## Product data sheet <br> Characteristics

## ZB5AG2

## Harmony XB5, Key switch selector head, plastic, black, $\varnothing 22$, key $\mathrm{n}^{\circ} 455$, 2 positions, stay put à corriger

$\qquad$


Main

| Range of Product | Harmony XB5 <br> Harmony XALF |
| :--- | :--- |
| Product or Component <br> Type | Head for key selector switch |
| Device short name | ZB5 |
| Bezel material | Dark grey plastic |
| Mounting diameter | 0.87 in (22 mm) |
| Head type | Standard |
| Sale per indivisible <br> quantity | 1 |
| Shape of signaling unit <br> head | Round |
| Type of operator | Stay put |
| Operator profile | Black key switch |
| Operator position <br> information | 2 positions $90^{\circ}$ |
| Type of Keylock | Ronis 455 |
| Key withdrawal position | Left |


| Complementary |  |
| :---: | :---: |
| CAD overall width | 1.14 in (29 mm) |
| CAD overall height | 1.14 in (29 mm) |
| CAD overall depth | 2.83 in (72 mm) |
| Net Weight | $0.13 \mathrm{lb}(\mathrm{US})(0.057 \mathrm{~kg})$ |
| Mechanical durability | 1000000 cycles |
| Station name | XALD 1... 5 cut-outs XALK 2... 5 cut-outs |
| Electrical composition code | C4 6 single and double front mounting C5 5 single front mounting C6 5 single and double front mounting C7 4 single front mounting C8 4 single and double front mounting C11 3 single front mounting C3 6 single front mounting SF1 3 single front mounting SR1 3 single rear mounting C15 1 single front mounting |
| Device presentation | Basic element |
| Environment |  |
| Protective treatment | TH |
| Ambient Air Temperature for Storage | $-40 . . .158^{\circ} \mathrm{F}\left(-40 . . .70^{\circ} \mathrm{C}\right)$ |
| Ambient air temperature for operation | $-40 \ldots 158{ }^{\circ} \mathrm{F}\left(-40 \ldots . .70^{\circ} \mathrm{C}\right)$ |
| Overvoltage category | Class II IEC 60536 |
| IP degree of protection | $\begin{aligned} & \text { IP66 IEC } 60529 \\ & \text { IP67 } \\ & \text { IP69 } \\ & \text { IP69K } \end{aligned}$ |
| NEMA degree of protection | NEMA 13 NEMA 4X |


| Resistance to high pressure washer | $1015.26 \mathrm{psi}(7000000 \mathrm{~Pa}) 131^{\circ} \mathrm{F}\left(55{ }^{\circ} \mathrm{C}\right) 0.1 \mathrm{~m}$ |
| :--- | :--- |
| IK degree of protection | IK06 IEC 50102 |
| Standards | UL 508 |
|  | EN/IEC $60947-5-1$ |
|  | EN/IEC $60947-1$ |
|  | CSA C22.2 No 14 |
|  | JIS C8201-5-1 |
|  | EN/IEC 60947-5-4 |
|  | JIS C8201-1 |
| Product Certifications | CSA |
|  | BV |
|  | UL Listed |
|  | DNV |
|  | GL |
|  | LROS (Lloyds register of shipping $)$ |
| Vibration resistance | 5 gn $2 \ldots . .500$ Hz)IEC 60068-2-6 |
| Shock resistance | 30 gn 18 ms$)$ half sine wave acceleration IEC 60068-2-27 |
|  | $50 \mathrm{gn} 11 \mathrm{~ms})$ half sine wave acceleration IEC 60068-2-27 |

Ordering and shipping details

| Category | $22467-$ PUSHBUTTONS,22MM(PLASTIC) NEW |
| :--- | :--- |
| Discount Schedule | CS2 |
| GTIN | 3389110905809 |
| Nbr. of units in pkg. | 1 |
| Package weight(Lbs) | 2.36 oz $(67 \mathrm{~g})$ |
| Returnability | Yes |
| Country of origin | FR |

Packing Units

| Unit Type of Package 1 | PCE |
| :--- | :--- |
| Package 1 Height | 3.46 in $(8.8 \mathrm{~cm})$ |
| Package 1 width | 2.05 in $(5.2 \mathrm{~cm})$ |
| Package 1 Length | 1.30 in $(3.3 \mathrm{~cm})$ |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 5 |
| Package 2 Weight | $11.75 \mathrm{oz}(333 \mathrm{~g})$ |
| Package 2 Height | 3.46 in $(8.8 \mathrm{~cm})$ |
| Package 2 width | $2.05 \mathrm{in}(5.2 \mathrm{~cm})$ |
| Package 2 Length | $10.43 \mathrm{in}(26.5 \mathrm{~cm})$ |
| Unit Type of Package 3 | S 03 |
| Number of Units in Package 3 | 150 |
| Package 3 Weight | $23.12 \mathrm{lb}(\mathrm{US})(10.486 \mathrm{~kg})$ |
| Package 3 Height | $11.81 \mathrm{in}(30 \mathrm{~cm})$ |
| Package 3 width | $11.81 \mathrm{in}(30 \mathrm{~cm})$ |
| Package 3 Length | $15.75 \mathrm{in}(40 \mathrm{~cm})$ |

Offer Sustainability

| Sustainable offer status | Green Premium product |
| :--- | :--- |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and <br> lead compounds, which is known to the State of California to cause cancer <br> and birth defects or other reproductive harm. For more information go to <br> www.P65Warnings.ca.gov |
| REACh Regulation | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS <br> Declaration |
| EU RoHS Directive | Yes |
| Mercury free | ReACh Declaration |
| RoHS exemption information | Resina RoHS Declaration |
| China RoHS Regulation |  |

Contractual warranty
Warranty 18 months


## Product data sheet

## ZB5AG2

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 $\left(\varnothing 22.3_{0}{ }^{+0.4}\right) / \varnothing 0.89 \mathrm{in}$. recommended $\left(\varnothing 0.88 \mathrm{in} .0^{+0.016}\right)$

| 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 | 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 $\left(\varnothing 22.3_{0}{ }^{+0.4}\right) / \varnothing 0.89 \mathrm{in}$. recommended $\left(\varnothing 0.88 \mathrm{in} .0^{+0.016}\right)$

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 ZB5AZ009: $\pm 2^{\circ} 30^{\prime}$ (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 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 (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked $a$ and $b$ 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 ZBZO1•
- $38 \times \varnothing 1.2 \mathrm{~mm} / 0.05 \mathrm{in}$. 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 $\varnothing 2.4$ 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• .

## Single contact

## Double contact

## Light block

## Possible location



Sequence of Contacts Fitted to 2-position Selector Switch Body

Position $315^{\circ}$
$315^{\circ}$

| Push | Position | Top |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Bottom | $\triangle$ | $\triangle$ |  |  |  |
| Location | Left | Centre | Right |  |  |
| State | 0 | 0 | 0 |  |  |
| Contacts | N/O |  | open | open | open |
| N/C | closed | closed | closed |  |  |

Position $45^{\circ}$



