## **ZB4BA48**

Harmony XB4, Illuminated push button head, metal, flush, red, Ø22, spring return, integral LED, for insertion legend, unmarked





#### Main

| Range of Product                | Harmony XB4                      |
|---------------------------------|----------------------------------|
| Product or Component<br>Type    | Head for illuminated push-button |
| Device short name               | ZB4                              |
| Product Compatibility           | Integral LED                     |
| Bezel material                  | Chromium plated metal            |
| Head type                       | Standard                         |
| Mounting diameter               | 0.87 in (22 mm)                  |
| Sale per indivisible quantity   | 1                                |
| Shape of signaling unit head    | Round                            |
| Type of operator                | Spring return                    |
| Operator profile                | Red flush, unmarked              |
| Operator additional information | For insertion of legend          |

#### Complementary

| Device presentation                | Basic element   |
|------------------------------------|---|
|                                    | C14 2 single front mounting                             |
|                                    | C4 6 single and double front mounting                   |
|                                    | C3 6 single front mounting                              |
|                                    | M10 2 single front mounting integral LED                |
|                                    | M6 2 single front mounting integral LED and transformer |
| •                                  | M2 6 single and double front mounting integral LED      |
| Electrical composition code        | M1 6 single front mounting integral LED                 |
| Mechanical durability              | 10000000 cycles   |
| Resistance to high pressure washer | 1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m           |
| Net Weight                         | 0.06 lb(US) (0.028 kg)                                  |
| CAD overall depth                  | 1.18 in (30 mm)   |
| CAD overall height                 | 1.14 in (29 mm)   |
| CAD overall width                  | 1.14 in (29 mm)   |

#### Environment

| Protective treatment                  | TH                                      |
|---------------------------------------|---|
| Ambient Air Temperature for Storage   | -40158 °F (-4070 °C)                    |
| Ambient air temperature for operation | -40158 °F (-4070 °C)                    |
| Overvoltage category                  | Class I IEC 60536                       |
| IP degree of protection               | IP66 IEC 60529<br>IP67<br>IP69<br>IP69K |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X                      |
| IK degree of protection               | IK06 EN 50102                           |

| JIS C8201-5-1   |  |
|---|--|
| UL 508  |  |
| EN/IEC 60947-5-5  |  |
| EN/IEC 60947-1  |  |
| CSA C22.2 No 14   |  |
| EN/IEC 60947-5-1  |  |
| EN/IEC 60947-5-4  |  |
| JIS C8201-1   |  |
| LROS (Lloyds register of shipping)                      |  |
| GL  |  |
| DNV   |  |
| UL Listed   |  |
| CSA   |  |
| BV  |  |
| 5 gn 2500 Hz)IEC 60068-2-6                              |  |
| 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27 |  |
| 50 gn 11 ms) half sine wave acceleration IEC 60068-2-27 |  |
|   | UL 508 EN/IEC 60947-5-5 EN/IEC 60947-1 CSA C22.2 No 14 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C8201-1  LROS (Lloyds register of shipping) GL DNV UL Listed CSA BV  5 gn 2500 Hz)IEC 60068-2-6 30 gn 18 ms) half sine wave acceleration IEC 60068-2-27 |

#### Ordering and shipping details

| or drowing direct or inplanting drottome |                                     |  |
|--|-------------------------------------|--|
| Category                                 | 22468 - PUSHBUTTONS,22MM(METAL) NEW |  |
| Discount Schedule                        | CS2                                 |  |
| GTIN                                     | 3389110887723                       |  |
| Nbr. of units in pkg.                    | 1                                   |  |
| Package weight(Lbs)                      | 1.02 oz (29 g)                      |  |
| Returnability                            | Yes                                 |  |
| Country of origin                        | FR                                  |  |

