

Head for illuminated selector switch, Harmony XB5, universal LED, blue handle, 22mm, 3 positions, spring return

ZB5AK1563

Important message: A change in appearance may be noted on the product but does not affect its use in terms of function and safety. This makes it compatible with our Universal LED blocks

#### Main

| Range Of Product              | Harmony XB5                          |  |  |  |
|-------------------------------|--------------------------------------|--|--|--|
| Product Or Component Type     | Head for illuminated selector switch |  |  |  |
| Product Compatibility         | Universal LED                        |  |  |  |
| 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              | To centre spring return              |  |  |  |
| Operator Profile              | Blue standard handle                 |  |  |  |
| Operator Position Information | 3 positions +/- 45°                  |  |  |  |

## Complementary

| Cad Overall Width           | 29 mm  |
|-----------------------------|--|
| Cad Overall Height          | 29 mm  |
| Cad Overall Depth           | 43 mm  |
| Net Weight                  | 0.016 kg   |
| Mechanical Durability       | 500000 cycles  |
| Station Name                | XALD 15 cut-outs<br>XALK 25 cut-outs   |
| Electrical Composition Code | M3 for <4 contacts using single blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer M10 for <2 contacts using single blocks in front mounting with integral LED MF1 for <2 contacts using single blocks in front mounting with integral LED MR1 for <2 contacts using single blocks in rear mounting with integral LED M4 for <4 contacts using single and double blocks in front mounting with integral LED |
| Device Presentation         | Basic element  |

#### **Environment**

| Protective Treatment                | тн       |
|-------------------------------------|----------|
| Ambient Air Temperature For Storage | -4070 °C |

| Ambient Air Temperature For Operation | -4070 °C  |  |  |  |  |  |
|---------------------------------------|---|--|--|--|--|--|
| Overvoltage Category                  | Class II conforming to IEC 60536  |  |  |  |  |  |
| Ip Degree Of Protection               | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K   |  |  |  |  |  |
| Nema Degree Of Protection             | NEMA 13<br>NEMA 4X  |  |  |  |  |  |
| Resistance To High Pressure<br>Washer | 7000000 Pa at 55 °C, distance : 0.1 m   |  |  |  |  |  |
| Ik Degree Of Protection               | IK04 conforming to IEC 50102  |  |  |  |  |  |
| Standards                             | EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-5-1 CSA C22.2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-5 UL 508 JIS C8201-1  |  |  |  |  |  |
| Product Certifications                | UL listed LROS (Lloyds register of shipping) DNV BV GL CSA  |  |  |  |  |  |
| Vibration Resistance                  | 5 gn (f= 2500 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**

| PCE       |
|-----------|
| 1         |
| 3.500 cm  |
| 4.500 cm  |
| 5.000 cm  |
| 23.000 g  |
| S02       |
| 50        |
| 15.000 cm |
| 30.000 cm |
| 40.000 cm |
| 1.394 kg  |
| P06       |
| 800       |
| 75.000 cm |
| 80.000 cm |
| 60.000 cm |
| 30.304 kg |
|           |

# **Contractual warranty**

Warranty

May 10, 2024

18 months

# Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



RoHS/REACh

# Well-being performance

| <b>②</b> | Reach Free Of Svhc         |     |
|----------|----------------------------|-----|
| <b>⊘</b> | Toxic Heavy Metal Free     |     |
| <b>⊘</b> | Mercury Free               |     |
| <b>⊘</b> | Rohs Exemption Information | Yes |

#### **Certifications & Standards**

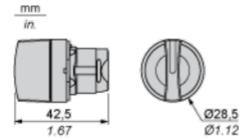
| Reach Regulation          | REACh Declaration   |  |  |  |  |
|---------------------------|---|--|--|--|--|
| Eu Rohs Directive         | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration  |  |  |  |  |
| China Rohs Regulation     | China RoHS declaration  |  |  |  |  |
| 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 |  |  |  |  |

# **Product data sheet**

# **ZB5AK1563**

**Dimensions Drawings** 

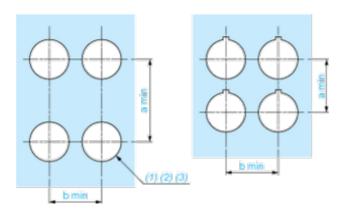
## **Dimensions**



#### Mounting and Clearance

Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for

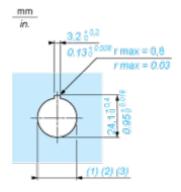
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) Ø22.5 mm recommended (Ø22.3  $_0^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 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     |

