## Product datasheet ZB5AA9 <br> Characteristics



Main

| Range of product | Harmony XB5 |
| :--- | :--- |
| Product or component type | Head for non-illuminated push-button |
| Device short name | ZB5 |
| Bezel material | Dark grey plastic |
| Mounting diameter | 0.87 in (22 mm $)$ |
| Head type | Standard |
| Sale per indivisible quantity | 1 |
| Shape of signaling unit head | Round |
| Type of operator | Spring return |
| Operator profile | 6 colors choice flush unmarked |
| Operator additional information | With set of 6 color cap |


| Complementary |  |
| :--- | :--- |
| CAD overall width | 1.14 in $(29 \mathrm{~mm})$ |
| CAD overall height | 1.14 in $(29 \mathrm{~mm})$ |
| CAD overall depth | 1.1 in $(28 \mathrm{~mm})$ |
| Product weight | $0.06 \mathrm{Ib}(\mathrm{US})(0.027 \mathrm{~kg})$ |
| Mechanical durability | 10000000 cycles |
| Station name | XALD $1 \ldots 5$ cut-outs |
|  | XALK 2...5 cut-outs |
| Electrical composition code | C15 1 contacts using single blocks in front mounting |
|  | C15 1 contacts susing single blocks in front mounting |
|  | C11 for 3 contacts using single blocks in front mounting |
|  | SF1 for 3 contacts using single blocks in front mounting |
|  | C1 for 9 contacts using single blocks in front mounting |
| C2 for 9 contacts using single and double blocks in front mounting |  |
| SR1 for 3 contacts using single blocks in rear mounting |  |

## Environment

| protective treatment | TH |
| :--- | :--- |
| ambient air temperature for storage | $-40 \ldots . .158{ }^{\circ} \mathrm{F}\left(-40 \ldots . .70^{\circ} \mathrm{C}\right)$ |
| ambient air temperature for operation | $-40 \ldots . .158{ }^{\circ} \mathrm{F}\left(-40 \ldots . .70^{\circ} \mathrm{C}\right)$ |
| overvoltage category | Class II conforming to IEC 60536 |
| IP degree of protection | IP67 |
|  | IP66 conforming to IEC 60529 |
|  | IP69K |
|  | IP69 |
| NEMA degree of protection | NEMA 13 |
|  | NEMA 4X |
| resistance to high pressure washer | 1015.26 psi $(7000000 \mathrm{~Pa})$ at $131{ }^{\circ}{ }^{\circ} \mathrm{F}\left(55^{\circ} \mathrm{C}\right)$, distance: 0.1 m |
| IK degree of protection | IK03 conforming to IEC 50102 |
| standards | EN/IEC $60947-1$ |
|  | EN/IEC 60947-5-1 |
|  | EN/IEC 60947-5-4 |
|  | JUS C 4520 |
|  | UL 508 |
|  | CSA C22.2 No 14 |
| product certifications | BV |
|  | CSA |
|  | DNV |
|  | GL |
|  | LROS (Lloyds register of shipping $)$ |
|  | RINA |
|  | UL listed |

Offer Sustainability
WARNING: This product can expose you to chemicals WARNING: This product can expose you to chemicals including: including:
Nickel compounds, which is known to the State of $\quad$ Nickel compounds, which is known to the State of California to cause cancer, and
California to cause cancer, and

California to cause cancer, and
Di-isodecyl phthalate (DIDP), which is known to the StateDi-isodecyl phthalate (DIDP), which is known to the State of California to cause birth of California to cause birth defects or other reproductive defects or other reproductive harm.
harm.
For more information go to www.p65warnings.ca.gov For more information go to www.p65warnings.ca.gov

Contractual warranty
Warranty period 18 months

## Dimensions

## mm




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 ( $\varnothing 0.88 \mathrm{in} .0^{+0.016}$ )

| 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

$\stackrel{\mathrm{mm}}{\mathrm{in}}$

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

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

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


A: $\quad 30 \mathrm{~mm}$ min. / 1.18 in . min.
B: $\quad 40 \mathrm{~mm}$ min. / 1.57 in . min.
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)
Dimensions in mm


A: 30 mm min.
B: $\quad 40 \mathrm{~mm}$ min.
Dimensions in in.


A: $\quad 1.18$ in. min.
B: $\quad 1.57 \mathrm{in} . \min$.

## 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 $\mathbf{b}$ ).
। 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 $\mathbf{a}$ and $\mathbf{b}$ are diagonally opposed and must align with those marked 4 and 5 .
$\frac{\mathrm{mm}}{\mathrm{m}}$

(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)

I 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 Code C1



## Electrical Composition Corresponding to Code C2



Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1


## Electrical Composition Corresponding to Code C15


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

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


## Legend

Single contact


Double contact

Light block


Possible location
$?$

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Switch Actuators category:
Click to view products by Schneider manufacturer:
Other Similar products are found below :
LW1B-M0 61-1330.0 61-2607.0/D 680-4000-00 704.411.018I 704.412.0 704.633.1 704.730.1 704.733.0 79452124 84-1221.7 862.8102 G6083 9PA24 120-1867-000 ADC-418G 12MA7 HW1M-L2222 200-.704-00 JS-10008 JS-10083 JS-10118 JS-10133 JS-116 JS-150 JS555 JS-68 JS-6-B JS-91 JS-94 22-211.011 9001KXSDC KRR22NW3XX03 SAPT654133 2PA3 STKLBU STKLWH SW53AA2 302561
3E-10.4 3E-12.0 468-10243-001 51-030.002 51-030.005 JM-13 JS-10120 JS-138-B JS-143-B JS-49 JS-551

