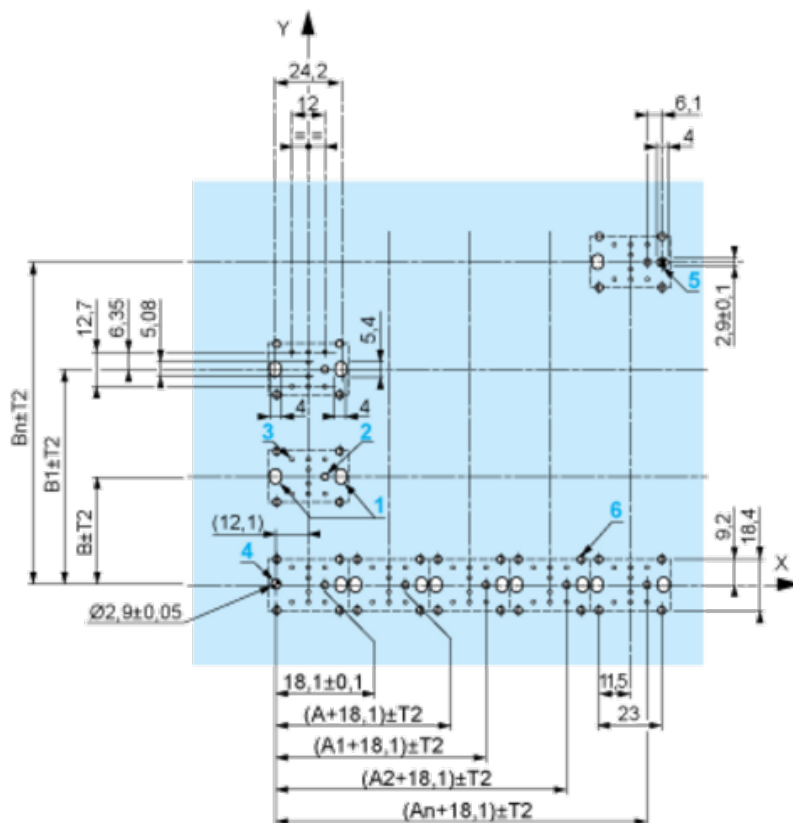


A: 30 mm min. / 1.18 in. min.

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

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

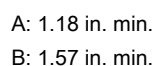
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



The cumulative tolerance must not exceed 0.3 mm / 0.012 in.:  $T1 + T2 = 0.3 \text{ mm max.}$

- 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\*).

Technical drawing of a ZB5 AZ079 assembly. The drawing shows a side view of the component with various dimensions and labels. The dimensions are:

- 49.75 ± 0.3
- 1.96 ± 0.012
- 55.4 max
- 2.18 max

The labels and callouts are:

- (1)
- (2)
- (3)
- ZB5 AZ079
- ZBE 70●/ZBV B●7
- ZBZ 01●
- (4)
- ZBZ 006

The drawing also includes a scale bar indicating mm and in.

- (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 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  2.9 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 mm / 0.09 in. for clipping in adapter ZBZ01•

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

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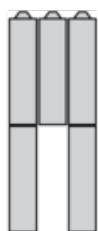
Electrical Composition Corresponding to Code C4

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Electrical Composition Corresponding to Code C5

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Electrical Composition Corresponding to Code C6

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Electrical Composition Corresponding to Code C7

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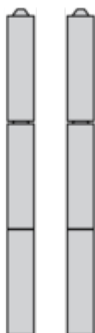
Electrical Composition Corresponding to Code C8

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## Electrical Composition Corresponding to Code C3

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

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## Legend

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Single contact

Double contact

Light block

Possible location



## Sequence of Contacts Fitted to 3-position Selector Switch Body

### Position 315°



|          |                                                                                   |      |                                                                                    |        |      |
|----------|-----------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------|--------|------|
| Push     | Position                                                                          | Top  |  |        |      |
| Bottom   |  |      |   |        |      |
| Location |                                                                                   | Left | Centre                                                                             | Right  |      |
| State    |                                                                                   | 1    | 1                                                                                  | 0      |      |
| Contacts | N/O                                                                               |      | closed                                                                             | closed | open |
| N/C      |                                                                                   | open | open                                                                               | closed |      |

### Position 0°



|          |                                                                                     |                                                                                     |                                                                                     |        |      |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|------|
| Push     | Position                                                                            | Top                                                                                 |  |        |      |
| Bottom   |  |  |  |        |      |
| Location |                                                                                     | Left                                                                                | Centre                                                                              | Right  |      |
| State    |                                                                                     | 0                                                                                   | 0                                                                                   | 0      |      |
| Contacts | N/O                                                                                 |                                                                                     | open                                                                                | open   | open |
| N/C      |                                                                                     | closed                                                                              | closed                                                                              | closed |      |

### Position 45°



|          |                                                                                     |                                                                                     |                                                                                     |        |        |
|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------|--------|
| Push     | Position                                                                            | Top                                                                                 |  |        |        |
| Bottom   |  |  |                                                                                     |        |        |
| Location |                                                                                     | Left                                                                                | Centre                                                                              | Right  |        |
| State    |                                                                                     | 0                                                                                   | 1                                                                                   | 1      |        |
| Contacts | N/O                                                                                 |                                                                                     | open                                                                                | closed | closed |
| N/C      |                                                                                     | closed                                                                              | open                                                                                | open   |        |