

Product data sheet

Specifications



Selector switch head, Harmony XB5, plastic, black, 22mm, 2 positions, stay put

ZB5AD2

Main

| | |
|-------------------------------|-----------------------------|
| Range of product | Harmony XALF Harmony XB5 |
| Product or component type | Head for selector switch |
| Device short name | ZB5 |
| Bezel material | Dark grey plastic |
| Mounting diameter | 22 mm |
| Head type | Standard |
| Sale per indivisible quantity | 1 |
| Shape of signaling unit head | Round |
| Type of operator | stay put |
| Operator profile | Black standard handle |
| Operator position information | 2 positions 90° |

Complementary

| | |
|-----------------------------|--|
| CAD overall width | 29 mm |
| CAD overall height | 29 mm |
| CAD overall depth | 46 mm |
| Product weight | 0.017 kg |
| Mechanical durability | 1000000 cycles |
| Station name | XALD 1...5 cut-outs XALK 2...5 cut-outs |
| Electrical composition code | C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C5 for <5 contacts using single blocks in front mounting C6 for <5 contacts using single and double blocks in front mounting 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 SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting |
| Device presentation | Basic element |

Environment

| | |
|----------------------|----|
| Protective treatment | TH |
|----------------------|----|

| | |
|---------------------------------------|--|
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -40...70 °C |
| Overvoltage category | Class II conforming to IEC 60536 |
| IP degree of protection | IP67 conforming to IEC 60529 IP69 conforming to IEC 60529 IP69K |
| NEMA degree of protection | NEMA 13 NEMA 4X |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m |
| IK degree of protection | IK06 conforming to IEC 50102 |
| Standards | JIS C8201-5-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-1 EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-1 |
| Product certifications | GL CSA BV DNV LROS (Lloyds register of shipping) UL listed |
| 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 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

Packing Units

| | |
|------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 3.700 cm |
| Package 1 Width | 5.400 cm |
| Package 1 Length | 6.000 cm |
| Package 1 Weight | 24.000 g |
| Unit Type of Package 2 | BB1 |
| Number of Units in Package 2 | 5 |
| Package 2 Height | 5.000 cm |
| Package 2 Width | 3.400 cm |
| Package 2 Length | 26.500 cm |
| Package 2 Weight | 121.000 g |
| Unit Type of Package 3 | S03 |
| Number of Units in Package 3 | 200 |
| Package 3 Height | 30.000 cm |
| Package 3 Width | 30.000 cm |
| Package 3 Length | 40.000 cm |
| Package 3 Weight | 5.304 kg |

Offer Sustainability

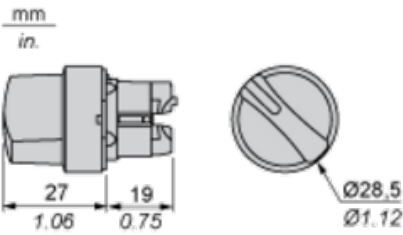
| | |
|--------------------------|-----------------------------------|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |

| | |
|----------------------------|---|
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |

Contractual warranty

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

Dimensions



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) $\varnothing 22.5\text{ mm}$ recommended ($\varnothing 22.3\text{ }_0^{+0.4}$) / $\varnothing 0.89\text{ in.}$ recommended ($\varnothing 0.88\text{ in. }_0^{+0.016}$)

