Product data sheet

Specifications

black projecting pushbutton head
Ø22 spring return "OFF"

ZB4BL235

Discontinued on: 01 July 2020

Main

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of Product</td>
<td>Harmony XB4</td>
</tr>
<tr>
<td>Product or Component Type</td>
<td>Head for non-illuminated push-button</td>
</tr>
<tr>
<td>Device short name</td>
<td>ZB4</td>
</tr>
<tr>
<td>Bezel material</td>
<td>Chromium plated metal</td>
</tr>
<tr>
<td>Mounting diameter</td>
<td>0.87 in (22 mm)</td>
</tr>
<tr>
<td>Sale per indivisible quantity</td>
<td>1</td>
</tr>
<tr>
<td>Shape of signaling unit head</td>
<td>Round</td>
</tr>
<tr>
<td>Type of operator</td>
<td>spring return</td>
</tr>
<tr>
<td>Operator profile</td>
<td>Black projecting, (OFF white)</td>
</tr>
</tbody>
</table>

Complementary

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD overall width</td>
<td>1.14 in (29 mm)</td>
</tr>
<tr>
<td>CAD overall height</td>
<td>1.14 in (29 mm)</td>
</tr>
<tr>
<td>CAD overall depth</td>
<td>1.30 in (33 mm)</td>
</tr>
<tr>
<td>Mechanical durability</td>
<td>10000000 cycles</td>
</tr>
<tr>
<td>Electrical composition code</td>
<td>C1 9 single front mounting</td>
</tr>
<tr>
<td></td>
<td>C2 9 single and double front mounting</td>
</tr>
<tr>
<td></td>
<td>C11 3 single front mounting</td>
</tr>
<tr>
<td></td>
<td>C15 1 single front mounting</td>
</tr>
<tr>
<td>Device presentation</td>
<td>Basic element</td>
</tr>
</tbody>
</table>

Environment

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective treatment</td>
<td>TH</td>
</tr>
<tr>
<td>Ambient Air Temperature for Storage</td>
<td>-40…158 °F (-40…70 °C)</td>
</tr>
<tr>
<td>Ambient air temperature for operation</td>
<td>-40…158 °F (-40…70 °C)</td>
</tr>
<tr>
<td>Overvoltage category</td>
<td>Class I IEC 60536</td>
</tr>
<tr>
<td>IP degree of protection</td>
<td>IP66 IEC 60529</td>
</tr>
<tr>
<td></td>
<td>IP67</td>
</tr>
<tr>
<td></td>
<td>IP69</td>
</tr>
<tr>
<td></td>
<td>IP69K</td>
</tr>
<tr>
<td>NEMA degree of protection</td>
<td>NEMA 13</td>
</tr>
</tbody>
</table>
NEMA 4X

**IK degree of protection**
IK06 IEC 50102

**Standards**
- JIS C8201-5-1
- EN/IEC 60947-5-1
- CSA C22.2 No 14
- EN/IEC 60947-1
- EN/IEC 60947-5-4
- EN/IEC 60947-5-5
- UL 508
- JIS C8201-1

**Product Certifications**
- BV
- GL
- LROS (Lloyds register of shipping)
- DNV
- CSA
- UL Listed

**Vibration resistance**
5 gn 2…500 Hz IEC 60068-2-6

**Shock resistance**
- 30 gn 18 ms half sine wave acceleration IEC 60068-2-27
- 50 gn 11 ms half sine wave acceleration IEC 60068-2-27

**Ordering and shipping details**

<table>
<thead>
<tr>
<th>Category</th>
<th>22466-PUSHBUTTONS,22MM(METAL) NEW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Schedule</td>
<td>CS2</td>
</tr>
<tr>
<td>GTIN</td>
<td>3389110887907</td>
</tr>
</tbody>
</table>

**Returnability**
No

**Country of origin**
FR

**Contractual warranty**

<table>
<thead>
<tr>
<th>Warranty</th>
<th>18 months</th>
</tr>
</thead>
</table>

Nov 19, 2023
Dimensions

32.5 mm
1.28 in

Ø28.5
Ø1.12
Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

<table>
<thead>
<tr>
<th>Connection by Screw Clamp Terminals or Plug-in Connectors on Printed Circuit Board</th>
<th>Connection by Faston Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
<td><img src="image" alt="Diagram" /></td>
</tr>
</tbody>
</table>

(1) Diameter on finished panel or support
(2) 40 mm min. / 1.57 in. min.
(3) 30 mm min. / 1.18 in. min.
(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm ±0.4 / 0.88 in. ±0.016)
(5) 45 mm min. / 1.78 in. min.
(6) 32 mm min. / 1.26 in. min.
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.
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: $T_1 + T_2 = 0.3$ 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.

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•.
Electrical Composition Corresponding to Code C1
ZB4BL235

Product data sheet

Technical Description

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
Product data sheet

Technical Description

Legend

Single contact

Double contact

Light block

Possible location
ZB4BL235 is replaced by the following product range:

**Harmony XB4/ZB4 Metal Push Buttons**

22 mm XB4/ZB4 metal modular push buttons, selector switches, pilot lights

Products: 1347