



## Main

|                           |  |
|---------------------------|--|
| Range of Product          | Harmony XB4  |
| Product or Component Type | Illuminated double-headed push-button  |
| Device short name         | XB4  |
| Bezel material            | Chromium plated metal  |
| Head type                 | Standard   |
| Mounting diameter         | 0.87 in (22 mm)  |
| Colour of marking         | White marking when green, red or black caps<br>Black marking when white caps |
| Light source              | Protected LED  |
| Light source colour       | White  |
| Device presentation       | Complete product   |

## Complementary

|   |  |
|---|--|
| Fixing collar material                      | Zamak  |
| Net Weight                                  | 0.29 lb(US) (0.13 kg)  |
| Resistance to high pressure washer          | 1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m  |
| Shape of signaling unit head                | Rectangular  |
| Type of operator                            | Spring return  |
| Operator profile                            | 1 flush - 1 projecting push-buttons - 1 central pilot light  |
| Operators description                       | Green "I" - red "O"  |
| Operator profile                            | Green flush, I white)<br>Red projecting, O white)  |
| Contacts type and composition               | 1 NO + 1 NC  |
| Contact operation                           | Slow-break   |
| Contacts usage                              | Standard contacts  |
| Positive opening                            | With EN/IEC 60947-5-1 appendix K   |
| Operating travel                            | 0.06 in (1.5 mm) NC changing electrical state)<br>0.10 in (2.6 mm) NO changing electrical state)<br>0.17 in (4.3 mm) total travel)                                     |
| Operating force                             | 3.5 N NC changing electrical state<br>3.8 N NO changing electrical state   |
| Mechanical durability                       | 1000000 cycles   |
| Connections - terminals                     | Screw clamp terminals, <= 2 x 1.5 mm <sup>2</sup> with cable end EN/IEC 60947-1<br>Screw clamp terminals, >= 1 x 0.22 mm <sup>2</sup> without cable end EN/IEC 60947-1 |
| Tightening torque                           | 7.08...10.62 lbf.in (0.8...1.2 N.m) EN 60947-1   |
| Shape of screw head                         | Cross JIS No 1<br>Cross Philips no 1<br>Cross pozidriv No 1<br>Slotted flat Ø 4 mm<br>Slotted flat Ø 5.5 mm  |
| Contacts material                           | Silver alloy (Ag/Ni)   |
| Short-circuit protection                    | 10 A cartridge fuse gG EN/IEC 60947-5-1  |
| [Ith] conventional free air thermal current | 10 A EN/IEC 60947-5-1  |
| [Ui] rated insulation voltage               | 600 V 3)EN 60947-1   |
| [Uimp] rated impulse withstand voltage      | 6 kV EN 60947-1  |

|                                |   |
|--------------------------------|---|
| [Ie] rated operational current | 3 A 240 V, AC-15, A600 EN/IEC 60947-5-1<br>6 A 120 V, AC-15, A600 EN/IEC 60947-5-1<br>0.1 A 600 V, DC-13, Q600 EN/IEC 60947-5-1<br>0.27 A 250 V, DC-13, Q600 EN/IEC 60947-5-1<br>0.55 A 125 V, DC-13, Q600 EN/IEC 60947-5-1<br>1.2 A 600 V, AC-15, A600 EN/IEC 60947-5-1  |
| Electrical durability          | 1000000 Cycles, AC-15, 2 A 230 V 3600 cyc/h 0.5 EN/IEC 60947-5-1 appendix C<br>1000000 Cycles, AC-15, 3 A 120 V 3600 cyc/h 0.5 EN/IEC 60947-5-1 appendix C<br>1000000 Cycles, AC-15, 4 A 24 V 3600 cyc/h 0.5 EN/IEC 60947-5-1 appendix C<br>1000000 Cycles, DC-13, 0.2 A 110 V 3600 cyc/h 0.5 EN/IEC 60947-5-1 appendix C<br>1000000 cycles, DC-13, 0.5 A 24 V 3600 cyc/h 0.5 EN/IEC 60947-5-1 appendix C |
| Electrical reliability         | $\Lambda < 10\exp(-6)$ 5 V 1 mA in clean environment EN/IEC 60947-5-4<br>$\Lambda < 10\exp(-8)$ 17 V 5 mA in clean environment EN/IEC 60947-5-4   |
| Signalling type                | Steady  |
| Bulb base                      | Integral LED  |
| [Us] rated supply voltage      | 110...120 V AC 50/60 Hz   |
| Current Consumption            | 14 mA   |
| Service life                   | 100000 h at rated voltage and 25 °C   |
| Surge withstand                | 1 kV IEC 61000-4-5  |
| Compatibility code             | XB4   |

