

Product data sheet

Specifications



Mushroom push button head 30mm,
Harmony XB5, plastic, black, 22mm,
latching turn release

ZB5AS42

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	Turn to release
Operator profile	Black mushroom Ø 30 mm, unmarked
Device presentation	Basic element

Complementary

CAD overall width	1.2 in (30 mm)
CAD overall height	1.2 in (30 mm)
CAD overall depth	2.2 in (57 mm)
Product Weight	0.09 lb(US) (0.04 kg)
Mechanical durability	500000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
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
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

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

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	UL 508 JIS C8201-5-1 IEC 60947-5-4 IEC 60947-1 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 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	3389110906820
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.69 in (4.300 cm)
Package 1 Width	2.05 in (5.200 cm)
Package 1 Length	3.43 in (8.700 cm)
Package weight(Lbs)	1.305 oz (37.000 g)
Unit Type of Package 2	S01
Number of Units in Package 2	21
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	5.91 in (15.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	2.227 lb(US) (1.010 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**

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: 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 [www.P65Warnings.ca.gov](#)**

Use Again

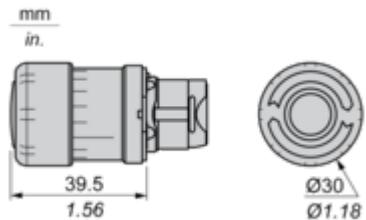
Repack and remanufacture

Circularity Profile [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



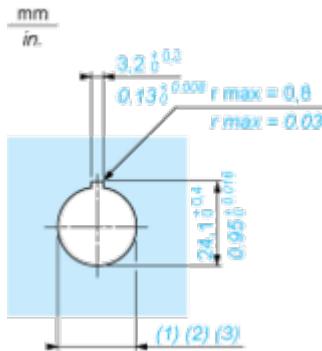
(1) Diameter on finished panel or support

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

(3) Ø22.5 mm recommended ($\varnothing 22.3^{+0.4}_0$) / 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



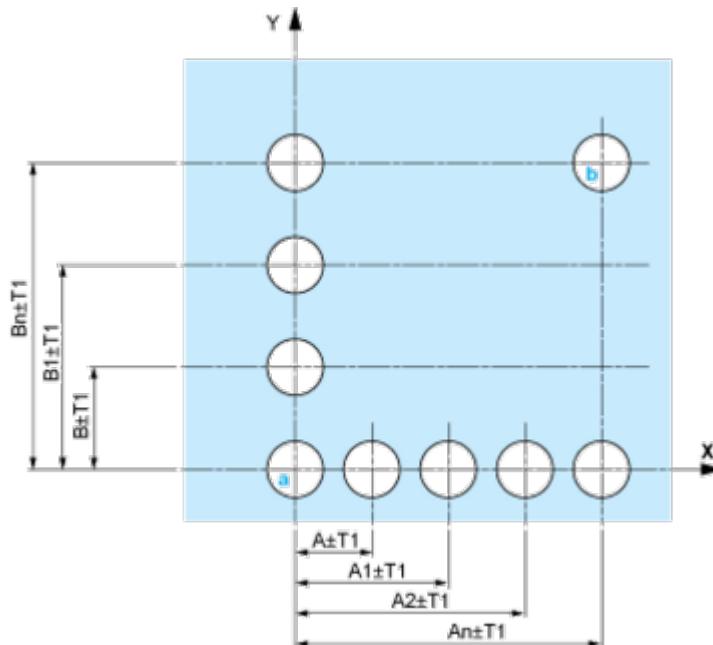
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Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

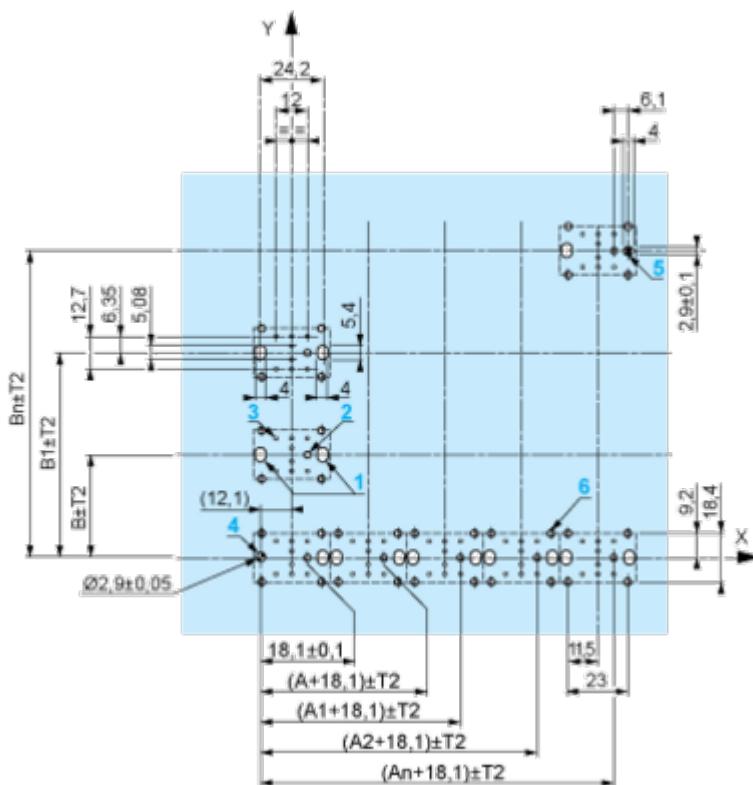


A: 30 mm min. / 1.18 in. min.

