

# Product data sheet

Specifications



Head for illuminated push button,  
Harmony XB5, plastic, flush, green,  
22mm, spring return, plain lens for  
BA9s bulb

ZB5AW33

**Product availability:** Stock - Normally stocked in distribution facility

## 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	0.9 in (22 mm)
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Green flush, unmarked
Operator additional information	With plain lens

## Complementary

CAD overall width	1.1 in (29 mm)
CAD overall height	1.1 in (29 mm)
CAD overall depth	1.3 in (32 mm)
Product Weight	0.040 lb(US) (0.018 kg)
Resistance to high pressure washer	1015.3 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
Mechanical durability	10000000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Cap/operator or lens colour	Green
Marking	Unmarked
Electrical composition code	M7 6 single front mounting BA 9s M8 6 single and double front mounting BA 9s M9 2 single front mounting BA 9s and transformer MF2 2 single front mounting BA 9s
Device presentation	Basic sub-assemblies

## Environment

Protective treatment	TC
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Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient Air Temperature for Operation	-40...131 °F (-40...55 °C)
Overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP66 IEC 60529 IP67 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK05 conforming to IEC 62262
Standards	IEC 60947-5-4 IEC 60947-1 CSA C22.2 No 14 IEC 60947-5-1 GB 14048.5 JIS C8201-5-1 UL 508 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 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

Category	US10CS222467
Discount Schedule	0CS2
GTIN	3389110909937
Returnability	Yes
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.77 in (4.5 cm)
Package 1 Width	1.34 in (3.4 cm)
Package 1 Length	2.13 in (5.4 cm)
Package weight(Lbs)	0.6 oz (18.0 g)
Unit Type of Package 2	S01
Number of Units in Package 2	50
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	5.91 in (15.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	2.341 lb(US) (1.062 kg)

## Contractual warranty

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**Warranty**

18 months



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 CO2 eq, Total Life cycle) **1**

Environmental Disclosure [Product Environmental Profile](#)

## 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)**

California proposition 65 **WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](#)**

## Use Again

### Repack and remanufacture

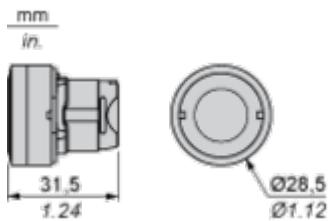
Circularity Profile [End of Life Information](#)

Take-back **No**

Dimensions Drawings

Dimensions

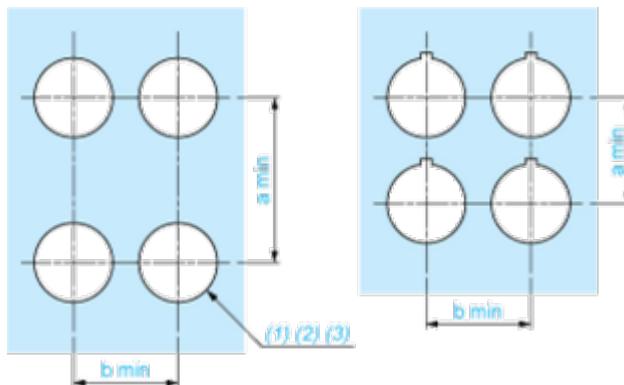
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## Mounting and Clearance

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



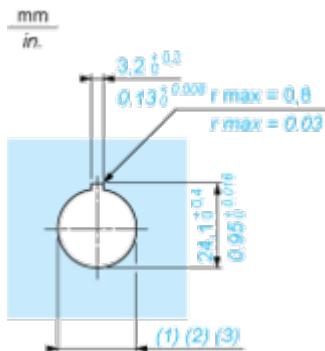
(1) Diameter on finished panel or support

(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

(3) Ø22.5 mm recommended ( $\varnothing 22.3^{+0.4}_0$ ) / Ø0.89 in. recommended ( $\varnothing 0.88^{+0.016}_0$ )

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



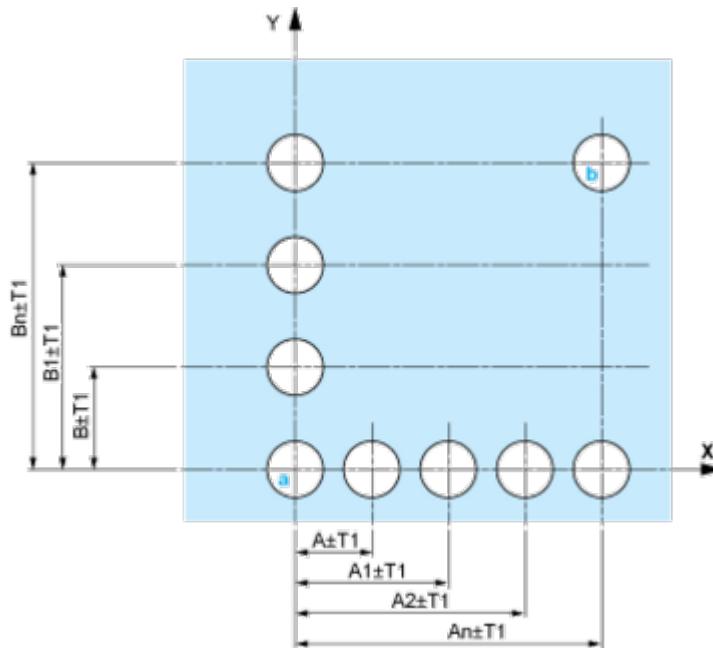
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(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

