

Product datasheet

Specifications



black Ø60 mushroom pushbutton
head Ø22 spring return

ZB4BR216

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 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Hemispherical
Type of operator	spring return
Operator profile	Black mushroom Ø 60 mm, unmarked
Cap/operator or lens colour	Black

Complementary

CAD overall width	60 mm
CAD overall height	60 mm
CAD overall depth	45 mm
Mechanical durability	5000000 cycles
Electrical composition code	C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting C3 for <6 contacts using single blocks in front mounting C4 for <6 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
Overvoltage category	Class I conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK03 conforming to IEC 50102

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

Standards	EN/IEC 60947-5-4 CSA C22.2 No 14 JIS C8201-5-1 EN/IEC 60947-5-1 UL 508 EN/IEC 60947-1 EN/IEC 60947-5-5 JIS C8201-1
Product certifications	BV CSA DNV LROS (Lloyds register of shipping) UL listed
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 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	7.0 cm
Package 1 Width	7.0 cm
Package 1 Length	9.0 cm
Package 1 Weight	70.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	40
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	3.285 kg

Contractual warranty

Warranty	18 months
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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

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	1
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Environmental Disclosure	Product Environmental Profile
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Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	REACH Declaration
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China RoHS Regulation	China RoHS declaration
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Use Again

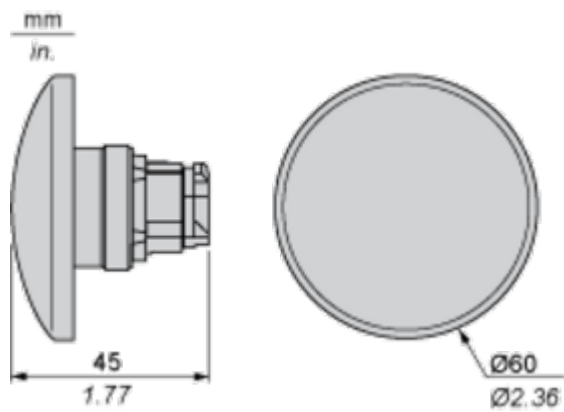
Repack and remanufacture

Circularity Profile	End of Life Information
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Take-back	No
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Dimensions Drawings

Dimensions



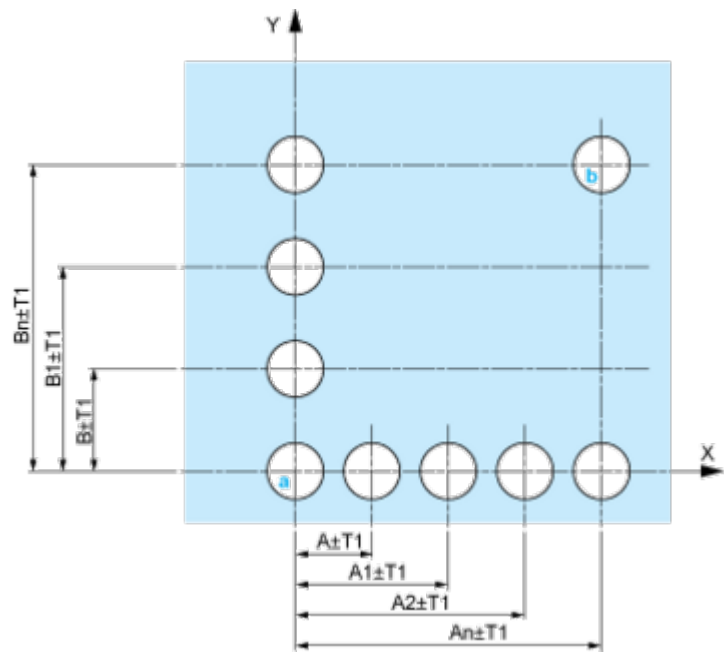
Mounting and Clearance

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 $^{+0.4}_0$ / 0.88 in. $^{+0.016}_0$)</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)

