

# Product data sheet

Specifications



head for non illuminated push button, Harmony XB5, black, 40mm mushroom pushbutton, 22mm latching key release

ZB5AS12

Product availability: Non-Stock - Not normally stocked in distribution facility

## Main

Range of Product	Harmony XB5
Product or Component Type	Head for non-illuminated push-button
Device short name	ZB5
Bezel material	Dark grey plastic
Head type	Standard
Mounting diameter	0.9 in (22 mm)
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	latching
Reset	Key release
Operator profile	Black mushroom Ø 40 mm, unmarked
Type of Keylock	Key 455
Key withdrawal position	Center
Device presentation	Basic element

## Complementary

CAD overall width	1.6 in (40 mm)
CAD overall height	1.6 in (40 mm)
CAD overall depth	3.1 in (79 mm)
Product Weight	0.097 lb(US) (0.044 kg)
Mechanical durability	500000 cycles
Station name	XALD 1 cut-out XALK 1 cut-out
Electrical composition code	C11 3 single front mounting C15 1 single front mounting SF1 3 single front mounting SR1 3 single rear mounting C7 4 single front mounting C8 4 single and double front mounting C10 4 single and double front mounting
Compatibility code	ZB5

## Environment

Protective treatment	TH
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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.

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

Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
Ambient Air Temperature for Operation	-40...158 °F (-40...70 °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
Resistance to high pressure washer	1015.3 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
IK degree of protection	IK03 conforming to IEC 50102
Standards	JIS C8201-5-1 CSA C22.2 No 14 IEC 60947-1 UL 508 IEC 60947-5-4 IEC 60947-5-1 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	3389110906790
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	2.09 in (5.3 cm)
Package 1 Length	3.46 in (8.8 cm)
Package weight(Lbs)	2.4 oz (69.0 g)
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Height	11.81 in (30.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	16.098 lb(US) (7.302 kg)

# Contractual warranty

Warranty	18 months
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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

Use Better

 Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
California proposition 65	WARNING: 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>

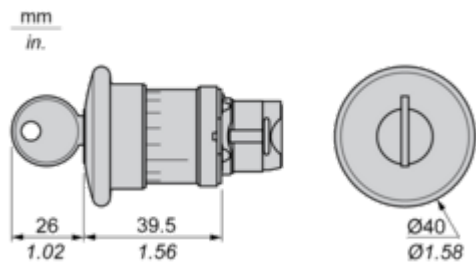
Use Again

 Repack and remanufacture	
Take-back	No

Dimensions Drawings

Dimensions

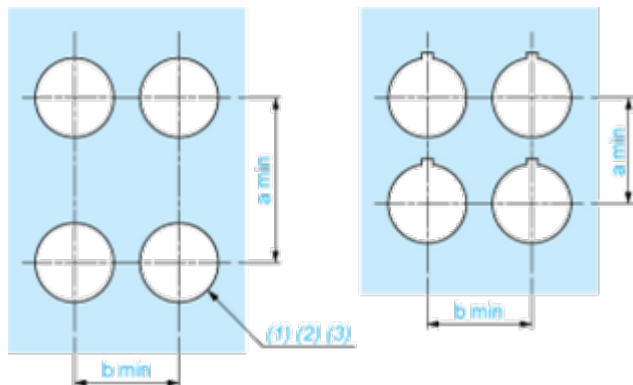
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Mounting and Clearance

Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

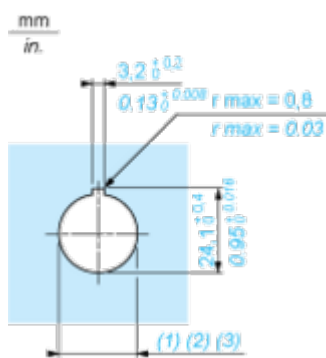
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 ( $\text{Ø}22.3 \begin{smallmatrix} +0.4 \\ 0 \end{smallmatrix}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. } \begin{smallmatrix} +0.016 \\ 0 \end{smallmatrix}$ )

