



Main

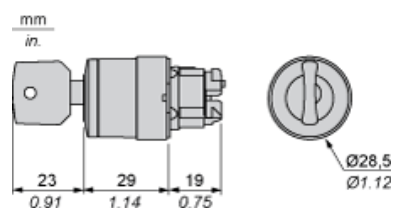
| | |
|-------------------------------|------------------------------|
| Range of product | Harmony XB4 |
| Product or component type | Head for key selector switch |
| Device short name | ZB4 |
| Bezel material | Chromium plated metal |
| Mounting diameter | 22 mm |
| Sale per indivisible quantity | 1 |
| Shape of signaling unit head | Round |
| Operator profile | Black key switch |
| Operator position information | 2 positions 90° |
| Type of keylock | Ronis 455 |
| Key withdrawal position | Left |

Complementary

| | |
|------------------------------------|--|
| CAD overall width | 29 mm |
| CAD overall height | 29 mm |
| CAD overall depth | 72 mm |
| Product weight | 0.098 kg |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance: 0.1 m |
| Mechanical durability | 1000000 cycles |
| Electrical composition code | C7 for <= 4 contacts using single blocks in front mounting C5 for <= 5 contacts using single blocks in front mounting C15 for 1 contacts using single blocks in front mounting C8 for <= 4 contacts using single and double blocks in front mounting C6 for <= 5 contacts using single and double blocks in front mounting C4 for <= 6 contacts using single and double blocks in front mounting C3 for <= 6 contacts using single blocks in front mounting C11 for <= 3 contacts using single blocks in front mounting |
| Main group | Selector switch |
| Group of product | Key switch |
| Cap/Operator or lens colour | Black |

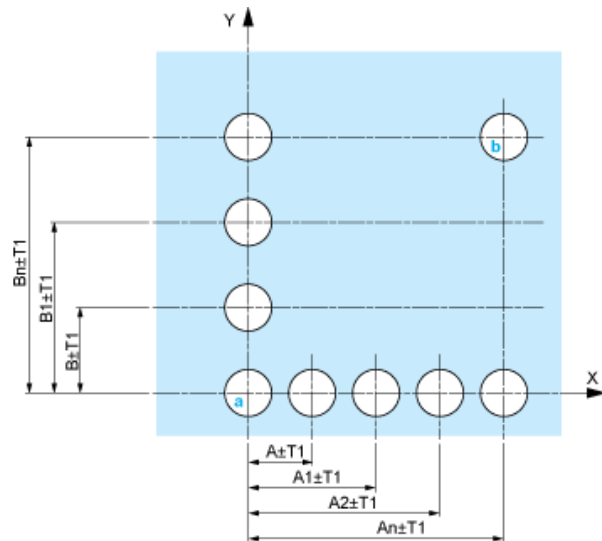
| | |
|---------------------------------------|--|
| Compatibility code | ZB4 |
| Environment | |
| Protective treatment | TH |
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -40...70 °C |
| Overvoltage category | Class I conforming to IEC 60536 |
| IP degree of protection | IP66 conforming to IEC 60529 IP67 IP69K IP69 |
| NEMA degree of protection | NEMA 4X NEMA 13 |
| IK degree of protection | IK06 conforming to IEC 50102 |
| Standards | EN/IEC 60947-5-4 EN/IEC 60947-5-1 UL 508 CSA C22.2 No 14 EN/IEC 60947-1 GB 14048.5 EN/IEC 60947-5-5 |
| Product certifications | DNV BV GL CSA LROS (Lloyds register of shipping) RINA UL listed |
| 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 |
| Contractual warranty | |
| Warranty period | 18 months |