# Packing Units

| 3                            |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Package 1 Height             | 1.34 in (3.4 cm)       |
| Package 1 width              | 2.09 in (5.3 cm)       |
| Package 1 Length             | 2.20 in (5.6 cm)       |
| Unit Type of Package 2       | BB1                    |
| Number of Units in Package 2 | 5                      |
| Package 2 Weight             | 5.19 oz (147 g)        |
| Package 2 Height             | 1.34 in (3.4 cm)       |
| Package 2 width              | 2.20 in (5.6 cm)       |
| Package 2 Length             | 10.43 in (26.5 cm)     |
| Unit Type of Package 3       | S03                    |
| Number of Units in Package 3 | 100                    |
| Package 3 Weight             | 7.60 lb(US) (3.446 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: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACh Regulation           | ☑ REACh Declaration   |
| REACh free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | ₫Yes  |
| China RoHS Regulation      | China RoHS Declaration  |

| Product Environmental Profile |  |
|-------------------------------|--|
| End Of Life Information       |  |
|                               |  |

#### Contractual warranty

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

# Product data sheet Dimensions Drawings

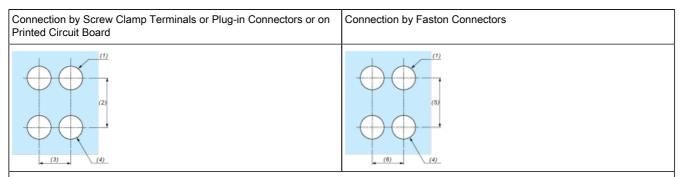
# **ZB4BA48**

#### **Dimensions**





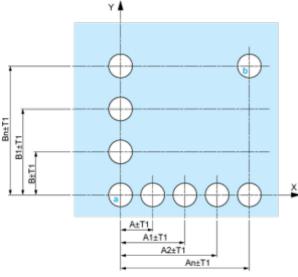
#### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



- (1) Diameter on finished panel or support
- (2) 40 mm min. / 1.57 in. min.
- (3) 30 mm min. / 1.18 in. min.
- (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm  $_0$   $^{+0.4}$  / 0.88 in.  $_0$   $^{+0.016}$ )
- (5) 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

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

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

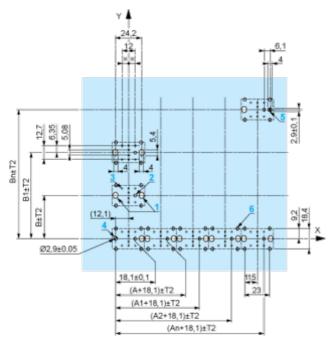


A: 30 mm min. / 1.18 in. min.

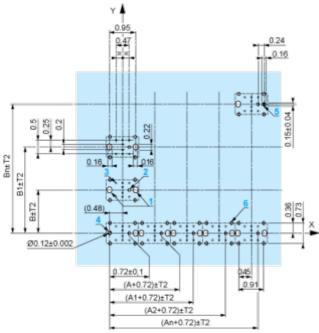
B: 40 mm min. / 1.57 in. min.

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.

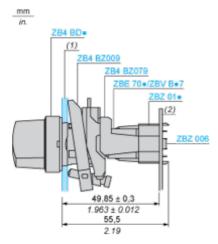
#### General Tolerances of the Panel and Printed Circuit Board

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 mm ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB4 BZ009: ± 2°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:
  - $\circ\quad$  every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - o 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 Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 38 × 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 ZBZ 01•

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

# **ZB4BA48**

| Electrical Composition Corresponding to Code C3                |
|--|
|  |
|  |
|  |
|  |
| Electrical Composition Corresponding to Code C4                |
|  |
|  |
|  |
|  |
| Electrical Composition Corresponding to Codes C14, SF2 and SR2 |
|  |
|  |
| Electrical Composition Corresponding to Codes M1 and M7        |
|  |
|  |
|  |
|  |
| Electrical Composition Corresponding to Codes M2 and M8        |
|  |



## Electrical Composition Corresponding to Codes M6 and P2



# Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



#### Legend

Single contact

Double contact

Light block

Possible location