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

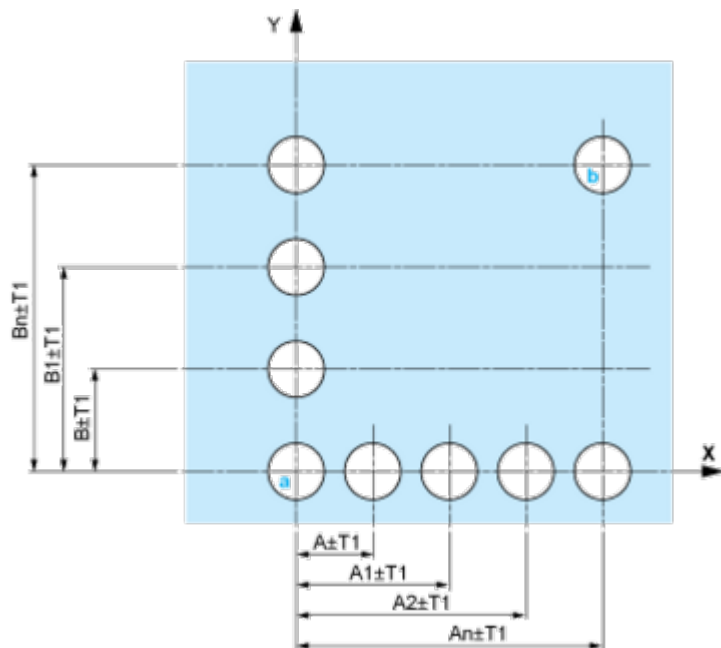
Detail of Lug Recess



- (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 ( $\text{Ø}22.3 \begin{smallmatrix} +0.4 \\ 0 \end{smallmatrix}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. } \begin{smallmatrix} +0.016 \\ 0 \end{smallmatrix}$ )

