

Product datasheet

Specifications



white flush illuminated pushbutton head Ø22 spring return for BA9s bulb

Local distributor code:
237217776

ZB5AW31

EAN Code: 3389110909913

Main

Range of product	Harmony XB5
Product or component type	Head for illuminated push-button
Device short name	ZB5
Product compatibility	BA 9s
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	White flush, unmarked
Operator additional information	With plain lens

Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	32 mm
Net weight	0.018 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	10000000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Cap/operator or lens colour	White
Marking	Unmarked
Electrical composition code	M7 for <6 contacts using single blocks in front mounting with BA 9s M8 for <6 contacts using single and double blocks in front mounting with BA 9s M9 for <2 contacts using single blocks in front mounting with BA 9s and transformer MF2 for <2 contacts using single blocks in front mounting with BA 9s
Device presentation	Basic sub-assemblies

Environment

Protective treatment	TC
Ambient air temperature for storage	-40...70 °C

Ambient air temperature for operation	-40...55 °C
Overtoltage category	Class II 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	IK05 conforming to IEC 62262
Standards	UL 508 IEC 60947-5-4 IEC 60947-1 GB 14048.5 JIS C8201-5-1 IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-1
Product certifications	CSA DNV BV 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	3.500 cm
Package 1 Width	4.500 cm
Package 1 Length	5.000 cm
Package 1 Weight	18.000 g
Unit Type of Package 2	S01
Number of Units in Package 2	50
Package 2 Height	15.000 cm
Package 2 Width	15.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	1.036 kg
Unit Type of Package 3	P06
Number of Units in Package 3	1600
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	41.152 kg

Logistical informations

Country of origin	CZ
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Contractual warranty

Warranty (in months)

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	0.2 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	0.1 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

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)
REACH Regulation	REACH Declaration

Use Longer



Lifetime extension

Repair	No
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Use Again

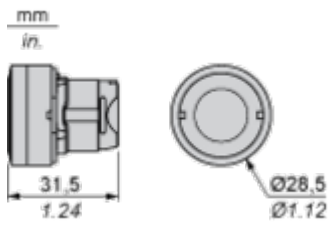


Repack and remanufacture

End of life manual availability	End of Life Information
Take-back	No

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



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended ($\text{Ø}22.3 \text{ }_0^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in. }_0^{+0.016}$)

Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

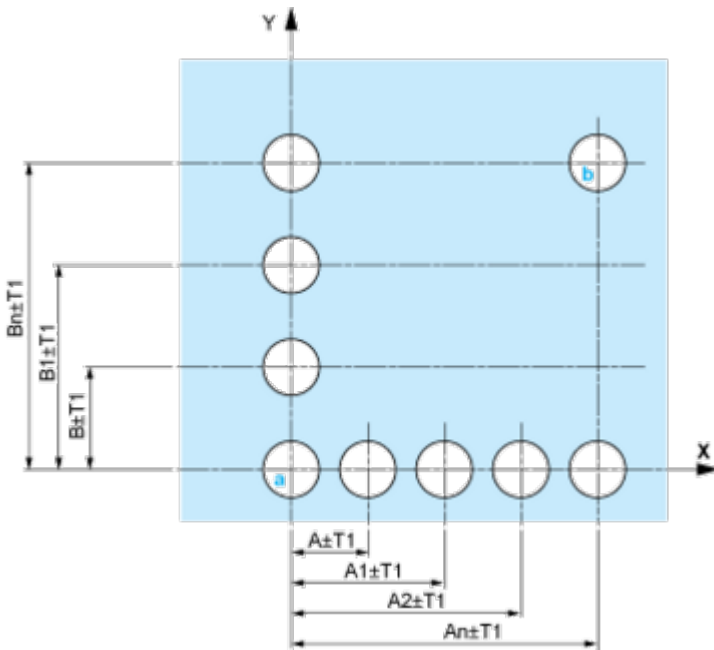
Detail of Lug Recess



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended ($\text{Ø}22.3 \text{ }_0^{+0.4}$) / Ø0.89 in. recommended ($\text{Ø}0.88 \text{ in. }_0^{+0.016}$)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