## 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)  |
| Electrical shock protection class     | Class I IEC 60536   |
| IP degree of protection               | IP66 IEC 60529<br>IP69K IEC 60529<br>IP69 IEC 60529   |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X  |
| IK degree of protection               | IK06 IEC 50102  |
| Standards                             | EN/IEC 60947-5-5<br>CSA C22.2 No 14<br>EN/IEC 60947-5-1<br>UL 508<br>EN/IEC 60947-1<br>EN/IEC 60947-5-4<br>JIS C8201-5-1<br>JIS C8201-1 |
| Product Certifications                | GL<br>BV<br>DNV<br>LROS (Lloyds register of shipping)<br>UL Listed<br>CSA   |
| 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                      |
| Resistance to fast transients         | 2 kV IEC 61000-4-4  |
| Resistance to electromagnetic fields  | 9.14 V/m (10 V/m) IEC 61000-4-3   |
| Resistance to electrostatic discharge | 6 kV on contact (on metal parts) IEC 61000-4-2<br>8 kV in free air (in insulating parts) IEC 61000-4-2                                  |
| Electromagnetic emission              | Class B IEC 55011   |

## Ordering and shipping details

|                       |                                     |
|-----------------------|-------------------------------------|
| Category              | 22468 - PUSHBUTTONS,22MM(METAL) NEW |
| Discount Schedule     | CS2                                 |
| GTIN                  | 3389119043618                       |
| Nbr. of units in pkg. | 1                                   |
| Package weight(Lbs)   | 4.41 oz (125 g)                     |
| Returnability         | Yes                                 |
| Country of origin     | FR                                  |

## Packing Units

|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Package 1 Height             | 1.26 in (3.2 cm)         |
| Package 1 width              | 2.13 in (5.4 cm)         |
| Package 1 Length             | 3.23 in (8.2 cm)         |
| Unit Type of Package 2       | BB1                      |
| Number of Units in Package 2 | 5                        |
| Package 2 Weight             | 22.22 oz (630 g)         |
| Package 2 Height             | 3.39 in (8.6 cm)         |
| Package 2 width              | 10.43 in (26.5 cm)       |
| Package 2 Length             | 1.30 in (3.3 cm)         |
| Unit Type of Package 3       | S03                      |
| Number of Units in Package 3 | 100                      |
| Package 3 Weight             | 29.22 lb(US) (13.255 kg) |
| Package 3 Height             | 11.81 in (30 cm)         |
| Package 3 width              | 11.81 in (30 cm)         |
| Package 3 Length             | 15.75 in (40 cm)         |

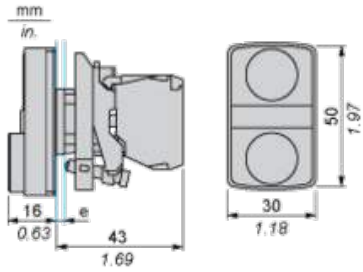
## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| 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>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <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>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.  |

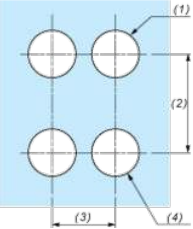
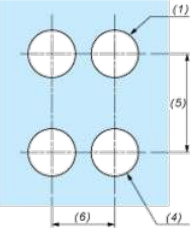
## Contractual warranty

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

Dimensions

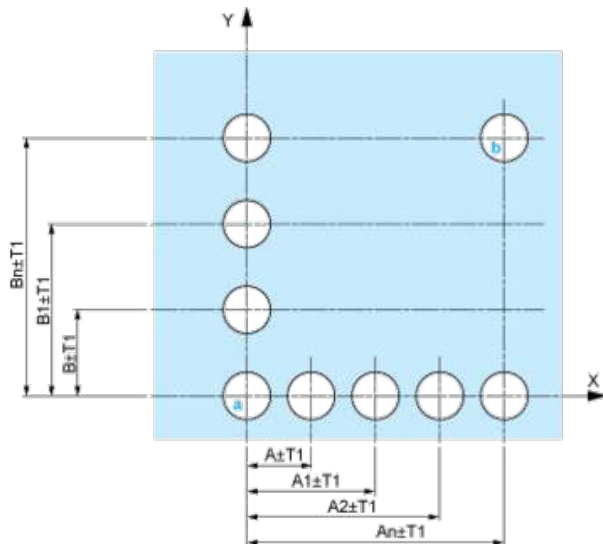


Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

| Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board   | Connection by Faston Connectors  |
|---|--|
|    |  |
| <p>(1) Diameter on finished panel or support<br/>                 (2) 40 mm min. / 1.57 in. min.<br/>                 (3) 30 mm min. / 1.18 in. min.<br/>                 (4) <math>\varnothing 22.5 \text{ mm} / 0.89 \text{ in.}</math> recommended (<math>\varnothing 22.3 \text{ mm}_0^{+0.4} / 0.88 \text{ in.}_0^{+0.016}</math>)<br/>                 (5) 45 mm min. / 1.78 in. min.<br/>                 (6) 32 mm min. / 1.26 in. min.</p> |  |

