

Product datasheet

Specifications



black Ø40 mushroom pushbutton head Ø22 latching turn release

Local distributor code:

237184391

ZB5AS2

EAN Code: 3389110906844

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	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 40 mm, unmarked
Device presentation	Basic element

Complementary

CAD overall width	40 mm
CAD overall height	40 mm
CAD overall depth	57 mm
Net weight	0.044 kg
Mechanical durability	500000 cycles
Station name	XALD 1 cut-out XALK 1 cut-out
Electrical composition code	C11 for <3 contacts using single blocks in front mounting C15 for <1 contacts using single blocks in front mounting SF1 for <3 contacts using single blocks in front mounting SR1 for <3 contacts using single blocks in rear mounting C7 for <4 contacts using single blocks in front mounting C8 for <4 contacts using single and double blocks in front mounting C10 for <4 contacts using single and double blocks in front mounting
Compatibility code	ZB5

Environment

Protective treatment	TH
Ambient air temperature for storage	-40...70 °C
Ambient air temperature for operation	-40...70 °C
Overvoltage 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
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
IK degree of protection	IK03 conforming to IEC 50102
Standards	IEC 60947-5-1 CSA C22.2 No 14 IEC 60947-5-4 IEC 60947-1 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 (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	8.800 cm
Package 1 Width	5.300 cm
Package 1 Length	4.500 cm
Package 1 Weight	41.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.643 kg

Logistical informations

Country of origin	CZ
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Contractual warranty

Warranty (in months)	18
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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

Total lifecycle Carbon footprint	0.5 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	0.4 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]	0.1 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

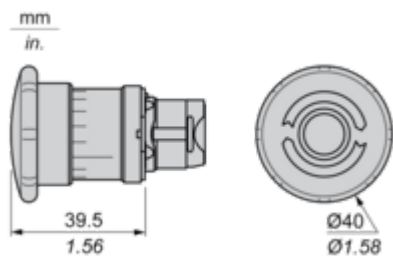


Repack and remanufacture

Recyclability potential, in %	21
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



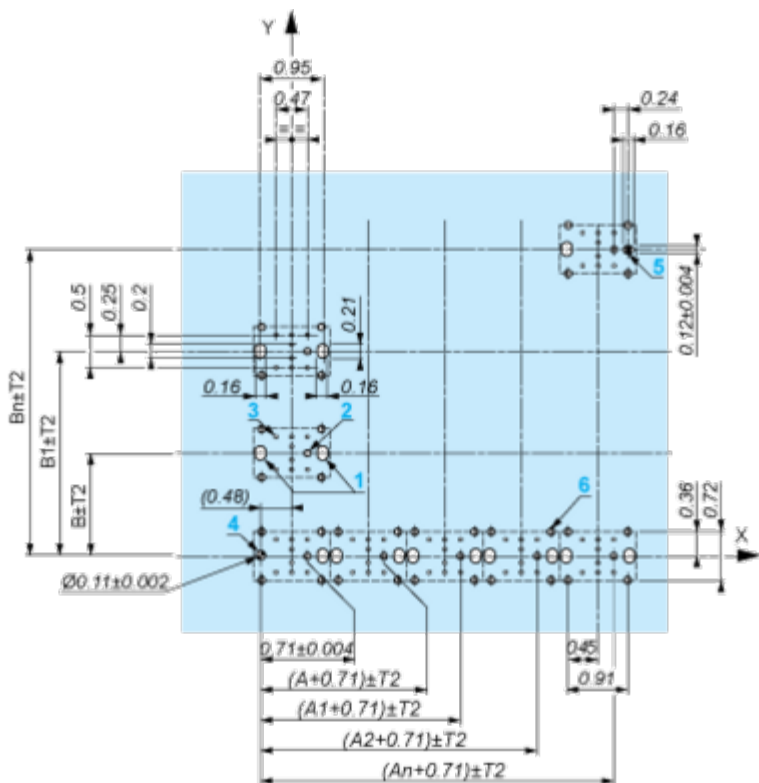
- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)



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•

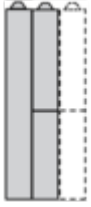
Dimensions An + 18.1 relate to the \varnothing 2.4 mm \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

Technical Description

Electrical Composition Corresponding to 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

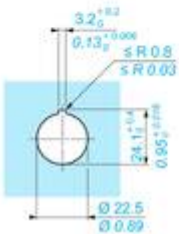
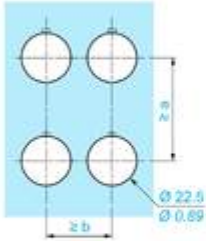
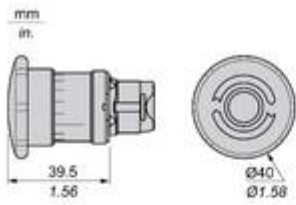


Possible location



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



Illuminated types to improve operator efficiency by reducing production downtime.



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



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



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



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
-  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

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