Panel Cut-outs (Viewed from Installer's Side)

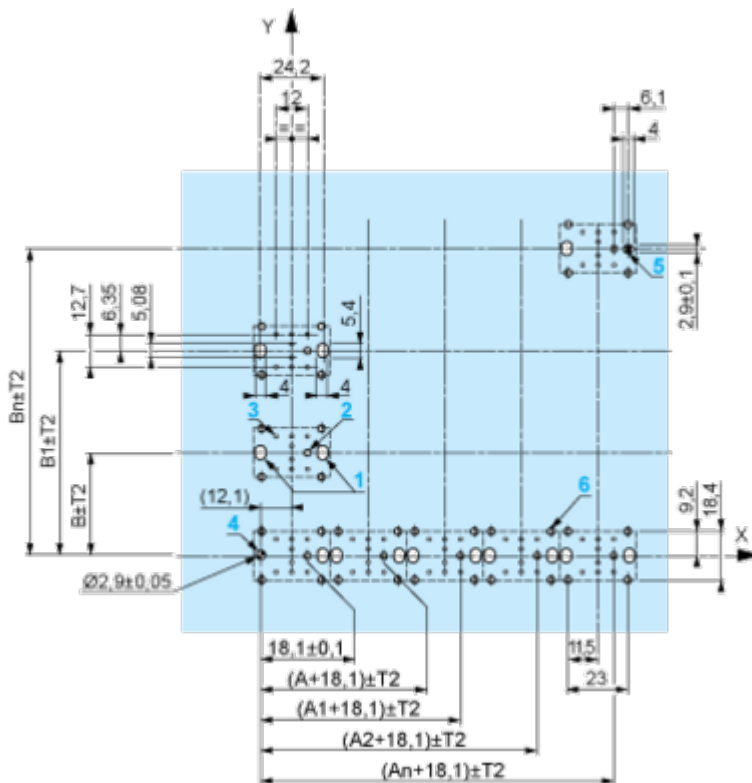


A: 30 mm min. / 1.18 in. min.

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

Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

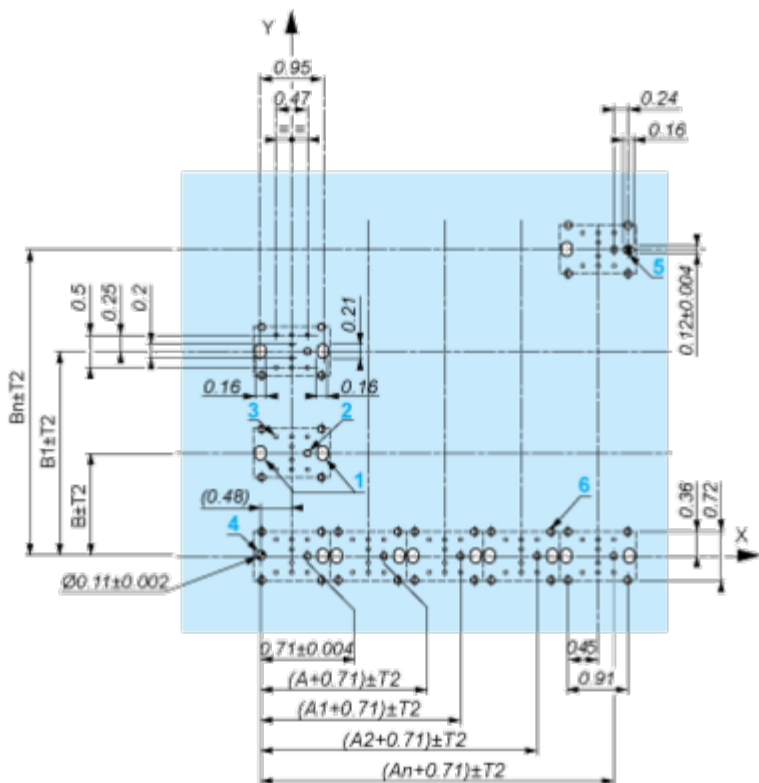
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.
 B: 1.57 in. min.