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

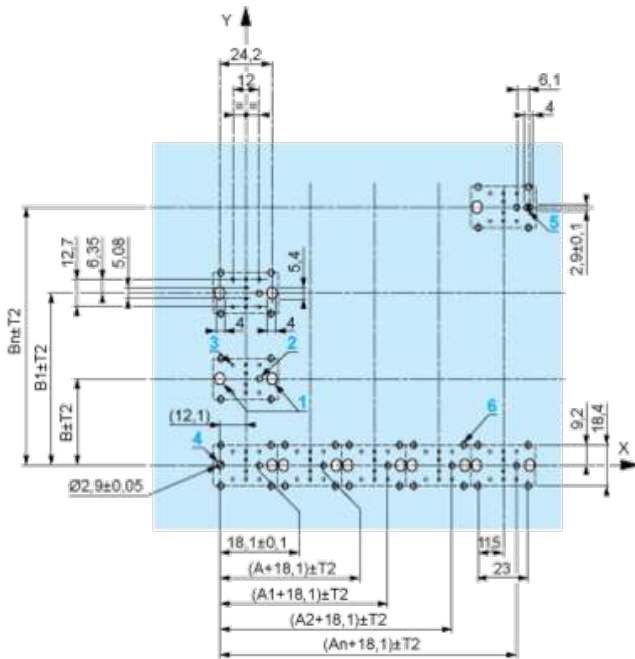
Panel Cut-outs (Viewed from Installer's Side)



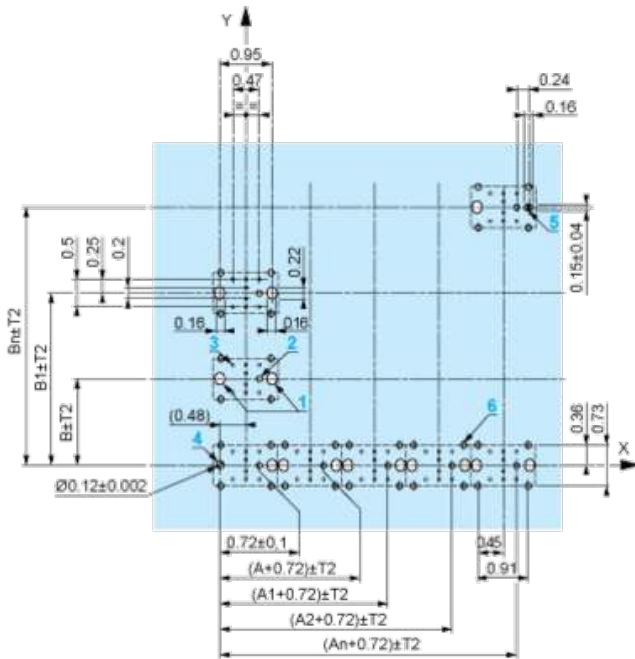
A: 30 mm min. / 1.18 in. min.  
 B: 40 mm min. / 1.57 in. min.

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.

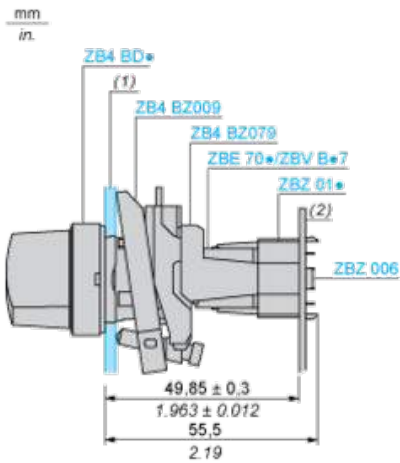
## General Tolerances of the Panel and Printed Circuit Board

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 mm  $\pm$  0.1 / 0.88 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  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  for centring adapter ZBZ 01•
- 3  $8 \times \varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$  holes
- 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$ , 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  $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$  for clipping in adapter ZBZ 01•

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