



## Main

|                               |                          |
|-------------------------------|--------------------------|
| Range of product              | Harmony XB4              |
| Product or component type     | Head for selector switch |
| Device short name             | ZB4                      |
| Bezel material                | Chromium plated metal    |
| Mounting diameter             | 22 mm                    |
| Sale per indivisible quantity | 1                        |
| Shape of signaling unit head  | Round                    |
| Type of operator              | Stay put                 |
| Operator profile              | Black standard handle    |
| Operator position information | 2 positions 90°          |

## Complementary

|                                    |   |
|------------------------------------|---|
| CAD overall width                  | 29 mm   |
| CAD overall height                 | 29 mm   |
| CAD overall depth                  | 44 mm   |
| Product weight                     | 0.04 kg   |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance: 0.1 m  |
| Mechanical durability              | 1000000 cycles  |
| Electrical composition code        | C11 for ≤ 3 contacts using single blocks in front mounting<br>C6 for ≤ 5 contacts using single and double blocks in front mounting<br>C8 for ≤ 4 contacts using single and double blocks in front mounting<br>C15 for 1 contacts using single blocks in front mounting<br>C5 for ≤ 5 contacts using single blocks in front mounting<br>C7 for ≤ 4 contacts using single blocks in front mounting<br>C4 for ≤ 6 contacts using single and double blocks in front mounting<br>C3 for ≤ 6 contacts using single blocks in front mounting |
| Main group                         | Selector switch   |
| Group of product                   | Non illuminated   |
| Cap/Operator or lens colour        | Black   |
| Compatibility code                 | ZB4   |

## Environment

|                                       |  |
|---------------------------------------|--|
| Protective treatment                  | TH   |
| Ambient air temperature for storage   | -40...70 °C  |
| Ambient air temperature for operation | -40...70 °C  |
| Overvoltage category                  | Class I conforming to IEC 60536  |
| IP degree of protection               | IP67 conforming to IEC 60529<br>IP69K<br>IP69  |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X   |
| IK degree of protection               | IK06 conforming to IEC 50102   |
| Standards                             | EN/IEC 60947-5-1<br>EN/IEC 60947-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-5<br>JIS C 4520<br>UL 508<br>EN/IEC 60947-5-4  |
| Product certifications                | LROS (Lloyds register of shipping)<br>CSA<br>UL listed<br>RINA<br>GL<br>DNV<br>BV  |
| Vibration resistance                  | 5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6  |
| Shock resistance                      | 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27<br>30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

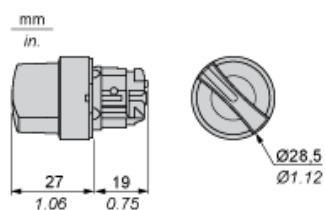
## Contractual warranty

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

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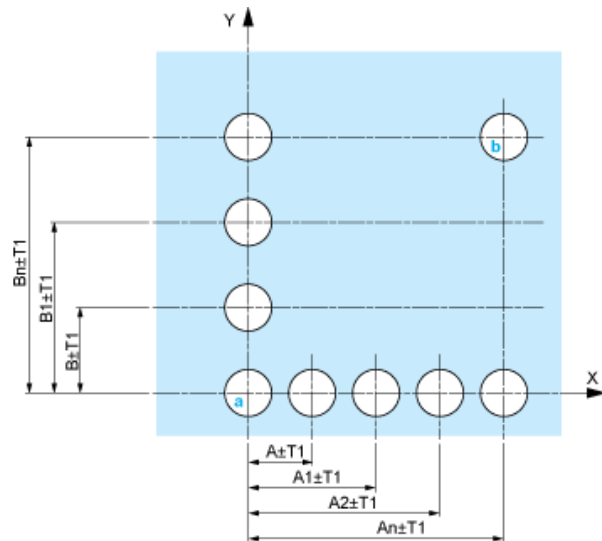
Dimensions

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## Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

