

Product data sheet

Specifications



Emergency stop head, Harmony XB4, switching off, metal, red mushroom 40mm, 22mm, trigger latching key release

ZB4BS944

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	Harmony XB4
Product or Component Type	Head for emergency switching off push-button
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	0.9 in (22.5 mm)
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	trigger action and mechanical latching
Reset	Key release
Operator profile	Red mushroom Ø 40 mm, unmarked
Type of Keylock	Key 455
Key withdrawal position	Center
Head type	Standard
Cap/operator or lens colour	Red

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)
Net Weight	0.216 lb(US) (0.098 kg)
Resistance to high pressure washer	1015.3 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
Mechanical durability	300000 cycles
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 C10 4 single and double front mounting
Device presentation	Basic element

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.

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 operation	-40...158 °F (-40...70 °C)
Electrical shock protection class	Class I IEC 61140
IP degree of protection	IP66 IEC 60529 IP67 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X NEMA 4 NEMA 12
IK degree of protection	IK03 conforming to IEC 50102
Standards	CSA C22.2 No 14 IEC 60204-1 IEC 60947-1 GB 14048.5 IEC 60947-5-1 ISO 13850 IEC 60947-5-5 JIS C8201-5-1 IEC 60947-5-4 UL 508 IEC 60364-5-53 JIS C8201-1
Product Certifications	DNV UL Listed LROS (Lloyds register of shipping) BV CSA
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	US10CS222468
Discount Schedule	0CS2
GTIN	3389110888881
Returnability	Yes
Country of origin	US

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.73 in (4.400 cm)
Package 1 Width	2.09 in (5.300 cm)
Package 1 Length	3.46 in (8.800 cm)
Package 1 Weight	3.563 oz (101.000 g)
Unit Type of Package 2	S03
Number of Units in Package 2	100
Package 2 Height	11.81 in (30.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	23.290 lb(US) (10.564 kg)

Contractual warranty

Warranty	18 months
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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	
Carbon footprint (kg CO2 eq, Total Life cycle)	1
Environmental Disclosure	Product Environmental Profile

Use Better

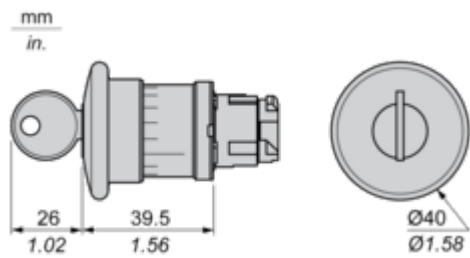
Materials and Substances	
Packaging made with recycled cardboard	No
Packaging without single use plastic	No
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	F28cb399-1b6a-409d-ac7b-4169e47b25c8
REACH Regulation	REACH Declaration
California proposition 65	WARNING: 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



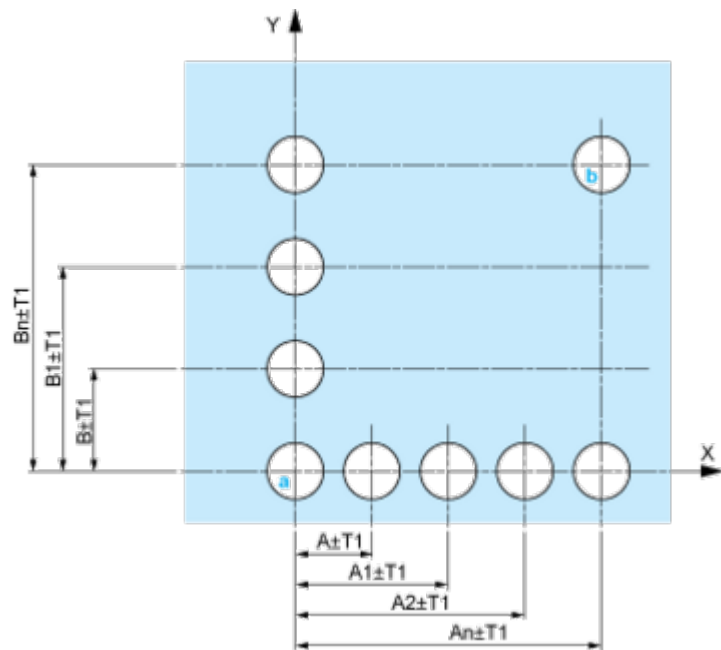
Mounting and Clearance

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	Connection by Faston Connectors
(1) Diameter on finished panel or support (2) 40 mm min. / 1.57 in. min. (3) 30 mm min. / 1.18 in. min. (4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $^{+0.4}_0$ / 0.88 in. $^{+0.016}_0$) (5) 45 mm min. / 1.78 in. min. (6) 32 mm min. / 1.26 in. min.	

