

# Product data sheet

Specifications



Emergency stop head, Harmony XB5, switching off, plastic, red mushroom 60mm, 22mm, trigger latching push pull

ZB5AX84

Product availability: Stock - Normally stocked in distribution facility

## Main

Range of Product	Harmony XB5
Product or Component Type	Head for emergency stop push-button
Product destination	Emergency stop 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	trigger action and mechanical latching
Reset	Push-pull
Operator profile	Red mushroom Ø 60 mm, unmarked
Device presentation	Basic element

## Complementary

CAD overall width	2.4 in (60 mm)
CAD overall height	2.4 in (60 mm)
CAD overall depth	2.2 in (56 mm)
Net Weight	0.11 lb(US) (0.05 kg)
Mechanical durability	300000 cycles
Station name	XALD 1 cut-out XALK 1 cut-out
Electrical composition code	C7 4 single front mounting C8 4 single and double front mounting C11 3 single front mounting C15 1 single front mounting SF1 3 single front mounting SR1 3 single rear 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)

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

<b>Ambient Air Temperature for Operation</b>	-40...158 °F (-40...70 °C)
<b>Overvoltage category</b>	Class II conforming to IEC 60536
<b>IP degree of protection</b>	IP66 IEC 60529 IP67 IP69 IP69K
<b>NEMA degree of protection</b>	NEMA 13 NEMA 4X
<b>Resistance to high pressure washer</b>	1015.3 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
<b>IK degree of protection</b>	IK03 conforming to IEC 50102
<b>Standards</b>	JIS C8201-5-1 IEC 60947-5-5 IEC 60364-5-53 IEC 60204-1 GB 14048.5 UL 508 IEC 60947-5-4 ISO 13850 CSA C22.2 No 14 IEC 60947-1 IEC 60947-5-1 JIS C8201-1
<b>Product Certifications</b>	CSA DNV BV LROS (Lloyds register of shipping) UL Listed
<b>Vibration resistance</b>	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	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

<b>Category</b>	US10CS222467
<b>Discount Schedule</b>	0CS2
<b>GTIN</b>	3389119048088
<b>Returnability</b>	Yes
<b>Country of origin</b>	CZ

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	3.5 in (9.0 cm)
<b>Package 1 Width</b>	2.8 in (7.0 cm)
<b>Package 1 Length</b>	2.8 in (7.0 cm)
<b>Package weight(Lbs)</b>	2.2 oz (62.0 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	5.9 in (15.0 cm)
<b>Package 2 Width</b>	11.8 in (30.0 cm)
<b>Package 2 Length</b>	15.7 in (40.0 cm)
<b>Package 2 Weight</b>	3.472 lb(US) (1.575 kg)

# Contractual warranty

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Warranty

18 months



## 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

Carbon footprint (kg CO2 eq, Total Life cycle) 1

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

REACH Regulation [REACH Declaration](#)

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](http://www.P65Warnings.ca.gov)

## Use Again

### Repack and remanufacture

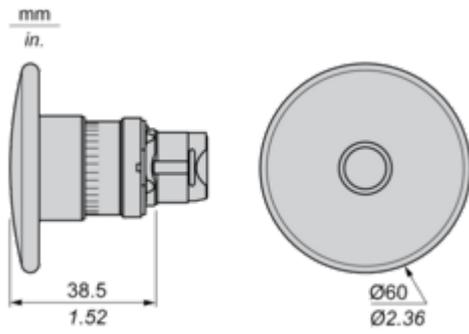
Circularity Profile [End of Life Information](#)

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

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

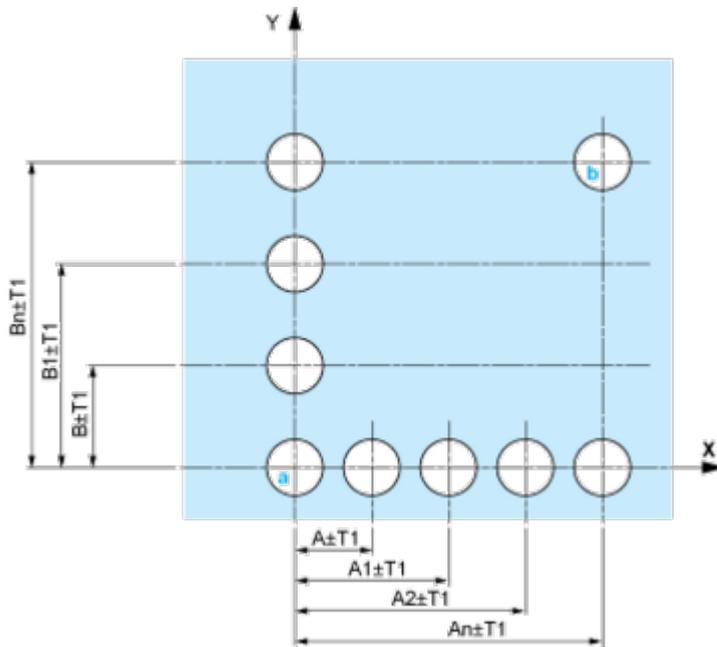
Detail of Lug Recess



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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