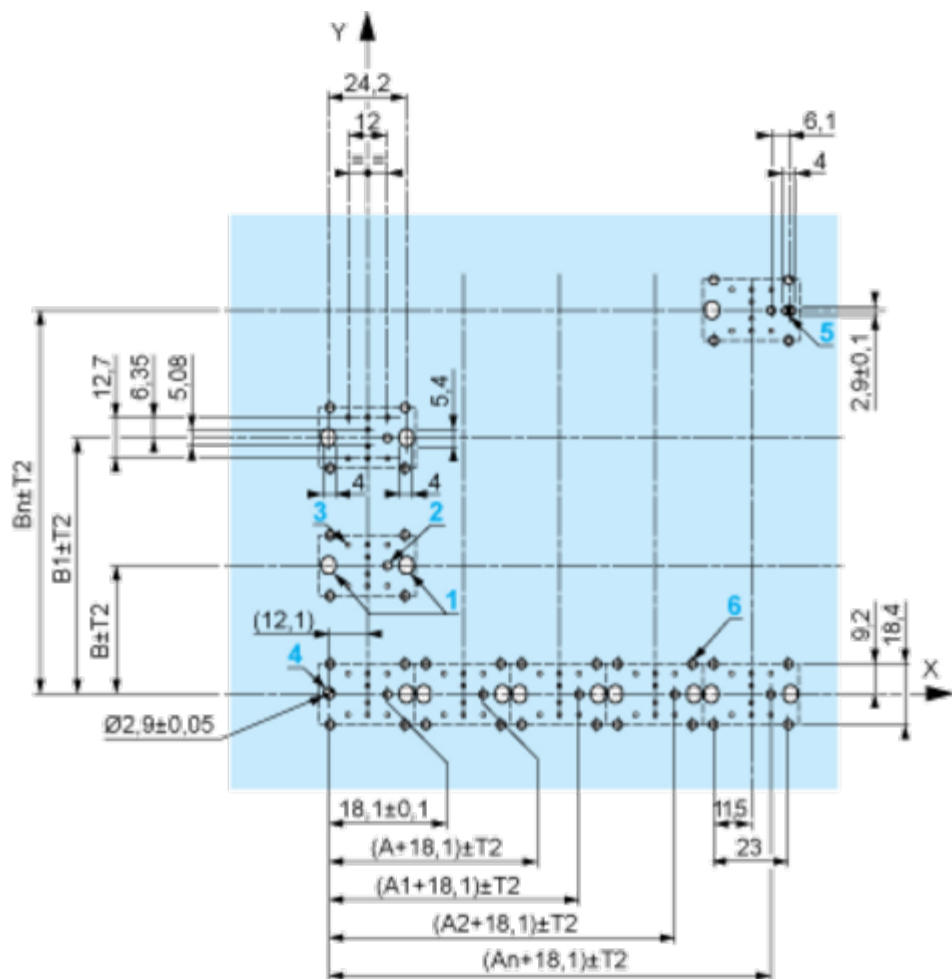


A: 30 mm min. / 1.18 in. min.

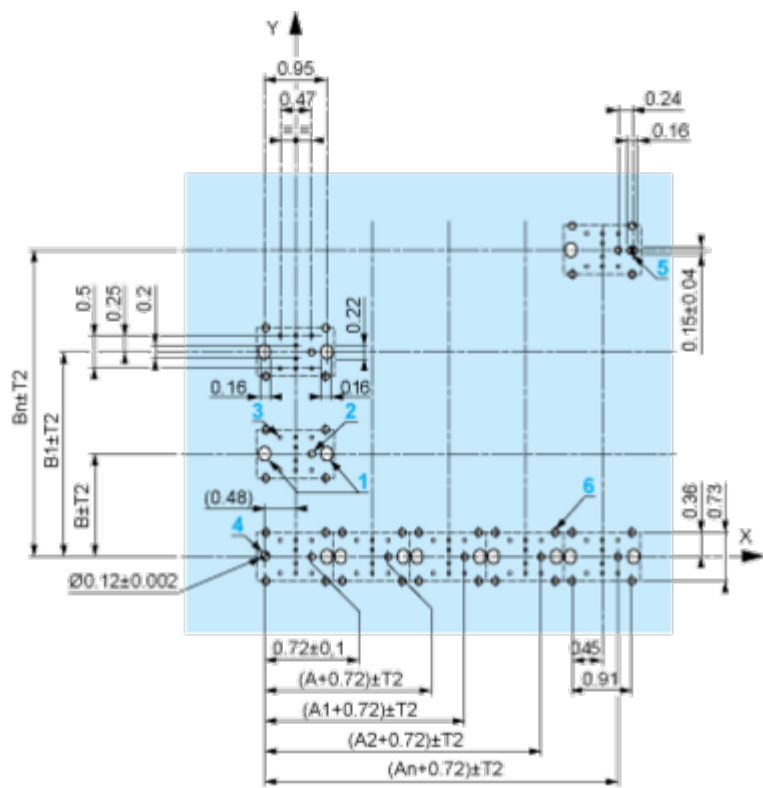
B: 40 mm min. / 1.57 in. min.

