

# Product data sheet

Specifications



Head for emergency switching off push button, Harmony XB4, red 40mm stop, 22mm trigger and latching key release, key 421E

ZB4BS94412

## Main

|                               |                                              |
|-------------------------------|----------------------------------------------|
| Range of product              | Harmony XB4                                  |
| Product or component type     | Head for emergency switching off push-button |
| Device short name             | ZB4                                          |
| Bezel material                | Chromium plated metal                        |
| Mounting diameter             | 22.5 mm                                      |
| Sale per indivisible quantity | 1                                            |
| Shape of signaling unit head  | Round                                        |
| Type of operator              | trigger action and mechanical latching       |
| Reset                         | Key release                                  |
| Operator profile              | Red mushroom Ø 40 mm, unmarked               |
| Type of keylock               | Key 421E                                     |
| Key withdrawal position       | Center                                       |
| Head type                     | Standard                                     |
| Cap/operator or lens colour   | Red                                          |

## Complementary

|                                    |                                                                                                                                                                                                                                                                                                                                   |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAD overall width                  | 40 mm                                                                                                                                                                                                                                                                                                                             |
| CAD overall height                 | 40 mm                                                                                                                                                                                                                                                                                                                             |
| CAD overall depth                  | 79 mm                                                                                                                                                                                                                                                                                                                             |
| Product weight                     | 0.098 kg                                                                                                                                                                                                                                                                                                                          |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m                                                                                                                                                                                                                                                                                             |
| Mechanical durability              | 300000 cycles                                                                                                                                                                                                                                                                                                                     |
| Electrical composition code        | C7 for <4 contacts using single blocks in front mounting<br>C8 for <4 contacts using single and double blocks in front mounting<br>C11 for <3 contacts using single blocks in front mounting<br>C15 for <1 contacts using single blocks in front mounting<br>C10 for <4 contacts using single and double blocks in front 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 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                   |                                                                                                                                                                                         |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical shock protection class | Class I conforming to IEC 61140                                                                                                                                                         |
| IP degree of protection           | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K                                                                                                                                   |
| Enclosure Type                    | UL type 4X/13                                                                                                                                                                           |
| IK degree of protection           | IK03 conforming to IEC 50102                                                                                                                                                            |
| Standards                         | IEC 60947-5-1<br>GB 14048.5<br>ISO 13850<br>IEC 60947-5-5<br>IEC 60364-5-53<br>IEC 60947-5-4<br>IEC 60947-1<br>UL 508<br>IEC 60204-1<br>CSA C22.2 No 14<br>JIS C8201-5-1<br>JIS C8201-1 |
| Product certifications            | DNV<br>UL listed<br>LROS (Lloyds register of shipping)<br>BV<br>CSA                                                                                                                     |
| 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<br>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             | 4.400 cm  |
| Package 1 Width              | 5.300 cm  |
| Package 1 Length             | 9.000 cm  |
| Package 1 Weight             | 102.000 g |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

|  Environmental footprint |              |
|-----------------------------------------------------------------------------------------------------------|--------------|
| Total lifecycle Carbon footprint                                                                          | 1 kg CO2 eq. |
| Carbon footprint of the manufacturing phase [A1 to A3]                                                    | 1 kg CO2 eq. |
| Carbon footprint of the distribution phase [A4]                                                           | 0 kg CO2 eq. |
| Carbon footprint of the installation phase [A5]                                                           | 0 kg CO2 eq. |
| Carbon footprint of the use phase [B2, B3, B4, B6]                                                        | 0 kg CO2 eq. |
| Carbon footprint of the end-of-life phase [C1 to C4]                                                      | 0 kg CO2 eq. |

Use Better

|  Materials and Substances |                                                                                                                                                                                                                                                                                             |
|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Average percentage of recycled plastic content                                                             | 12 %                                                                                                                                                                                                                                                                                        |
| Average percentage of recycled metal content                                                               | 23 %                                                                                                                                                                                                                                                                                        |
| Packaging made with recycled cardboard                                                                     | No                                                                                                                                                                                                                                                                                          |
| Packaging without single use plastic                                                                       | No                                                                                                                                                                                                                                                                                          |
| SCIP Number                                                                                                | F28cb399-1b6a-409d-ac7b-4169e47b25c8                                                                                                                                                                                                                                                        |
| EU RoHS Directive                                                                                          | <a href="#">Compliant By Exemption</a>                                                                                                                                                                                                                                                      |
| REACH Regulation                                                                                           | <a href="#">Reference contains Substances of Very High Concern above the threshold</a>                                                                                                                                                                                                      |
| California proposition 65                                                                                  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

Use Longer

|  Lifetime extension |    |
|--------------------------------------------------------------------------------------------------------|----|
| Repair                                                                                                 | No |

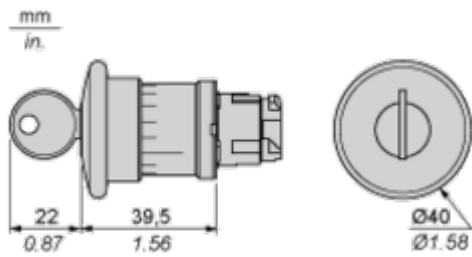
Use Again

|  Repack and remanufacture |                                         |
|--------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| End of life manual availability                                                                              | <a href="#">End of Life Information</a> |
| Take-back                                                                                                    | No                                      |

Dimensions Drawings

Dimensions

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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                                                                                                                                                                                                                                               | Connection by Faston Connectors                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                    |  |
| <p>(1) Diameter on finished panel or support</p> <p>(2) 40 mm min. / 1.57 in. min.</p> <p>(3) 30 mm min. / 1.18 in. min.</p> <p>(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm<sub>0</sub><sup>+0.4</sup> / 0.88 in.<sub>0</sub><sup>+0.016</sup>)</p> <p>(5) 45 mm min. / 1.78 in. min.</p> <p>(6) 32 mm min. / 1.26 in. min.</p> |                                                                                    |

## 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.



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:  $T1 + T2 = 0.3 \text{ mm max.}$

Installation Precautions

- Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- Cut-out diameter: 22.4 mm  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^\circ 30'$  (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - with each selector switch head (ZB4 BD\*, ZB4 BJ\*, ZB4 BG\*).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



(1) Panel

(2) Printed circuit board

#### Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  for centring adapter ZBZ 01•
- 3 8 ×  $\varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$  holes
- 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$ , 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  $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$  for clipping in adapter ZBZ 01•

Dimensions An + 18.1 relate to the  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  holes for centring adapter ZBZ 01•.

Technical Description

Electrical Composition Corresponding to Code C7

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Electrical Compositions Corresponding to Code C8

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Electrical Compositions Corresponding to Code C10

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



Electrical Composition Corresponding to Code C15

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1 N/O



1 N/C



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



Legend

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Single contact



Double contact



Light block



Possible location



Technical Illustration

Dimensions