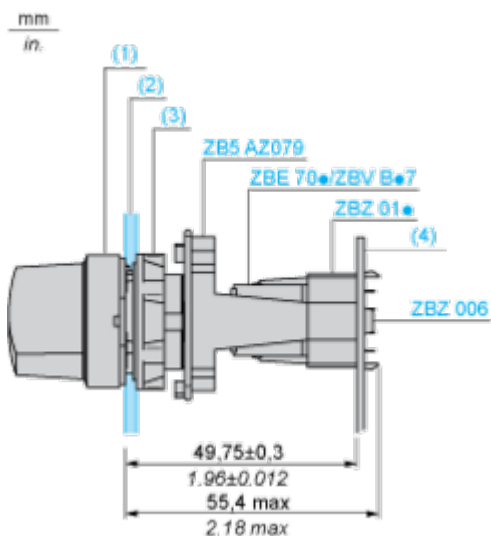
General Tolerances of the Panel and Printed Circuit Board

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 ZB5AZ009: ± 2° 30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB5AZ079 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 (ZB5AD*, ZB5AJ*, ZB5AG*).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



- (1) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

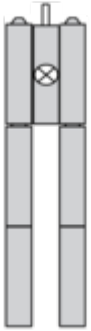
Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole \varnothing 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 for centring adapter ZBZ01•
- 3 8 \times \varnothing 1.2 mm / 0.05 in. holes
- 4 1 hole \varnothing 2.9 mm \pm 0.05 / 0.11 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 mm / 0.09 in. for clipping in adapter ZBZ01•

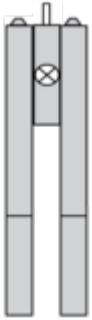
Dimensions An + 18.1 relate to the \varnothing 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

Technical Description

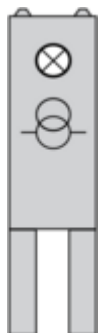
Electrical Composition Corresponding to Codes M1 and M7



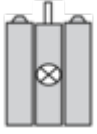
Electrical Composition Corresponding to Codes M2 and M8



Electrical Composition Corresponding to Code M9



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



Legend

Single contact



Double contact



Light block

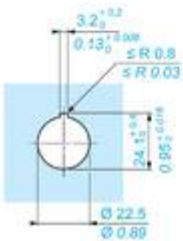
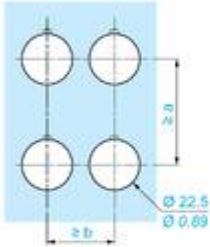
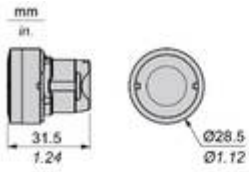


Possible location



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				

Offer Marketing Illustration

Product benefits / Features

Features

Harmony XB4/XB5 Illuminated functions

- NEW universal LED Block for all colors
- Simple stock management
- Improved installation time and easy selection
- Improved color intensity and brightness

Offer Marketing Illustration

Product benefits / Features



The infographic features a central image of a Schneider XB5 terminal block. Surrounding it are five circular icons, each with a corresponding text description of a feature. The background is a solid green color.

Features Harmony XB5

- Quick and easy assembly and disassembly** (Icon: crossed wrench and screwdriver)
- Excellent mechanical connection with operator head** (Icon: hand holding a terminal)
- Various types of connection: screw clamp, connector, Faston connector, spring terminal, or printed circuit board** (Icon: screwdriver)
- Large set of accessories to customize your panels** (Icon: screwdriver and terminal)
- Robustness to withstand harsh environments** (Icon: lightning bolt and rain cloud)

Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony XB5

Conformity with IEC, UL, CSA, CCC EAC, and JIS standards, as well as CE marking and marine approvals

Up to IP66, 67, 69, 69K, and type 4X protection ratings

High vibration resistance with shake-proof terminal screws



Operating temperature from -40°C to 70°C

Shock protection level up to IK06

Secure switching of inductive or heavy DC loads directly – 100 000 operations at 10A, 24V dc

Image of product / Alternate images

Alternative