Dimensions



Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

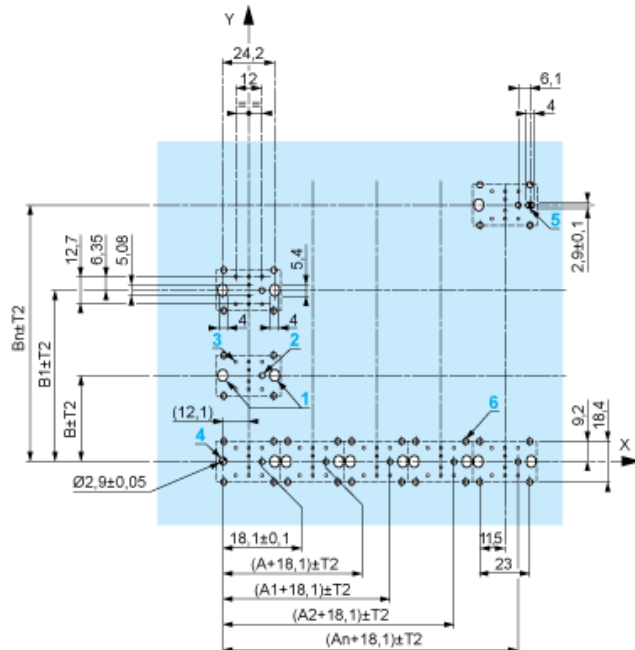
Panel Cut-outs (Viewed from Installer's Side)



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

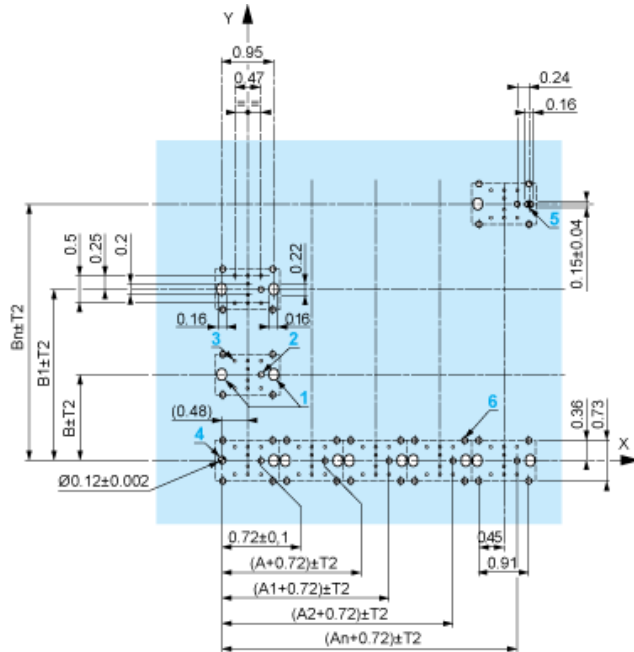
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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

Dimensions in in.



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

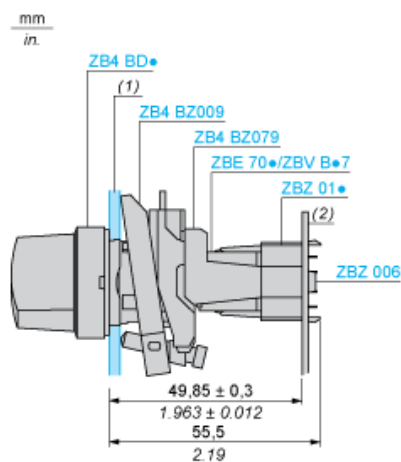
General Tolerances of the Panel and Printed Circuit Board

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

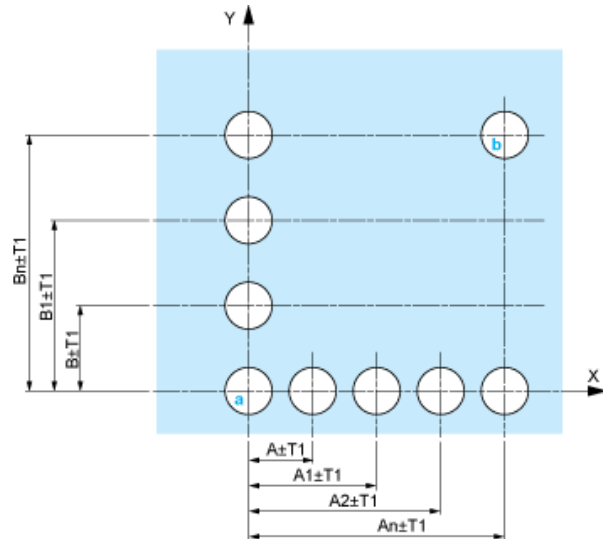
Mounting of Adapter (Socket) ZBZ 01•

- 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•.