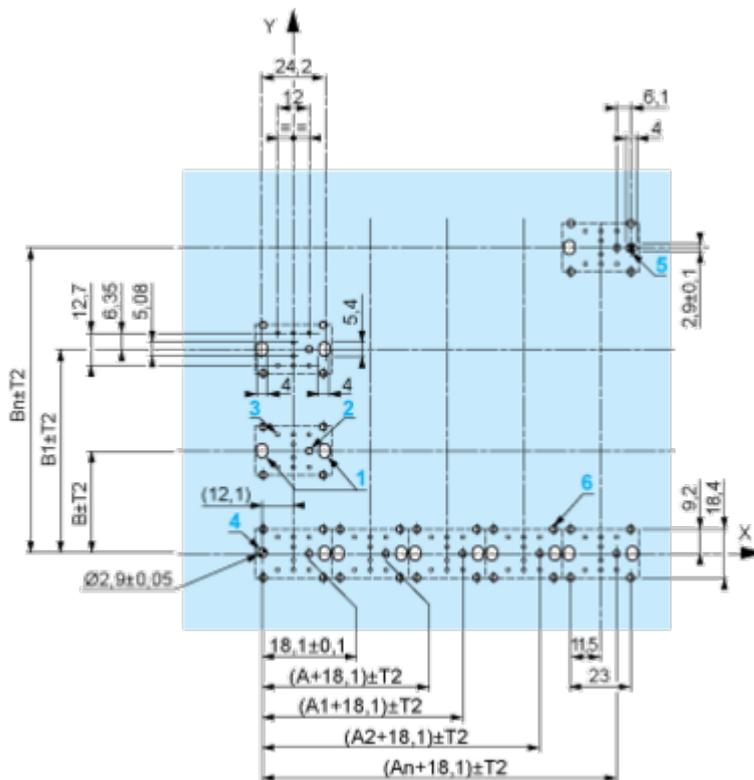


A: 30 mm min. / 1.18 in. min.

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

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

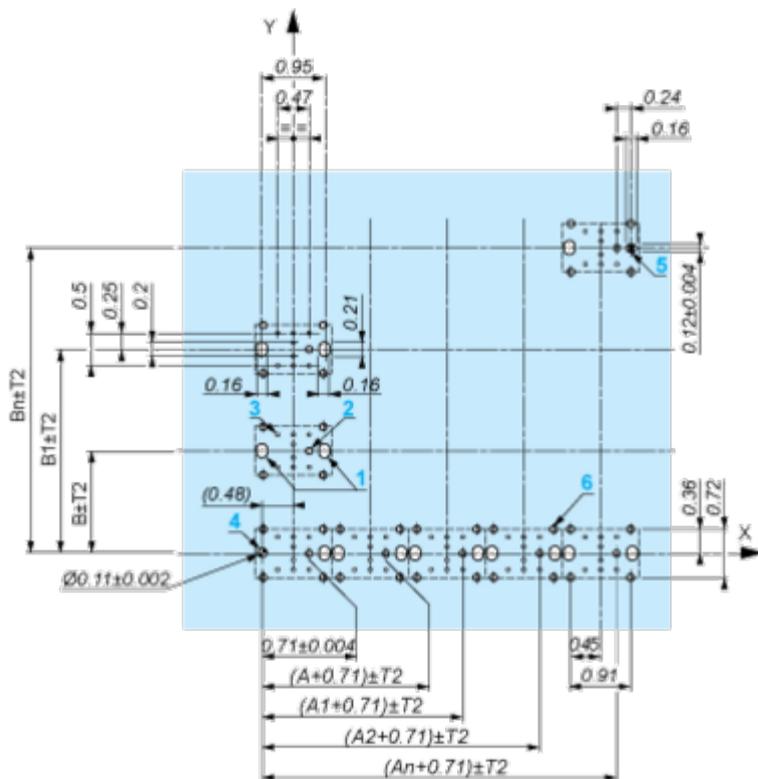
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

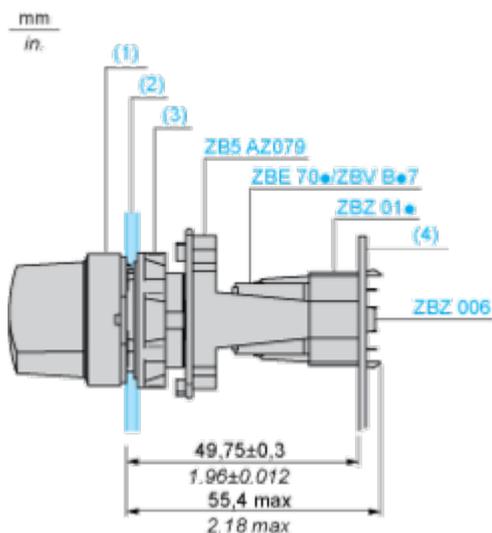
**General Tolerances of the Panel and Printed Circuit Board**

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

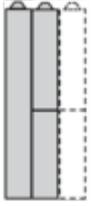
Electrical Composition Corresponding to Code C7

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Electrical Compositions Corresponding to Code C8

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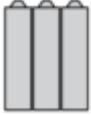


Electrical Compositions Corresponding to Code C10

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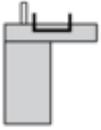
Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



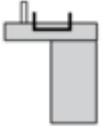
Electrical Composition Corresponding to Code C15

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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

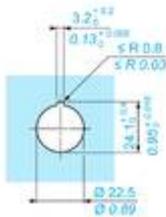
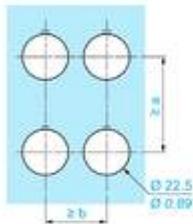
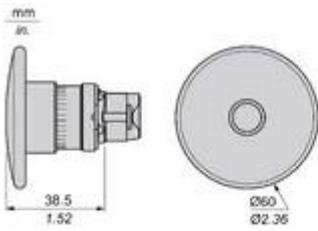


Possible location



Technical Illustration

Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		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				

Offer Marketing Illustration

Product benefits / Features

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### 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



Offer Marketing Illustration

Product benefits / Features

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## 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

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### Features Harmony XB5



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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

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## 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

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Image of product in real life situation

