

# Product data sheet

Specifications



Head for illuminated push button,  
Harmony XB4, metal, black flush,  
22mm, spring return, white marked  
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ZB4BA245

## Main

Range of product	Harmony XB4
Product or component type	Head for non-illuminated push-button
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22.5 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Black flush, T (white)
Cap/operator or lens colour	Black

## Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	28 mm
Mechanical durability	10000000 cycles
Electrical composition code	C1 for <9 contacts using single blocks in front mounting C2 for <9 contacts using single and double blocks in front mounting C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single 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
Overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K
Enclosure Type	UL type 4X/13
IK degree of protection	IK06 conforming to IEC 50102

<b>Standards</b>	JIS C8201-5-1 IEC 60947-5-5 UL 508 CSA C22.2 No 14 IEC 60947-5-1 IEC 60947-1 IEC 60947-5-4 JIS C8201-1
<b>Product certifications</b>	BV CSA DNV LROS (Lloyds register of shipping) 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 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>	3.500 cm
<b>Package 1 Width</b>	4.600 cm
<b>Package 1 Length</b>	5.400 cm
<b>Package 1 Weight</b>	26.000 g
<b>Unit Type of Package 2</b>	S01
<b>Number of Units in Package 2</b>	50
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	15.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	1.675 kg

## Contractual warranty

<b>Warranty (in months)</b>	18
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## 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	0.3 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	0.2 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	14 %
Average percentage of recycled metal content	21 %
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	<a href="#">Compliant</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
California proposition 65	<b>WARNING:</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



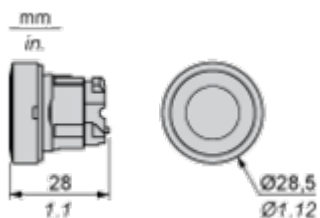
### Repack and remanufacture

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                  (2) 40 mm min. / 1.57 in. min.                  (3) 30 mm min. / 1.18 in. min.                  (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>                  (5) 45 mm min. / 1.78 in. min.                  (6) 32 mm min. / 1.26 in. min.</p>	





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  $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$  for centring adapter ZBZ 01
- 3  $8 \times \varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$  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 C1

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Electrical Composition Corresponding to Code C2

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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

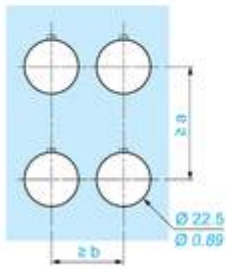
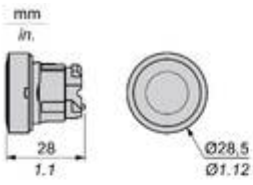


Possible location



Technical Illustration

Dimensions



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