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

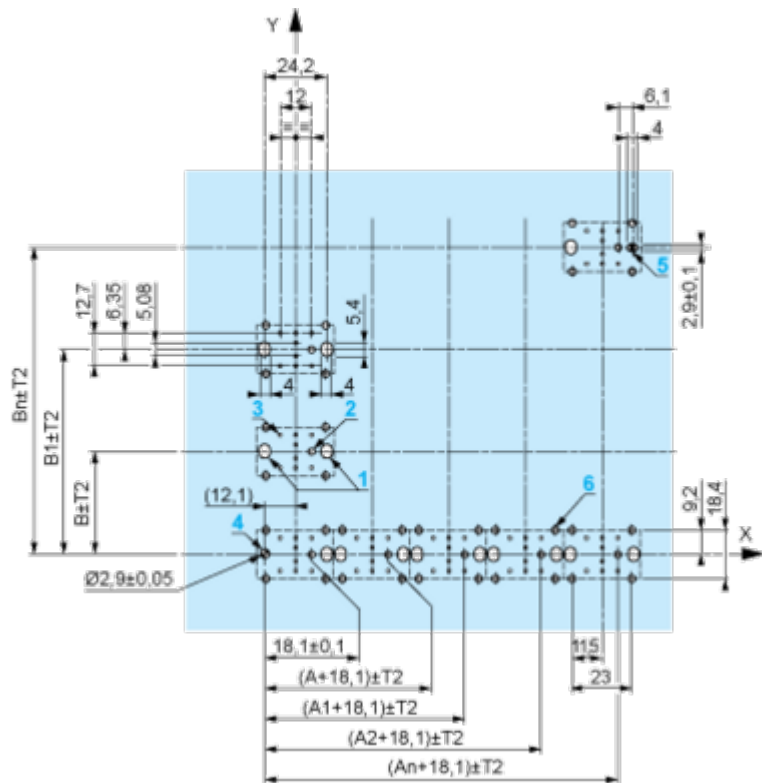
Panel Cut-outs (Viewed from Installer’s Side)



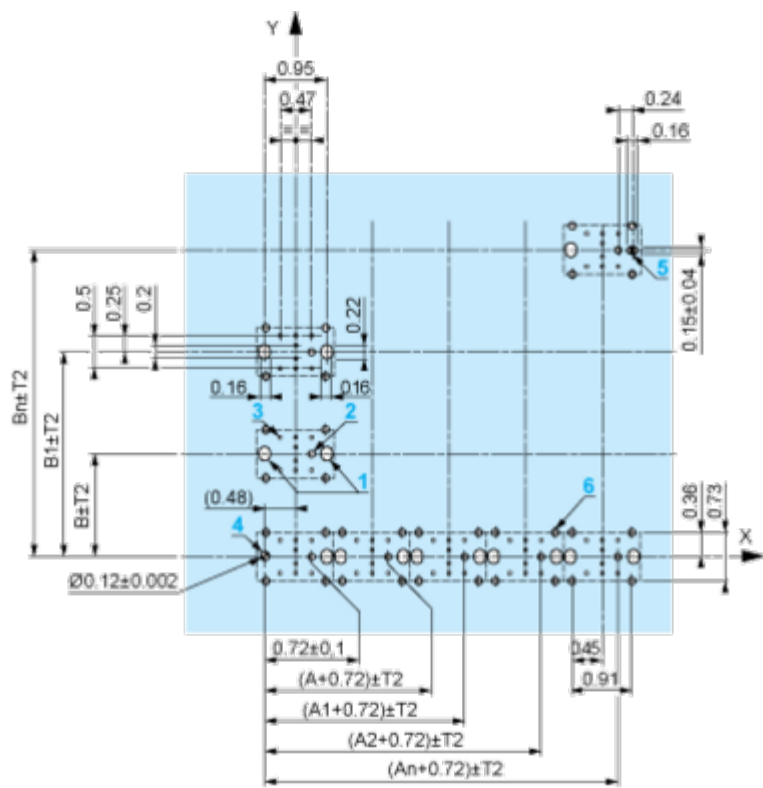
A: 30 mm min. / 1.18 in. min.
B: 40 mm min. / 1.57 in. min.

