

# Product datasheet

Specifications



## Head for key selector switch, Harmony XB4, with 3131 A

Local distributor code:

409064524

ZB4BG0820

⚠ Discontinued on: 9 Feb 2023

EAN Code: 3389110121087

⚠ Discontinued

## Main

|                               |                              |
|-------------------------------|------------------------------|
| Range of product              | Harmony XB4                  |
| Product or component type     | Head for key selector switch |
| Device short name             | ZB4                          |
| Bezel material                | Chromium plated metal        |
| Mounting diameter             | 22 mm                        |
| Head type                     | Standard                     |
| Sale per indivisible quantity | 1                            |
| Shape of signaling unit head  | Round                        |
| Return                        | Right to centre              |
| Operator profile              | Black key switch             |
| Type of operator              | Spring return                |
| Operator position information | 3 positions +/- 45°          |
| Type of keylock               | Key 3131A                    |
| Key withdrawal position       | Left                         |

## Complementary

|                                    |  |
|------------------------------------|--|
| CAD overall width                  | 29 mm  |
| CAD overall height                 | 29 mm  |
| CAD overall depth                  | 72 mm  |
| Net weight                         | 0.098 kg   |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m  |
| Mechanical durability              | 1000000 cycles   |
| Electrical composition code        | C3 for <6 contacts using single blocks in front mounting<br>C4 for <6 contacts using single and double blocks in front mounting<br>C5 for <5 contacts using single blocks in front mounting<br>C6 for <5 contacts using single and double blocks in front mounting<br>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 |
| Device presentation                | Basic element  |

## Environment

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

|  |  |
|--|--|
| <b>Ambient air temperature for storage</b>   | -40...70 °C  |
| <b>Ambient air temperature for operation</b> | -40...70 °C  |
| <b>Overvoltage category</b>                  | Class I conforming to IEC 60536  |
| <b>IP degree of protection</b>               | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K  |
| <b>NEMA degree of protection</b>             | NEMA 13<br>NEMA 4X   |
| <b>Standards</b>                             | EN/IEC 60947-5-4<br>EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-5<br>UL 508<br>CSA C22.2 No 14<br>GB 14048.5  |
| <b>Product certifications</b>                | BV<br>CSA<br>DNV<br>LROS (Lloyds register of shipping)<br>UL listed  |
| <b>Vibration resistance</b>                  | 5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6   |
| <b>Shock resistance</b>                      | 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

|                                     |           |
|-------------------------------------|-----------|
| <b>Unit Type of Package 1</b>       | PCE       |
| <b>Number of Units in Package 1</b> | 1         |
| <b>Package 1 Height</b>             | 3.400 cm  |
| <b>Package 1 Width</b>              | 5.300 cm  |
| <b>Package 1 Length</b>             | 9.000 cm  |
| <b>Package 1 Weight</b>             | 104.000 g |
| <b>Unit Type of Package 2</b>       | S02       |
| <b>Number of Units in Package 2</b> | 50        |
| <b>Package 2 Height</b>             | 15.000 cm |
| <b>Package 2 Width</b>              | 30.000 cm |
| <b>Package 2 Length</b>             | 40.000 cm |
| <b>Package 2 Weight</b>             | 5.655 kg  |

## Logistical informations

|                          |    |
|--------------------------|----|
| <b>Country of origin</b> | FR |
|--------------------------|----|

## Contractual warranty

|                             |    |
|-----------------------------|----|
| <b>Warranty (in months)</b> | 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

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard No

Packaging without single use plastic No

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number F28cb399-1b6a-409d-ac7b-4169e47b25c8

REACH Regulation [REACH Declaration](#)

## Use Again

### Repack and remanufacture

End of life manual availability [End of Life Information](#)

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<br/>                 (2) 40 mm min. / 1.57 in. min.<br/>                 (3) 30 mm min. / 1.18 in. min.<br/>                 (4) <math>\varnothing 22.5 \text{ mm} / 0.89 \text{ in. recommended } (\varnothing 22.3 \text{ mm }_0^{+0.4} / 0.88 \text{ in. }_0^{+0.016})</math><br/>                 (5) 45 mm min. / 1.78 in. min.<br/>                 (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)