(3) Ø22.5 mm recommended ( $\varnothing 22.3^{+0.4}_0$ ) / Ø0.89 in. recommended ( $\varnothing 0.88^{+0.016}_0$ )

## Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

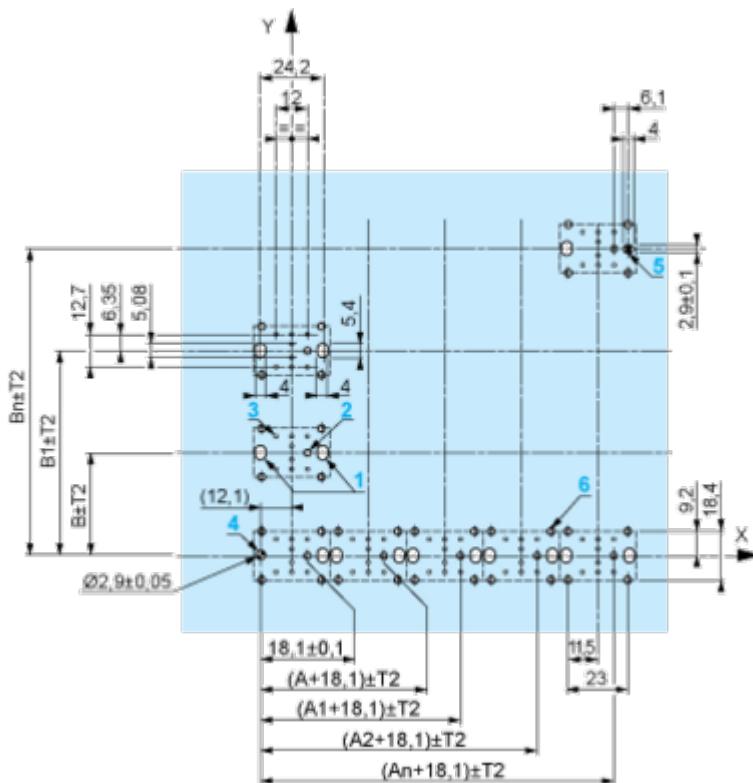


**A:** 30 mm min. / 1.18 in. min.

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

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

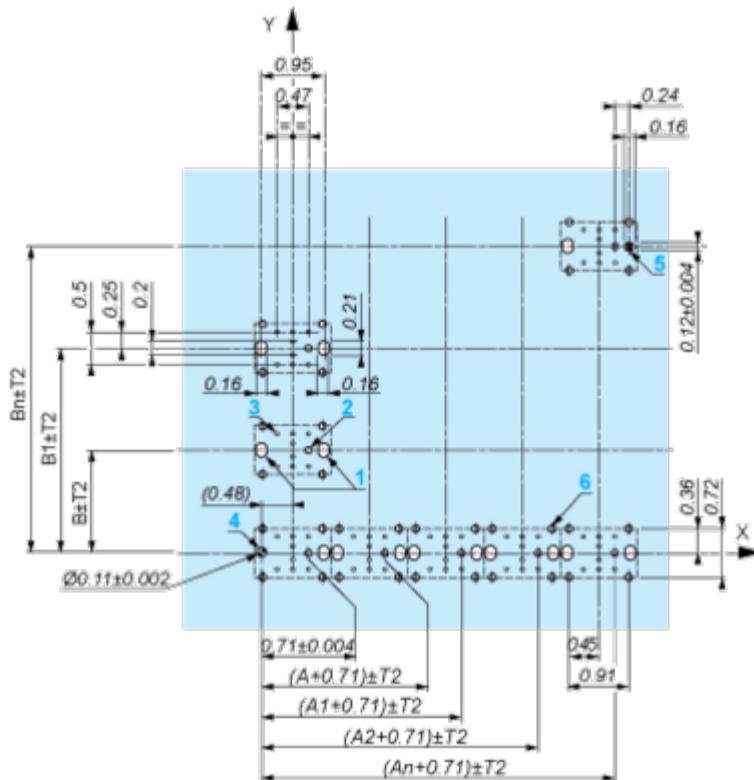
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