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.

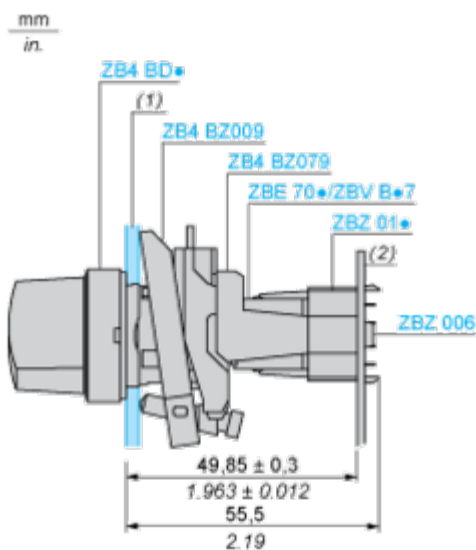
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: T1 + T2 = 0.3 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 C3



Electrical Composition Corresponding to Code C4

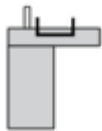


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Electrical Composition Corresponding to Code C15

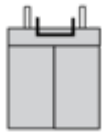
1 N/O



1 N/C



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



Legend

Single contact



Double contact



Light block

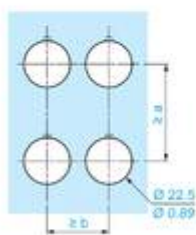
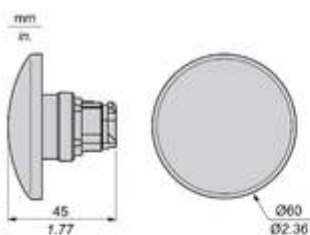













Possible location



Technical Illustration

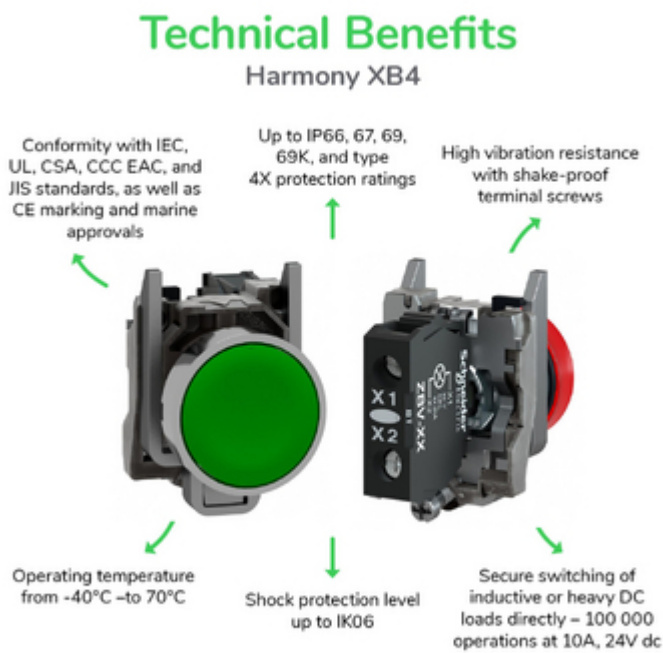
Dimensions



		<i>a</i> (mm)	<i>a</i> (n.)	<i>b</i> (mm)	<i>b</i> (n.)
		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				

Offer Marketing Illustration

Product benefits / Features




Offer Marketing Illustration


Product benefits / Features

Features


Harmony XB4




Quick and easy assembly and disassembly




Various types of connection: screw clamp, connector, Faston connector, spring terminal, or printed circuit board



Excellent mechanical connection with operator head



Large set of accessories to customize your panels



Robustness to withstand harsh environments




Image of product / Alternate images

Alternative







Image of product in real life situation