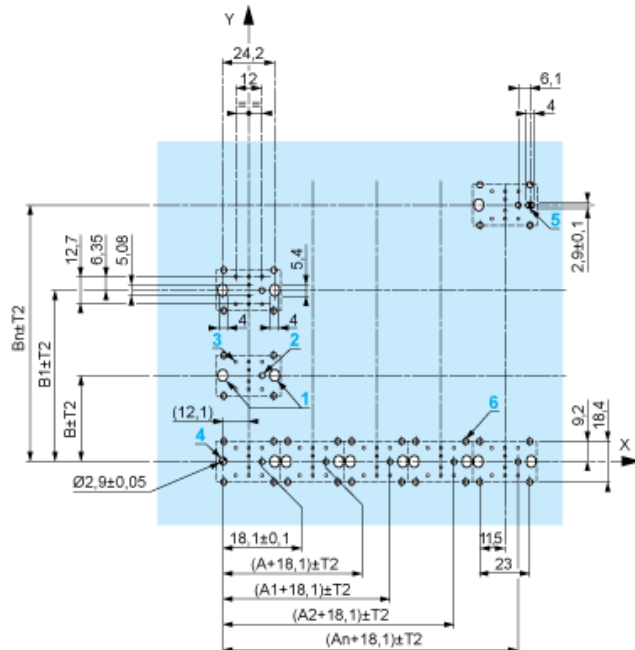
### Panel Cut-outs (Viewed from Installer's Side)



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

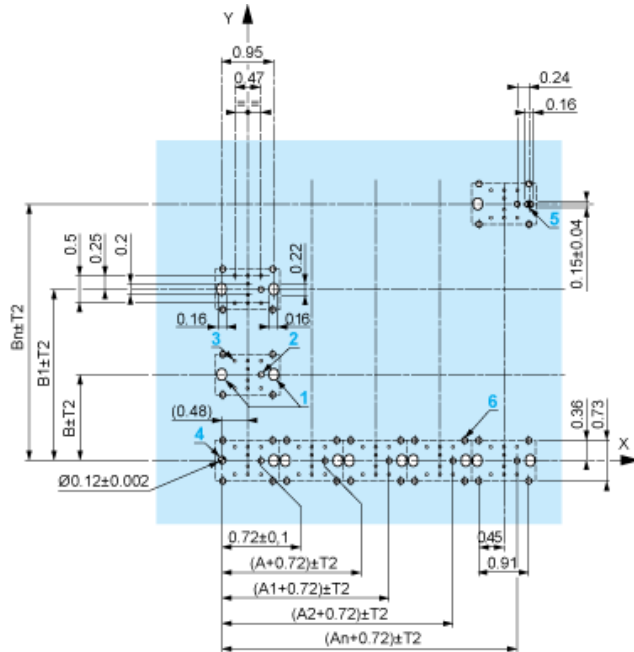
### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



- A: 30 mm min.  
B: 40 mm min.

Dimensions in in.



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

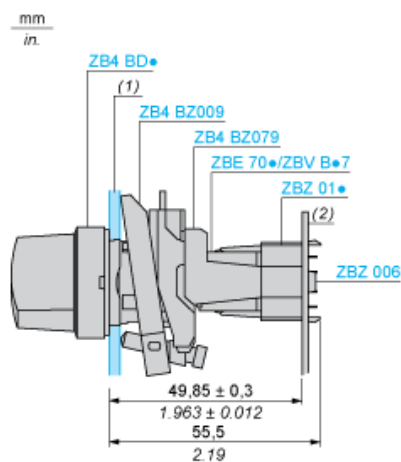
### General Tolerances of the Panel and Printed Circuit Board

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

### 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 ZB4 BZ009:  $\pm 2^\circ 30'$  (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 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 (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



- (1) Panel  
(2) Printed circuit board

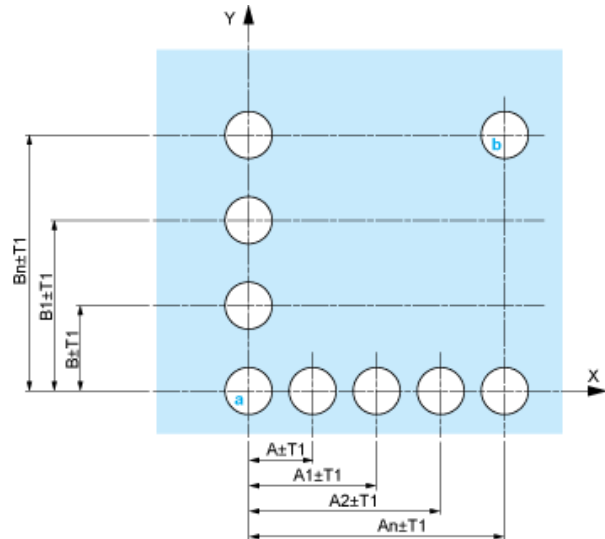
### Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 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 ZBZ 01•

Dimensions An + 18.1 relate to the  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01•.

