## Product datasheet

Specifications

# Emergency stop head, switching off, metal, red mushroom Ø40, Ø22, trigger latching key release 

Local distributor code: 237090524 ZB4BS944

EAN Code : 3389110888881

| Main |  |
| :---: | :---: |
| Range of product | Harmony XB4 |
| Product or component type | Head for emergency switching off push-button |
| 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 | trigger action and mechanical latching |
| Reset | Key release |
| Operator profile | Red mushroom $\varnothing 40 \mathrm{~mm}$, unmarked |
| Type of keylock | Key 455 |
| Key withdrawal position | Center |
| Head type | Standard |
| Complementary |  |
| CAD overall width | 40 mm |
| CAD overall height | 40 mm |
| CAD overall depth | 79 mm |
| Net weight | 0.098 kg |
| Resistance to high pressure washer | 7000000 Pa at $55^{\circ} \mathrm{C}$, distance : 0.1 m |
| Mechanical durability | 300000 cycles |
| Electrical composition code | C7 for <4 contacts using single blocks in front mounting C8 for $<4$ contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting C10 for $<4$ contacts using single and double blocks in front mounting |
| Device presentation | Basic element |
| Environment |  |
| Protective treatment | TH |


| Ambient air temperature for <br> storage | $-40 \ldots 70^{\circ} \mathrm{C}$ |
| :--- | :--- |

Ambient air temperature for $\quad-40 \ldots 70^{\circ} \mathrm{C}$ operation

| Electrical shock protection Class I conforming to IEC 61140 <br> class |
| :--- |

\(\left.\begin{array}{ll} \& IP66 conforming to IEC 60529 <br>
\& IP67 <br>
\& IP69 <br>

\& IP69K\end{array}\right]\)|  | NEMA 13 |
| :--- | :--- |
| NEMA degree of protection | NEMA 4X |
|  | NEMA 4 |
|  | NEMA 12 |

Packing Units

| Unit Type of Package 1 | PCE |
| :--- | :--- |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.4 cm |
| Package 1 Width | 5.3 cm |
| Package 1 Length | 8.8 cm |
| Package 1 Weight | 103.0 g |
| Unit Type of Package 2 | 503 |
| Number of Units in Package 2 | 100 |
| Package 2 Height | 30.0 cm |
| Package 2 Width | 30.0 cm |
| Package 2 Length | 40.0 cm |
| Package 2 Weight | 10.778 kg |

Offer Sustainability

| Sustainable offer status | Green Premium product |
| :--- | :--- |
| REACh Regulation | REACh Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) <br>  <br> EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration |

Environmental Disclosure Product Environmental Profile
Circularity Profile End of Life Information

Contractual warranty
Warranty
18 months


Mounting and Clearance

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 |
| :---: | :---: |
|  |  |
| (1) Diameter on finished panel or support <br> (2) 40 mm min . / $1.57 \mathrm{in} . \mathrm{min}$. <br> (3) 30 mm min . / 1.18 in . min. <br> (4) $\varnothing 22.5 \mathrm{~mm} / 0.89 \mathrm{in}$. recommended $\left(\varnothing 22.3 \mathrm{~mm}_{0}{ }^{+0.4} / 0.88 \mathrm{in} .0^{+0.01}\right)$ <br> (5) 45 mm min. / $1.78 \mathrm{in} . \mathrm{min}$. <br> (6) 32 mm min. / $1.26 \mathrm{in} . \mathrm{min}$. |  |

Mounting and Clearance

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection
Panel Cut-outs (Viewed from Installer's Side)


A: 30 mm min. / $1.18 \mathrm{in} . \mathrm{min}$.
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 $0.3 \mathrm{~mm} / 0.012 \mathrm{in}$ : $\mathrm{T} 1+\mathrm{T} 2=0.3 \mathrm{~mm}$ max.

## Installation Precautions

- Minimum thickness of circuit board: $1.6 \mathrm{~mm} / 0.06 \mathrm{in}$.
- Cut-out diameter: $22.4 \mathrm{~mm} \pm 0.1$ / $0.88 \mathrm{in} . \pm 0.004$
- Orientation of body/fixing collar ZB4 BZ009: $\pm 2^{\circ} 30^{\prime}$ (excluding cut-outs marked $\mathbf{a}$ and $\mathbf{b}$ ).
- 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 $90 \mathrm{~mm} / 3.54 \mathrm{in}$. horizontally (X), and $120 \mathrm{~mm} / 4.72 \mathrm{in}$. vertically (Y).
- with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked $\mathbf{a}$ and $\mathbf{b}$ are diagonally opposed and must align with those marked $\mathbf{4}$ and 5 .

(1) Panel
(2) Printed circuit board

## Mounting of Adapter (Socket) ZBZ 01•

- 12 elongated holes for ZBZ 006 screw access
- 21 hole $\varnothing 2.4 \mathrm{~mm} \pm 0.05 / 0.09 \mathrm{in} . \pm 0.002$ for centring adapter ZBZ $01 \cdot$
- $38 \times \varnothing 1.2 \mathrm{~mm} / 0.05 \mathrm{in}$. holes
- 41 hole $\varnothing 2.9 \mathrm{~mm} \pm 0.05 / 0.11 \mathrm{in} . \pm 0.002$, for aligning the printed circuit board (with cut-out marked a)
- 51 elongated hole for aligning the printed circuit board (with cut-out marked b)
- 64 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

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





Electrical Composition Corresponding to Code C15

1 N/O

$1 \mathrm{~N} / \mathrm{C}$

$1 \mathrm{~N} / \mathrm{O}+\mathrm{N} / \mathrm{C}$ or $1 \mathrm{~N} / \mathrm{O}+\mathrm{N} / \mathrm{O}$ or $1 \mathrm{~N} / \mathrm{C}+\mathrm{N} / \mathrm{C}$


Single contact


Double contact


Light block


Possible location
$\frac{\mathrm{mm}}{\mathrm{in} .}$


Recommended replacement(s)