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

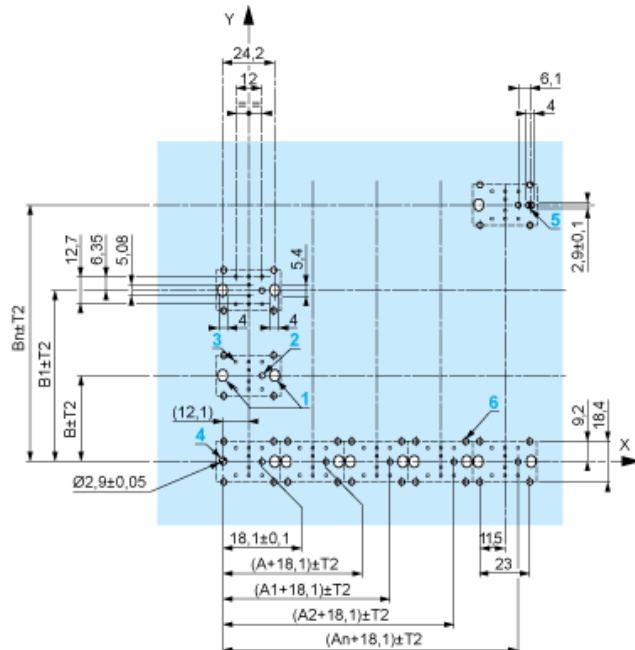
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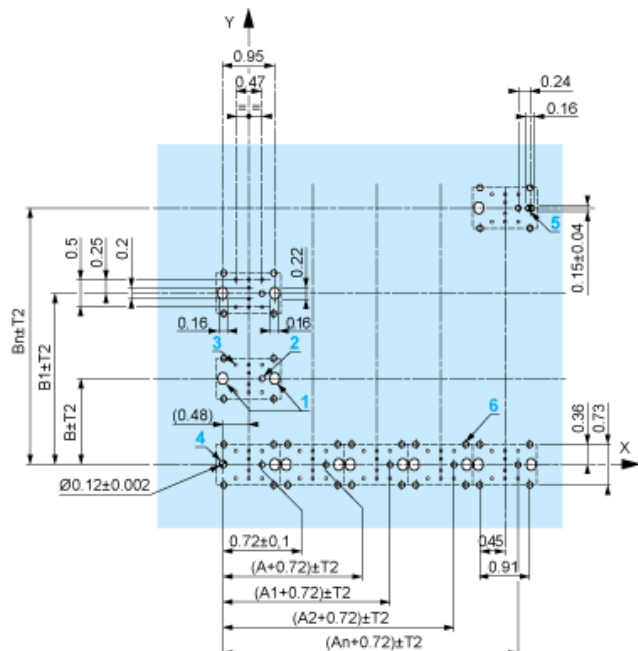
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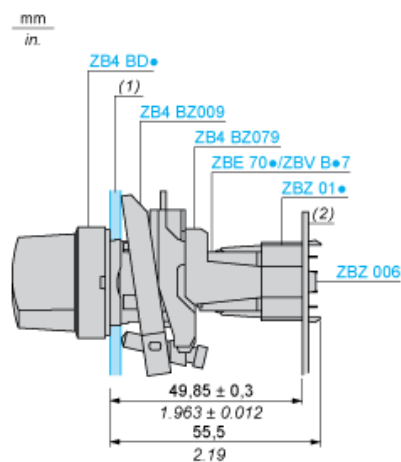
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Sequence of Contacts Fitted to 2-position Selector Switch Body

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 | <div></div> | | | | |
| Location | | Left | Centre | Right | |
| State | | 1 | 1 | 1 | |
| Contacts | N/O | | closed | closed | closed |
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