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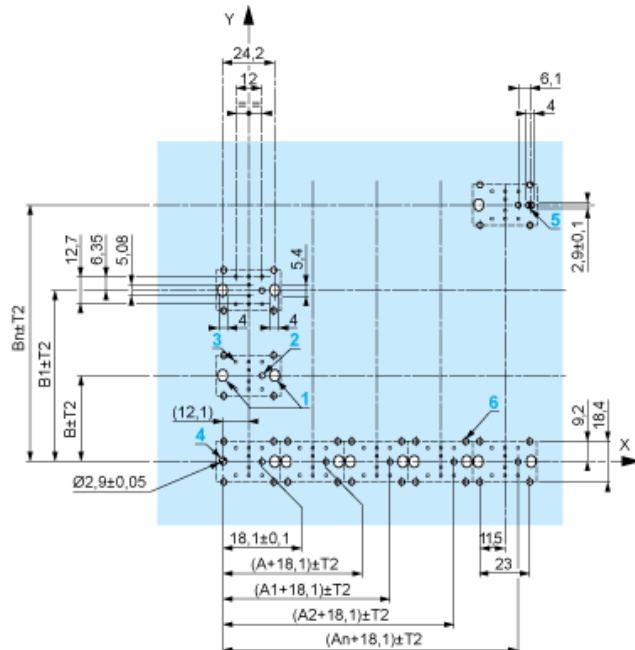
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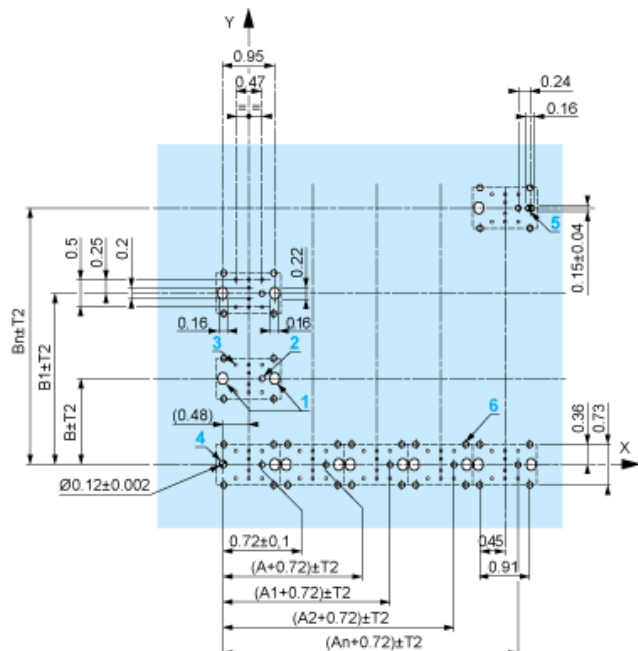
### Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



- A: 30 mm min.  
B: 40 mm min.

Dimensions in in.



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

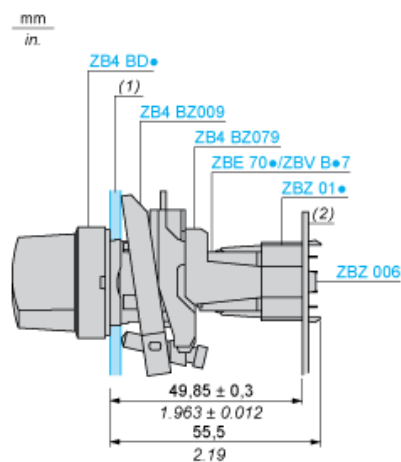
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Sequence of Contacts Fitted to 2-position Selector Switch Body

Position 315°



|          |          |        |        |        |      |
|----------|----------|--------|--------|--------|------|
| 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    |          | 1    | 1      | 1      |        |
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|          |          |        |        |        |      |
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| State    |          | 0      | 0      | 0      |      |
| Contacts | N/O      |        | open   | open   | open |
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### Position 45°



|          |             |      |        |        |        |
|----------|-------------|------|--------|--------|--------|
| Push     | Position    | Top  |        |        |        |
| Bottom   | <div></div> |      |        |        |        |
| Location |             | Left | Centre | Right  |        |
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| Location |          | Left   | Centre | Right  |      |
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