

## Product data sheet

### Characteristics

## ZB4BK1513

white illuminated selector switch head Ø22 3-position spring return



### Main

|                               |                                      |
|-------------------------------|--------------------------------------|
| Range of product              | Harmony XB4                          |
| Product or component type     | Head for illuminated selector switch |
| Product compatibility         | Integral LED                         |
| Device short name             | ZB4                                  |
| Bezel material                | Chromium plated metal                |
| Head type                     | Standard                             |
| Mounting diameter             | 22 mm                                |
| Sale per indivisible quantity | 1                                    |
| Shape of signaling unit head  | Round                                |
| Type of operator              | To centre spring return              |
| Operator profile              | White 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                         | 0.036 kg                                                                                                                                                                                                                                                                                                                                         |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m                                                                                                                                                                                                                                                                                                            |
| Mechanical durability              | 500000 cycles                                                                                                                                                                                                                                                                                                                                    |
| Electrical composition code        | M3 for <4 contacts using single blocks in front mounting with integral LED<br>M6 for <2 contacts using single blocks in front mounting with integral LED and transformer<br>M10 for <2 contacts using single blocks in front mounting with integral LED<br>M4 for <4 contacts using single and double blocks in front mounting with integral LED |
| 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 I 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                                    |
| IK degree of protection               | IK06 conforming to IEC 50102                          |

|                        |                                                                                                                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards              | JIS C8201-5-1<br>UL 508<br>EN/IEC 60947-5-1<br>EN/IEC 60947-1<br>EN/IEC 60947-5-5<br>EN/IEC 60947-5-4<br>CSA C22.2 No 14<br>JIS C8201-1                                        |
| Product certifications | UL listed<br>LROS (Lloyds register of shipping)<br>BV<br>DNV<br>GL<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 Weight             | 41 g     |
| Package 1 Height             | 4.8 cm   |
| Package 1 width              | 5.2 cm   |
| Package 1 Length             | 3.3 cm   |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 100      |
| Package 2 Weight             | 4.438 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Unit Type of Package 3       | BB1      |
| Number of Units in Package 3 | 5        |
| Package 3 Weight             | 206 g    |
| Package 3 Height             | 4.8 cm   |
| Package 3 width              | 26.5 cm  |
| Package 3 Length             | 3.3 cm   |

## Offer Sustainability

|                            |                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                          |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                              |
| REACH free of SVHC         | Yes                                                                                            |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                            |
| Mercury free               | Yes                                                                                            |
| RoHS exemption information | <a href="#">Yes</a>                                                                            |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                         |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                  |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                        |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 12 months |
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Dimensions

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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 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
|                                                                                                                                                                                                                                                                                                                             |                                 |
| (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) $\varnothing 22.5 \text{ mm} / 0.89 \text{ in. recommended } (\varnothing 22.3 \text{ mm}_0^{+0.4} / 0.88 \text{ in.}_0^{+0.016})$<br>(5) 45 mm min. / 1.78 in. min.<br>(6) 32 mm min. / 1.26 in. min. |                                 |

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





(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•.

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Electrical Composition Corresponding to Code M3

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Electrical Composition Corresponding to Code M4

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Electrical Composition Corresponding to Codes M6 and P2

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

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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 | Right  |      |  |
| State    |          | 1    | 0      |      |  |
| Contacts | N/O      |      | closed | open |  |
| N/C      |          | open | closed |      |  |

Position 0°



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

Position 45°



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