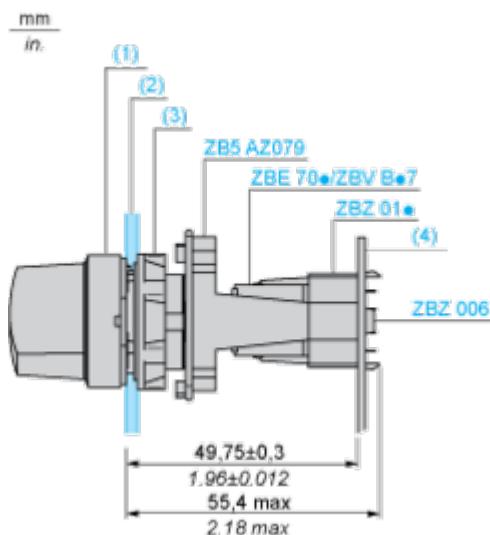
## General Tolerances of the Panel and Printed Circuit Board

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  $\pm$  0.1 / 0.88 in.  $\pm$  0.004
- Orientation of body/fixing collar ZB5AZ009:  $\pm 2^{\circ}$  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•**

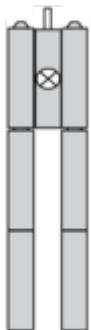
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked **a**)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked **b**)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

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

Technical Description

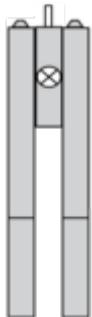
Electrical Composition Corresponding to Codes M1 and M7

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**Electrical Composition Corresponding to Codes M2 and M8**

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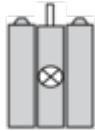


Electrical Composition Corresponding to Code M9



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

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Legend

Single contact



Double contact



Light block

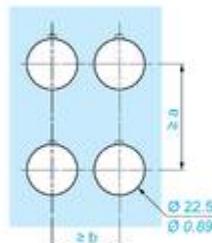
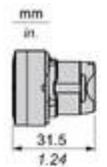


Possible location

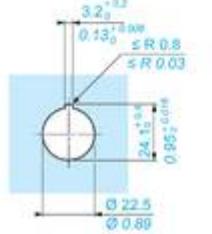


## Technical Illustration

## Dimensions

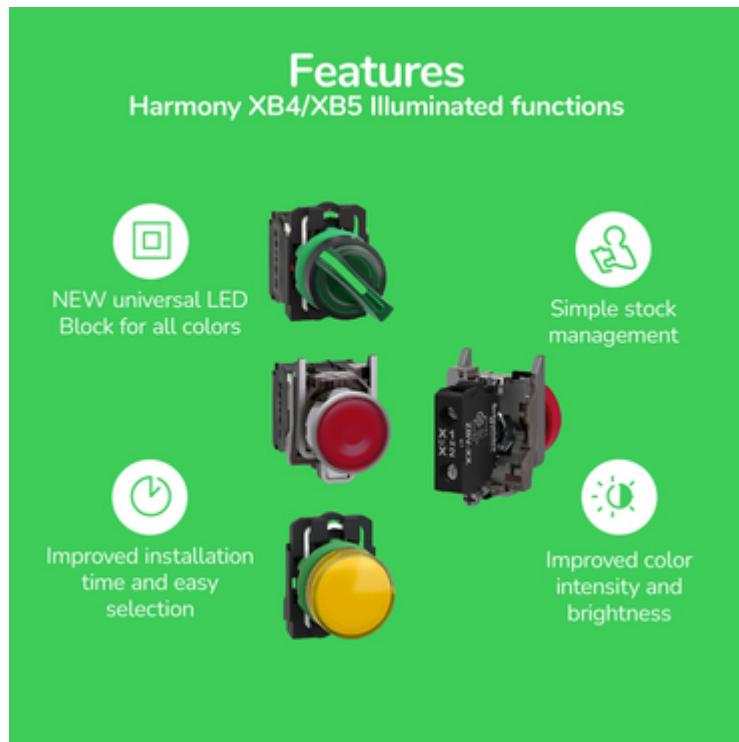


		a (mm)	a (in.)	b (mm)	b (in.)
ZBE*****	ZBV*****	40	1.57	30	1.18
ZBE*****3	ZBV*****3	45	1.77	32	1.26
ZBE*****4	ZBV*****4	40	1.57	30	1.18
ZBE*****5	ZBV*****5	50	1.97	30	1.18
ZBE*****9	ZBV*****9	40	1.57	30	1.18
ZBRT*	ZBRV1	40	1.57	30	1.18



## Offer Marketing Illustration

### Product benefits / Features



## Offer Marketing Illustration

## Product benefits / Features

## Features

### Harmony XB5



- Quick and easy assembly and disassembly**  

- Excellent mechanical connection with operator head**  

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

- Large set of accessories to customize your panels**  

- Robustness to withstand harsh environments**  


## 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



Operating temperature from -40°C to 70°C

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



Shock protection level up to IK06

High vibration resistance with shake-proof terminal screws

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

Image of product / Alternate images

Alternative

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Image of product in real life situation

