## Product data sheet

Specifications



## Head for pilot light, Harmony XB5, plastic, red, 22mm, universal LED, plain lens

ZB5AV043


Environment

| Protective treatment | TH |
| :--- | :--- |
| Ambient air temperature for <br> storage | $-40 \ldots 70^{\circ} \mathrm{C}$ |
| Ambient air temperature for <br> operation | $-40 \ldots 70^{\circ} \mathrm{C}$ |
| Overvoltage category | Class II conforming to IEC 60536 |
| IP degree of protection | IP66 conforming to IEC 60529 |


|  | IP67 conforming to IEC 60529 <br> IP69 conforming to IEC 60529 <br> IP69K conforming to ISO 20653 |
| :--- | :--- |
| NEMA degree of protection | NEMA 13 <br> NEMA 4X |
| Resistance to high pressure <br> washer | 7000000 Pa at $55{ }^{\circ} \mathrm{C}$, distance : 0.1 m |
| IK degree of protection | IK05 conforming to IEC 50102 |
| Standards | CSA C22.2 No 14 |
|  | UL 508 |
|  | EN/IEC 60947-5-5 |
|  | JIS C8201-5-1 |
|  | EN/IEC 60947-5-1 |
|  | EN/IEC 60947-1 |
|  | JIS C8201-1 |

Packing Units

| Unit Type of Package 1 | PCE |
| :--- | :--- |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 4.500 cm |
| Package 1 Width | 3.400 cm |
| Package 1 Length | 5.400 cm |
| Package 1 Weight | 15.0 g |
| Unit Type of Package 2 | 503 |
| Number of Units in Package 2 | 300 |
| Package 2 Height | 30.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 5.263 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 2400 |
| Package 3 Height | 77.000 cm |
| Package 3 Width | 80.000 cm |
| Package 3 Length | 60.000 cm |
| Package 3 Weight | 50.604 kg |

Offer Sustainability

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

Circularity Profile

## Contractual warranty

## Warranty

Dimensions Drawings

Dimensions


## Product data sheet

ZB5AV043
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

(1) Diameter on finished panel or support
(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended
(3) $\varnothing 22.5 \mathrm{~mm}$ recommended $\left(\varnothing 22.30^{+0.4}\right) / \varnothing 0.89 \mathrm{in}$. recommended ( $\varnothing 0.88 \mathrm{in} .0^{+0.016}$ )

| Connections | a in mm | a in in. | b in mm | b in in. |
| :--- | :--- | :--- | :--- | :--- |
| By screw clamp terminals or plug-in connector | 40 | 1.57 | 30 | 1.18 |
| By Faston connectors | 45 | 1.77 | 32 | 1.26 |
| On printed circuit board | 30 | 1.18 | 30 | 1.18 |

## Detail of Lug Recess


(1) Diameter on finished panel or support
(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
(3) $\varnothing 22.5 \mathrm{~mm}$ recommended $\left(\varnothing 22 . \mathrm{O}^{+0.4}\right) / \varnothing 0.89 \mathrm{in}$. recommended ( $\left.\varnothing 0.88 \mathrm{in} .0^{+0.016}\right)$

## Product data sheet

ZB5AV043
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. / $1.57 \mathrm{in} . \mathrm{min}$
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 ZB5AZ009: $\pm 2^{\circ} 30^{\prime}$ (excluding cut-outs marked $\mathbf{a}$ and b).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 Ibf.in) max.
- Allow for one ZB5AZ079 fixing collar/pillar and its fixing screws:
- every $90 \mathrm{~mm} / 3.54 \mathrm{in}$. horizontally $(\mathrm{X})$, and $120 \mathrm{~mm} / 4.72 \mathrm{in}$. vertically ( Y ).
- with each selector switch head (ZB5AD•, ZB5AJ•, ZB5AG•).

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

(1) Head ZB5AD•
(2) Panel
(2) Nut
(4) Printed circuit board

Mounting of Adapter (Socket) ZBZ01•

- 12 elongated holes for ZBZ006 screw access
- 21 hole $\varnothing 2.4 \mathrm{~mm} \pm 0.05 / 0.09 \mathrm{in} . \pm 0.002$ for centring adapter ZBZ01•
- $38 \times \varnothing 1.2 \mathrm{~mm} / 0.05 \mathrm{in}$. 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 ZBZ01•

Dimensions $\mathrm{An}+18.1$ relate to the $\varnothing 2.4 \mathrm{~mm} \pm 0.05 / 0.09 \mathrm{in} . \pm 0.002$ holes for centring adapter ZBZ01• .

Electrical Composition Corresponding to Codes P1, P3, PF1, PR1 and PF2

Light block



Single contact


Double contact


Light block


Possible location

Technical Illustration

## Dimensions



ZBE•••••3 ZBV $\bullet \bullet \bullet \bullet 3$




ZBE••••••9 ZBV•••••9

| $\begin{aligned} & \text { cor } \\ & \text { cosen } \end{aligned}$ | Cly | 40 | 1.57 | 30 | 1.18 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ZBRT• | ZBRV1 |  |  |  |  |

Recommended replacement(s)