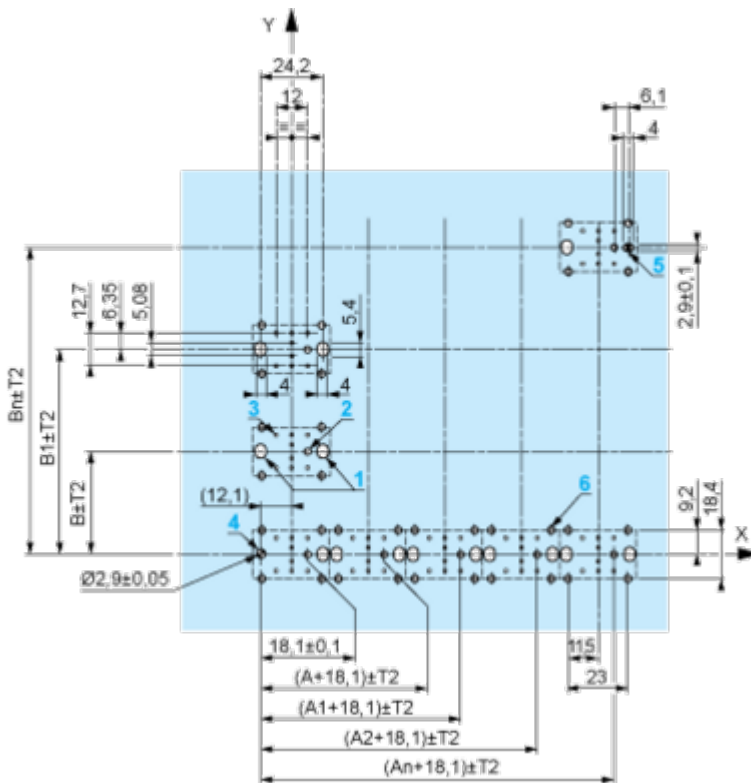


A: 30 mm min. / 1.18 in. min.

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 mm max.

**Installation Precautions**

- 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 ZB4 BZ009: ± 2° 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 Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 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 ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ 01•.

Technical Description

Electrical Composition Corresponding to Code C3

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Electrical Composition Corresponding to Code C4

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Electrical Composition Corresponding to Code C5

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Electrical Composition Corresponding to Code C6

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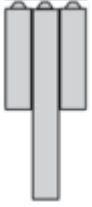
Electrical Composition Corresponding to Code C7

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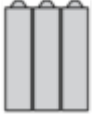


Electrical Composition Corresponding to Code C8

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



**Legend**

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Single contact



Double contact



Light block



Possible location



Sequence of Contacts Fitted to 3-position Selector Switch Body

Position 315°



|          |          |        |        |        |  |
|----------|----------|--------|--------|--------|--|
| Push     | Position | Top    |        |        |  |
|          |          | Bottom |        |        |  |
|          | Location | Left   | Centre | Right  |  |
|          | State    | 1      | 1      | 0      |  |
| Contacts | N/O      | closed | closed | open   |  |
|          | N/C      | open   | open   | closed |  |

Position 0°



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

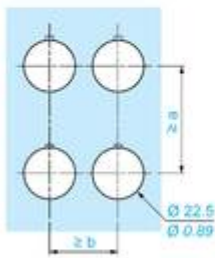
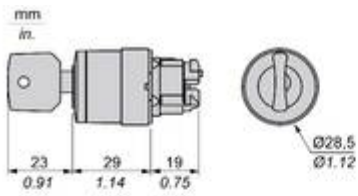
Position 45°



|                 |          |        |        |        |        |
|-----------------|----------|--------|--------|--------|--------|
| <b>Push</b>     | Position | Top    |        |        |        |
|                 |          | Bottom |        |        |        |
|                 | Location |        | Left   | Centre | Right  |
|                 | State    |        | 0      | 1      | 1      |
| <b>Contacts</b> | N/O      |        | open   | closed | closed |
|                 | N/C      |        | closed | open   | open   |

Technical Illustration

Dimensions



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