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.

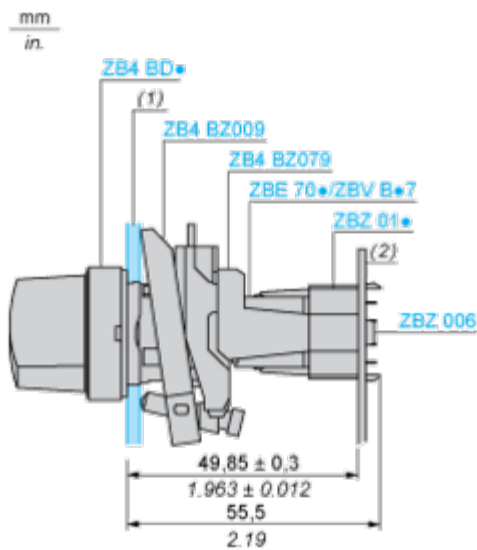
General Tolerances of the Panel and Printed Circuit Board

The cumulative tolerance must not exceed 0.3 mm / 0.012 in: $T1 + T2 = 0.3 \text{ mm max.}$

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 ZB4 BZ009: $\pm 2^\circ 30'$ (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 ZB4 BZ079 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 (ZB4 BD*, ZB4 BJ*, ZB4 BG*).

The fixing centers marked **a** and **b** are diagonally opposed and must align with those marked **4** and **5**.



(1) Panel

(2) Printed circuit board

Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ for centring adapter ZBZ 01•
- 3 $8 \times \varnothing 1.2 \text{ mm} / 0.05 \text{ in.}$ holes
- 4 1 hole $\varnothing 2.9 \text{ mm} \pm 0.05 / 0.11 \text{ in.} \pm 0.002$, 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 $\varnothing 2.4 \text{ mm} / 0.09 \text{ in.}$ for clipping in adapter ZBZ 01•

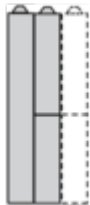
Dimensions An + 18.1 relate to the $\varnothing 2.4 \text{ mm} \pm 0.05 / 0.09 \text{ in.} \pm 0.002$ holes for centring adapter ZBZ 01•.

Technical Description

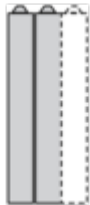
Electrical Composition Corresponding to Code C7



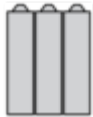
Electrical Compositions Corresponding to Code C8



Electrical Compositions Corresponding to Code C10



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



Electrical Composition Corresponding to Code C15

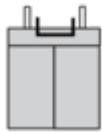
1 N/O



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

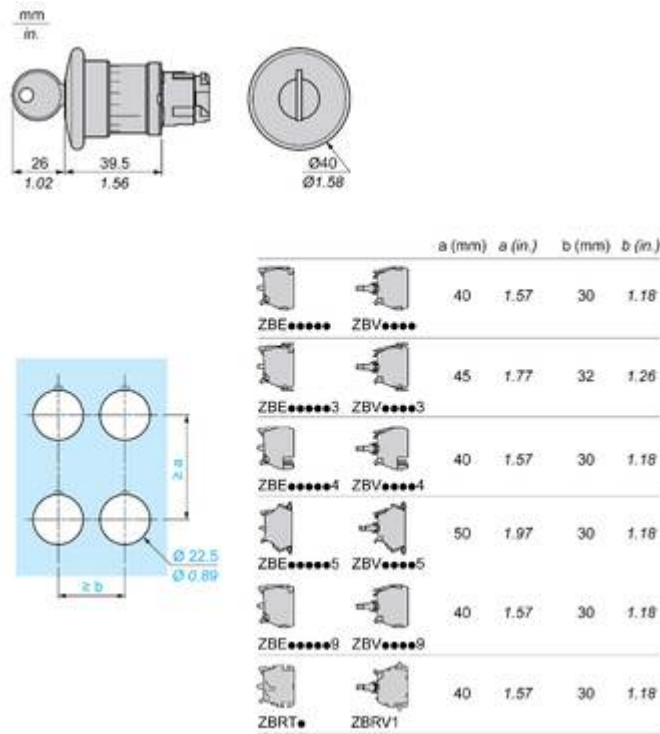


Possible location



Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Features

Harmony XB4 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 XAPK 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.



Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony XB4 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.



Fit for all machine sizes and environments:

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

Designed as per international standards for high performance.

Image of product / Alternate images

Alternative