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

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

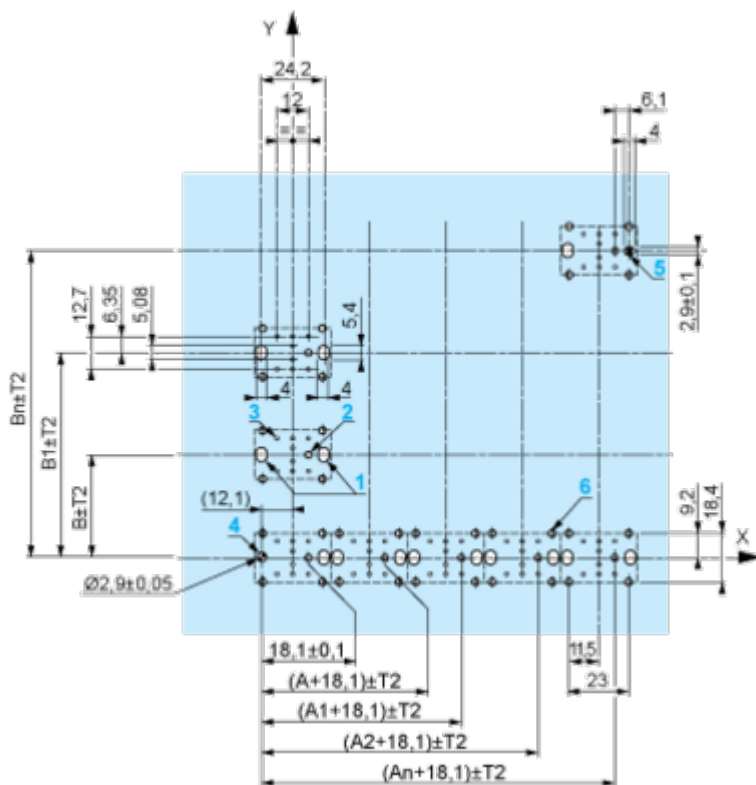


**A:** 30 mm min. / 1.18 in. min.

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

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

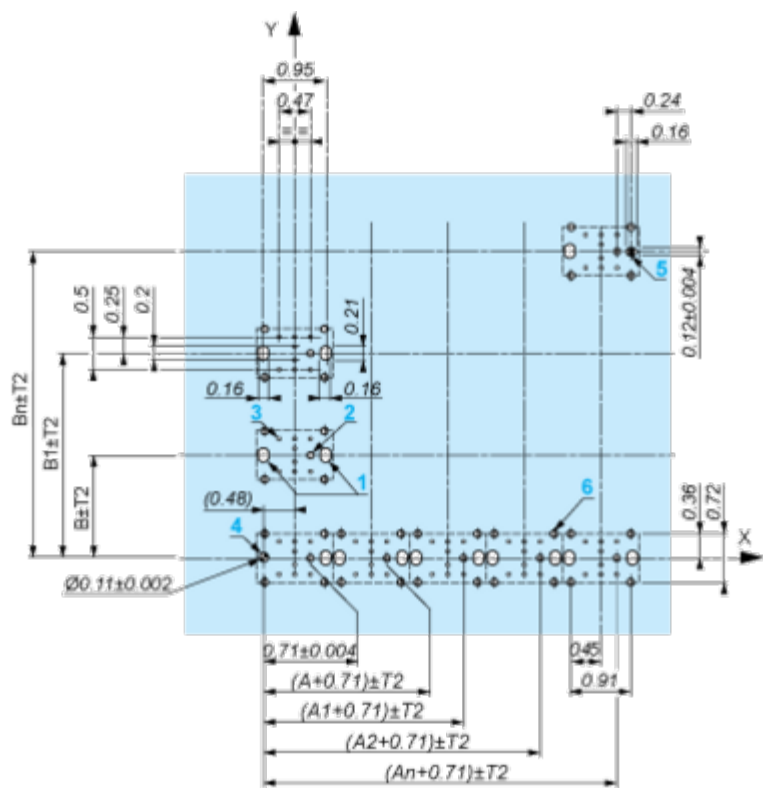
Dimensions in mm



**A:** 30 mm min.

**B:** 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

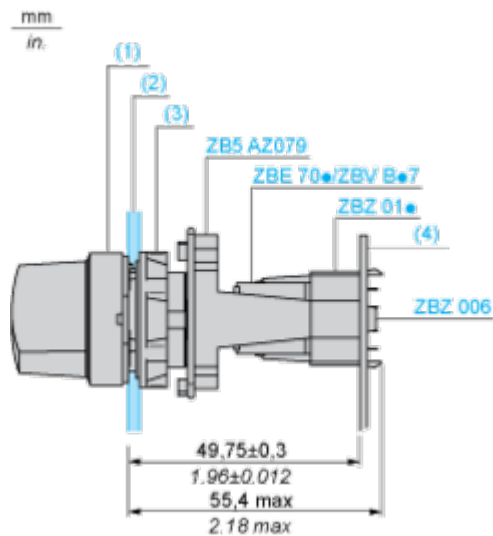
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.:  $T_1 + T_2 = 0.3 \text{ mm max.}$

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  $\varnothing$  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

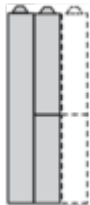
Electrical Composition Corresponding to Code C7

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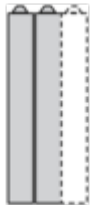
Electrical Compositions Corresponding to Code C8

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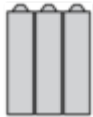


Electrical Compositions Corresponding to Code C10

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



Electrical Composition Corresponding to Code C15

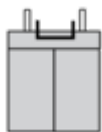
1 N/O



1 N/C



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



Legend

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Single contact



Double contact



Light block

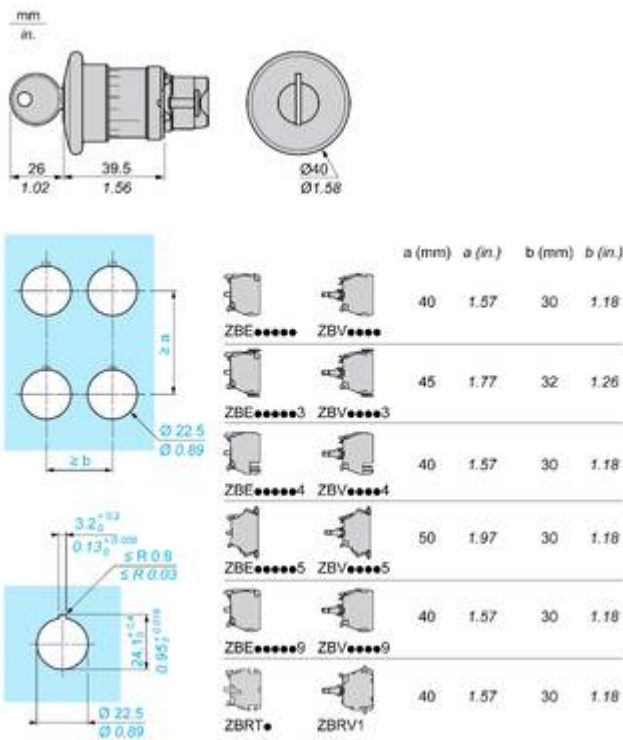


Possible location



Technical Illustration

Dimensions





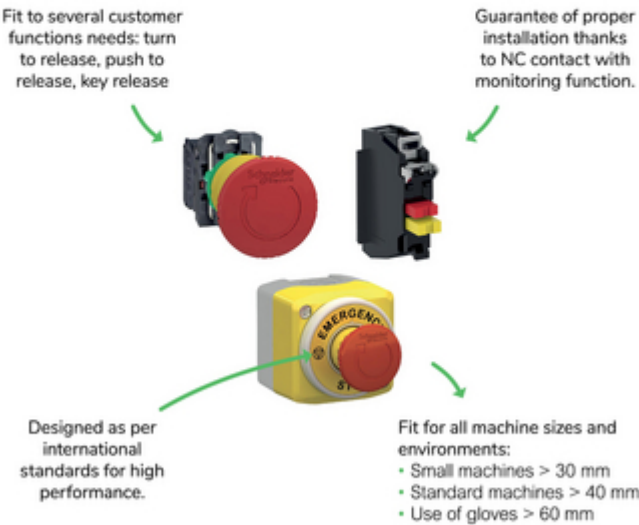
Offer Marketing Illustration

Product benefits / Features

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Technical Benefits

Harmony XB5 e-stop function




Offer Marketing Illustration


Product benefits / Features

## Features


### Harmony XB5 e-stop function




Wide modular range to suit machines and operator safety.




Ergonomic design for emergency actuation in several environments



Designed to fit in a standard 22mm cut-out or Harmony XALK control station ensuring compatibility with pre-existing machinery



Large set of accessories: circular legends, illuminated legend rings, protective bellows for harsh environments and protective guards.



Illuminated types to improve operator efficiency by reducing production downtime.

Offer Marketing Illustration

Product benefits / Features

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### 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



Robustness to withstand harsh environments



Large set of accessories to customize your panels



Offer Marketing Illustration

Product benefits / Features

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Technical Benefits

Harmony XB5



Image of product / Alternate images

Alternative

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