



### Main

|                               |  |
|-------------------------------|--|
| Range of product              | Harmony XB4  |
| Product or component type     | Head for illuminated emergency switching off push-button |
| Device short name             | ZB4  |
| Product compatibility         | Integral LED   |
| Bezel material                | Chromium plated metal                                    |
| Head type                     | Standard   |
| Mounting diameter             | 22 mm  |
| Sale per indivisible quantity | 1  |
| Shape of signaling unit head  | Round  |
| Type of operator              | Mechanical latching                                      |
| Reset                         | Push-pull  |
| Operator profile              | Red mushroom Ø 40 mm unmarked                            |

### Complementary

|                                    |  |
|------------------------------------|--|
| CAD overall width                  | 40 mm  |
| CAD overall height                 | 40 mm  |
| CAD overall depth                  | 53 mm  |
| Product weight                     | 0.051 kg   |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance: 0.1 m   |
| Mechanical durability              | 500000 cycles  |
| Electrical composition code        | M10 for <= 2 contacts using single blocks in front mounting with integral LED<br>M6 for <= 2 contacts using single blocks in front mounting with integral LED and transformer<br>M3 for <= 4 contacts using single blocks in front mounting with integral LED<br>M4 for <= 4 contacts using single and double blocks in front mounting with integral LED |

### 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               | IP69<br>IP66 conforming to IEC 60529 |

IP69K

|                           |  |
|---------------------------|--|
| NEMA degree of protection | NEMA 13<br>NEMA 4X   |
| IK degree of protection   | IK05 conforming to EN 50102  |
| Standards                 | UL 508<br>CSA C22.2 No 14<br>JIS C 4520<br>EN/IEC 60947-1<br>IEC 60364-5-53<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-5<br>EN/IEC 60947-5-1  |
| Product certifications    | UL listed<br>RINA<br>LROS (Lloyds register of shipping)<br>BV<br>DNV<br>CSA<br>GL  |
| 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<br>50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

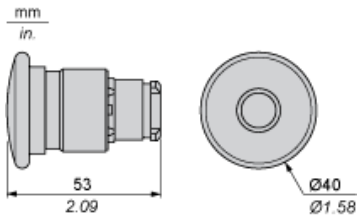
**Contractual warranty**

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

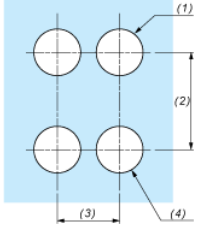
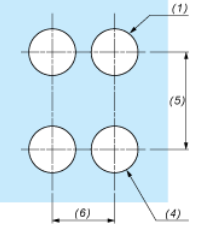
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Dimensions

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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>\text{Ø } 22.5 \text{ mm} / 0.89 \text{ in. recommended } (\text{Ø } 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 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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Electrical Composition Corresponding to Code M3

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Electrical Composition Corresponding to Code M4

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Electrical Composition Corresponding to Codes M6 and P2

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

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Legend

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Single contact



Double contact



Light block



Possible location