| 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 |

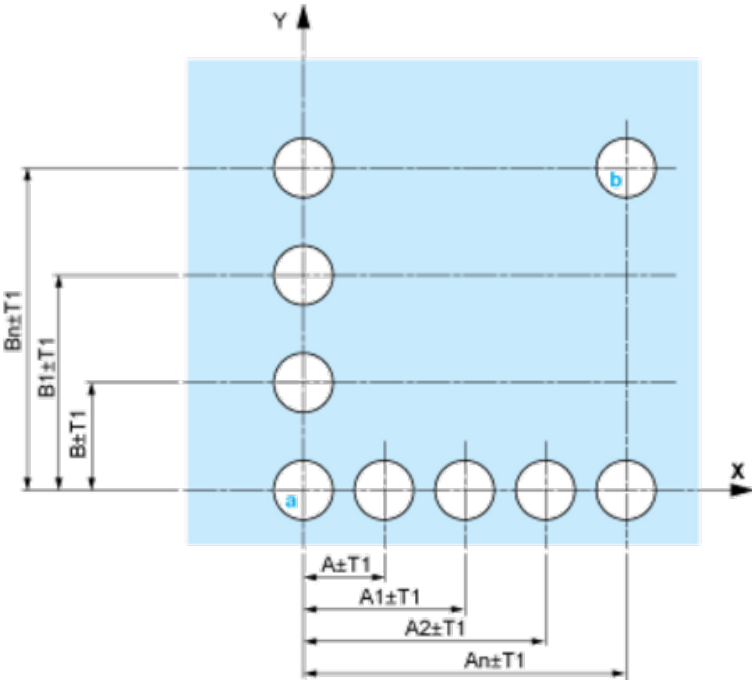
Detail of Lug Recess



- (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) $\varnothing 22.5\text{ mm}$ recommended ($\varnothing 22.3\text{ }_0^{+0.4}$) / $\varnothing 0.89\text{ in.}$ recommended ($\varnothing 0.88\text{ in. }_0^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

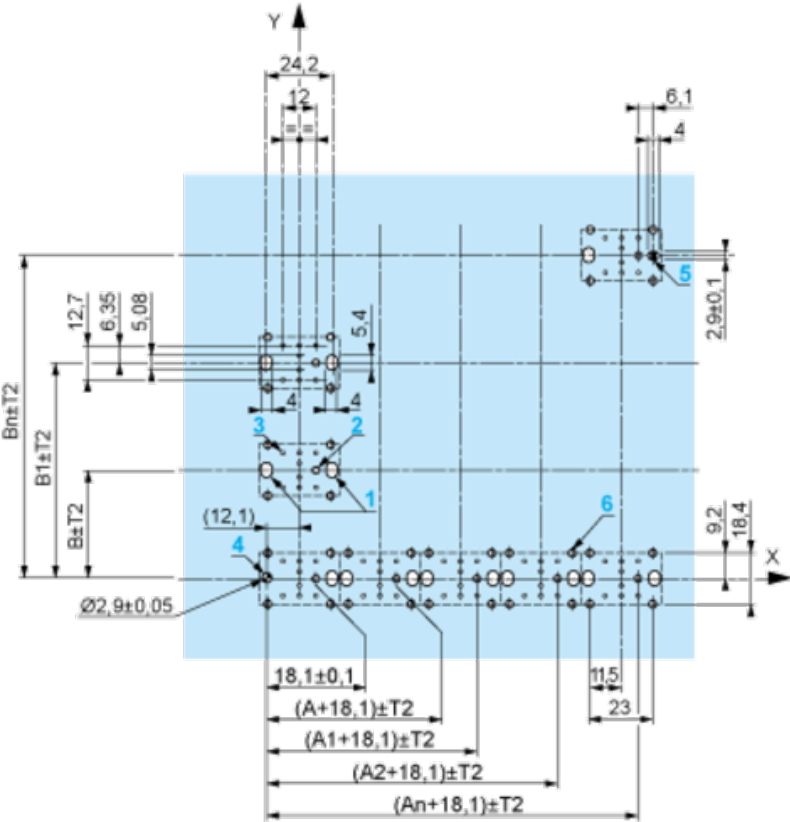
Panel Cut-outs (Viewed from Installer's Side)



- 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



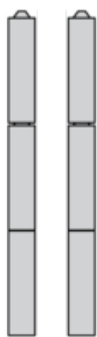
- A: 30 mm min.
 - B: 40 mm min.
- Dimensions in in.

Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 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 Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

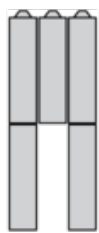
Electrical Composition Corresponding to Code C3



Electrical Composition Corresponding to Code C4



Electrical Composition Corresponding to Code C5



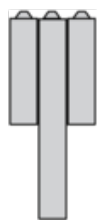
Electrical Composition Corresponding to Code C6



Electrical Composition Corresponding to Code C7



Electrical Composition Corresponding to Code C8

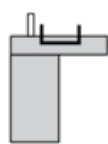


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

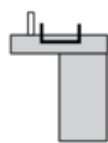


Electrical Composition Corresponding to Code C15

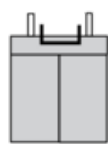
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



Legend

Single contact



Double contact



Light block







Possible location



Sequence of Contacts Fitted to 2-position Selector Switch Body


Position 315°



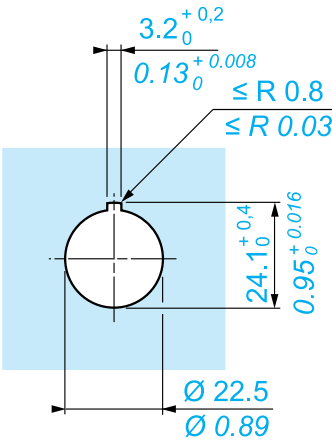
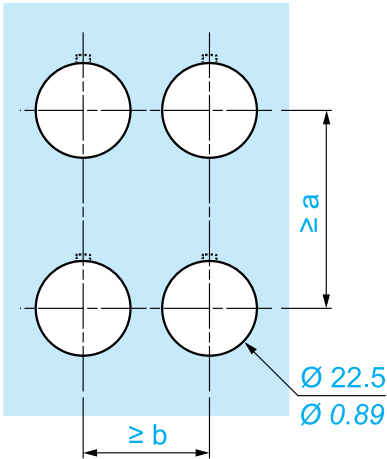
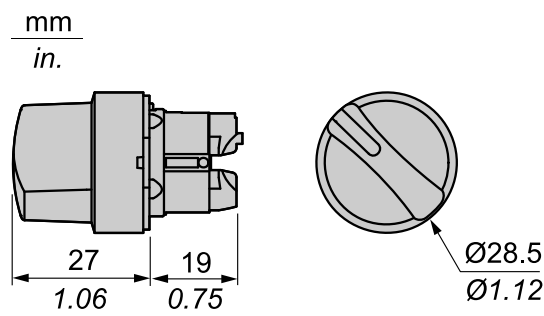
| | | | | | |
|----------|----------|--------|--|---|---|
| Push | Position | Top |  | | |
| | | Bottom |  |  |  |
| | Location | | Left | Centre | Right |
| | State | | 0 | 0 | 0 |
| Contacts | N/O | | open | open | open |
| | N/C | | closed | closed | closed |


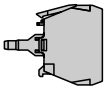

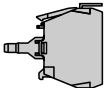

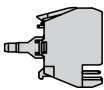

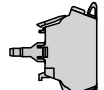

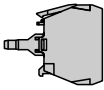

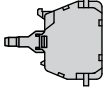
Position 45°



| | | | | | |
|----------|----------|--------|---|--------|--------|
| Push | Position | Top | | | |
| | | Bottom |  | | |
| | Location | | Left | Centre | Right |
| | State | | 1 | 1 | 1 |
| Contacts | N/O | | closed | closed | closed |
| | N/C | | open | open | open |

Dimensions



| | | a (mm) | a (in.) | b (mm) | b (in.) |
|---|---|--------|---------|--------|---------|
|  |  | 40 | 1.57 | 30 | 1.18 |
| ZBE●●●●● | ZBV●●●●● | | | | |
|  |  | 45 | 1.77 | 32 | 1.26 |
| ZBE●●●●●3 | ZBV●●●●●3 | | | | |
|  |  | 40 | 1.57 | 30 | 1.18 |
| ZBE●●●●●4 | ZBV●●●●●4 | | | | |
|  |  | 50 | 1.97 | 30 | 1.18 |
| ZBE●●●●●5 | ZBV●●●●●5 | | | | |
|  |  | 40 | 1.57 | 30 | 1.18 |
| ZBE●●●●●9 | ZBV●●●●●9 | | | | |
|  |  | 40 | 1.57 | 30 | 1.18 |
| ZBRT● | ZBRV1 | | | | |

Recommended replacement(s)