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

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

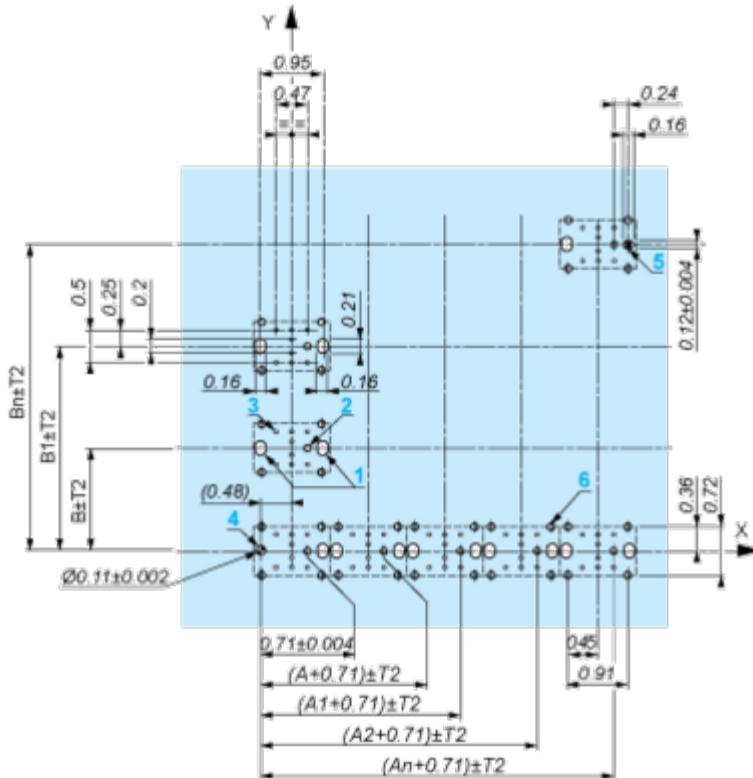
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

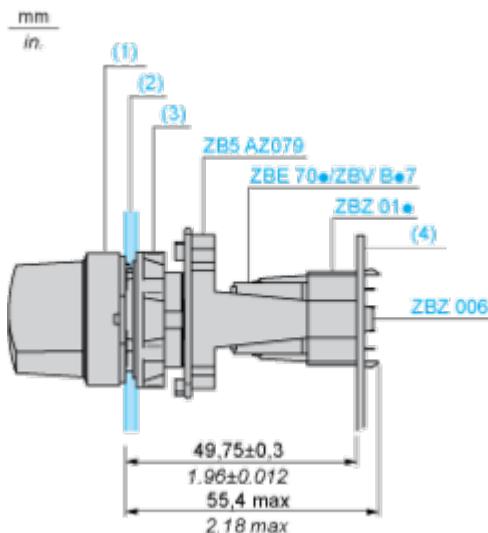
General Tolerances of the Panel and Printed Circuit Board

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: $22.4 \text{ mm} \pm 0.1$ / $0.88 \text{ in.} \pm 0.004$
- Orientation of body/fixing collar ZB5AZ009: $\pm 2^\circ 30'$ (excluding cut-outs marked **a** and **b**).
- Tightening torque of screws ZBZ 006: 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

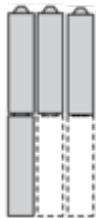
Mounting of Adapter (Socket) ZBZ01•

- 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•

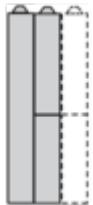
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

Technical Description

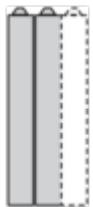
Electrical Composition Corresponding to Code C7



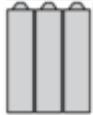
Electrical Compositions Corresponding to Code C8



Electrical Compositions Corresponding to Code C10

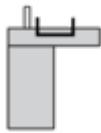


Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Electrical Composition Corresponding to Code C15

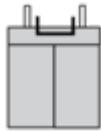
1 N/O



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

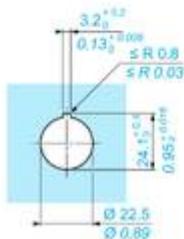
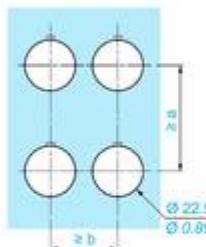
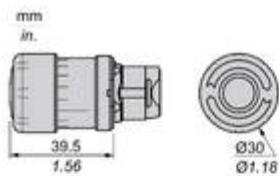


Possible location



Technical Illustration

Dimensions



		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

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

Technical Benefits

Harmony XB5 e-stop function

Fit to several customer functions needs: turn to release, push to release, key release



Guarantee of proper installation thanks to NC contact with monitoring function.

Designed as per international standards for high performance.

Fit for all machine sizes and environments:

- Small machines > 30 mm
- Standard machines > 40 mm
- Use of gloves > 60 mm

Offer Marketing Illustration

Product benefits / Features



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