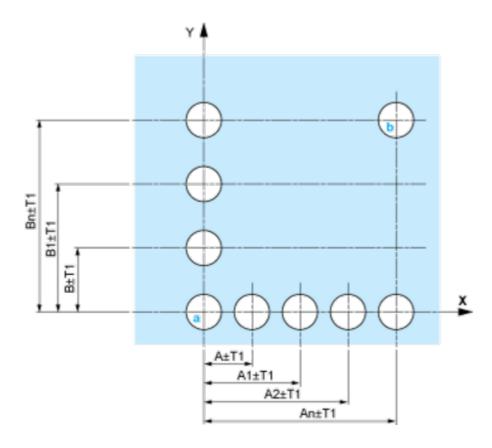
#### **Detail of Lug Recess**



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

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

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

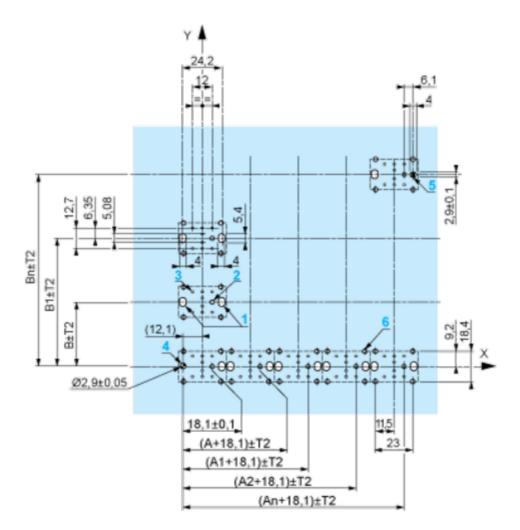


**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

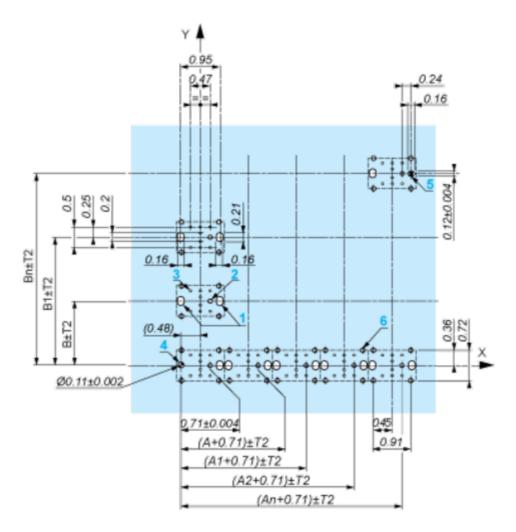
Dimensions in mm

## **ZB5AK1563**



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

#### **ZB5AK1563**



**A:** 1.18 in. min. **B:** 1.57 in. min.

#### General Tolerances of the Panel and Printed Circuit Board

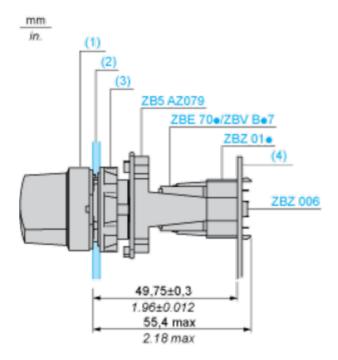
The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 mm max.

#### **Installation Precautions**

- $_{\bullet}$  Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm ± 0.1 / 0.88 in. ± 0.004
- Orientation of body/fixing collar ZB5AZ009: ± 2 30' (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:
  - $_{\circ}~$  every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - o with each selector switch head (ZB5AD•, ZB5AJ•, ZB5AG•).

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

#### **ZB5AK1563**



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

#### 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•

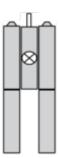
Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.

# **Product data sheet**

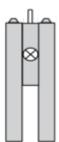
# **ZB5AK1563**

**Technical Description** 

**Electrical Composition Corresponding to Code M3** 



## **Electrical Composition Corresponding to Code M4**



## **Electrical Composition Corresponding to Codes M6 and P2**



## Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2



## Legend

Single contact



Double contact



Light block



Possible location



## Sequence of Contacts Fitted to 3-position Selector Switch Body

#### Position 315°



|          | Position | Тор    |        |           |             |
|----------|----------|--------|--------|-----------|-------------|
| Push     |          | Bottom |        | $\otimes$ | $\triangle$ |
|          | Location |        | Left   |           | Right       |
|          | State    |        | 1      |           | 0           |
| Contacts | N/O      |        | closed |           | open        |
|          | N/C      |        | open   |           | closed      |

#### Position 0°



|          | Position | Тор    |             |        |
|----------|----------|--------|-------------|--------|
| Push     | T Gitton | Bottom | $\triangle$ |        |
|          | Location | •      | Left        | Right  |
|          | State    |        | 0           | 0      |
| Contacts | N/O      |        | open        | open   |
|          | N/C      |        | closed      | closed |

Position 45°



| Push     | Position | Тор    |             |  |        |
|----------|----------|--------|-------------|--|--------|
|          |          | Bottom | $\triangle$ |  |        |
|          | Location |        | Left        |  | Right  |
|          | State    |        | 0           |  | 1      |
| Contacts | N/O      |        | open        |  | closed |
|          | N/C      |        | closed      |  | open   |

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