

# ZB5AT8643M

Illuminated emergency stop switching off head, Harmony XB5, plastic, red mushroom 40mm, 22mm, trigger latching push pull, with state indicator



## Main

Range of Product	Harmony XALF Harmony XB5
Product or Component Type	Head for illuminated emergency stop push-button
Device short name	ZB5
Bezel material	Dark grey plastic
Head type	Standard
Mounting diameter	0.87 in (22 mm)
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Trigger action and mechanical latching with mechanical state indicator
Reset	Push-pull
Operator profile	Red mushroom Ø 40 mm, unmarked
Device presentation	Basic element

## Complementary

CAD overall width	1.57 in (40 mm)
CAD overall height	1.57 in (40 mm)
CAD overall depth	2.32 in (59 mm)
Net Weight	0.07 lb(US) (0.034 kg)
Mechanical durability	500000 cycles
Station name	XALD 1 cut-out XALK 1 cut-out
Electrical composition code	M6 2 single front mounting integral LED and transformer M10 2 single front mounting integral LED MF1 2 single front mounting integral LED MR1 2 single rear mounting integral LED
Product Compatibility	Integral LED
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 IEC 60536
IP degree of protection	IP54 IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m
IK degree of protection	IK05 IEC 50102

Standards	EN 81-1 GB 14048.5 UL 508 EN/ISO 13850 EN/IEC 60204-1 CSA C22.2 No 14 EN/IEC 60947-1 JIS C8201-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-1
Product Certifications	CSA[RETURN]BV[RETURN]LROS (Lloyds register of shipping) [RETURN]DNV[RETURN]GL[RETURN]UL Listed
Vibration resistance	5 gn 2...500 Hz)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	22467-PUSHBUTTONS,22MM(PLASTIC) NEW
Discount Schedule	CS2
GTIN	3389119003766
Returnability	Yes
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.09 in (5.3 cm)
Package 1 Width	1.73 in (4.4 cm)
Package 1 Length	3.23 in (8.2 cm)
Package 1 Weight	1.59 oz (45.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	42
Package 2 Height	5.91 in (15.0 cm)
Package 2 Width	11.81 in (30.0 cm)
Package 2 Length	15.75 in (40.0 cm)
Package 2 Weight	4.87 lb(US) (2.208 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	672
Package 3 Height	30.31 in (77.0 cm)
Package 3 Width	31.50 in (80.0 cm)
Package 3 Length	23.62 in (60.0 cm)
Package 3 Weight	96.34 lb(US) (43.7 kg)

## Offer Sustainability

Sustainable offer status	Green Premium product
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>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>

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Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

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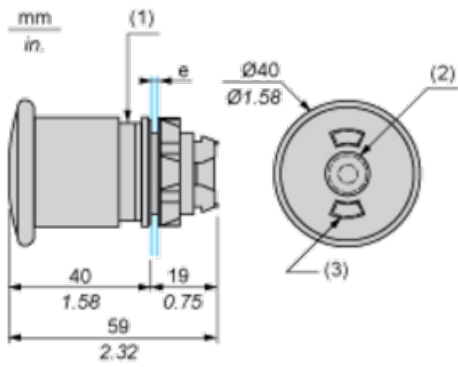
### Contractual warranty

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Warranty	18 months
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Dimensions



e: panel thickness: 1 to 6 mm / 0.04 to 0.24 in.

(1) 360° "red/green" mechanical indicator

(2) Pilot light

(3) "Red/green" mechanical indicator

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

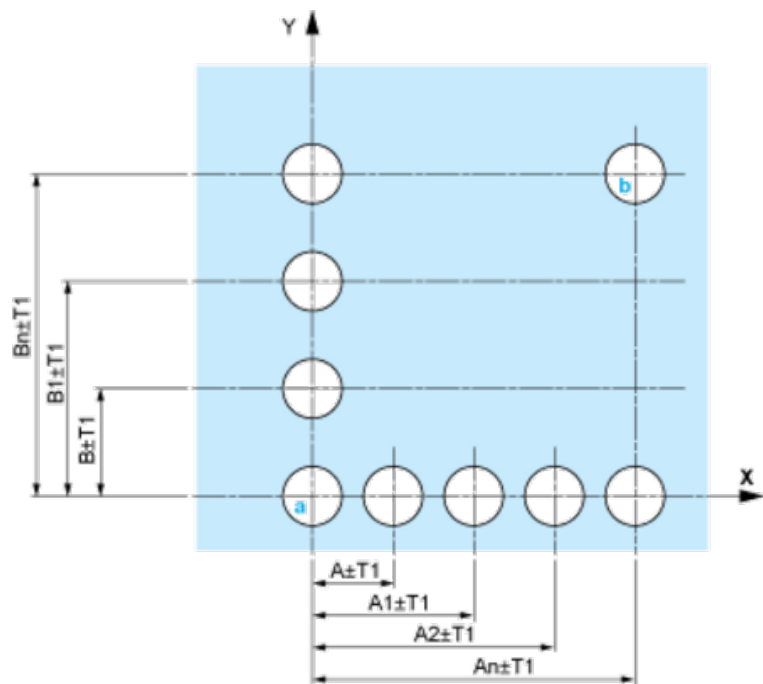
Detail of Lug Recess



- (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 ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

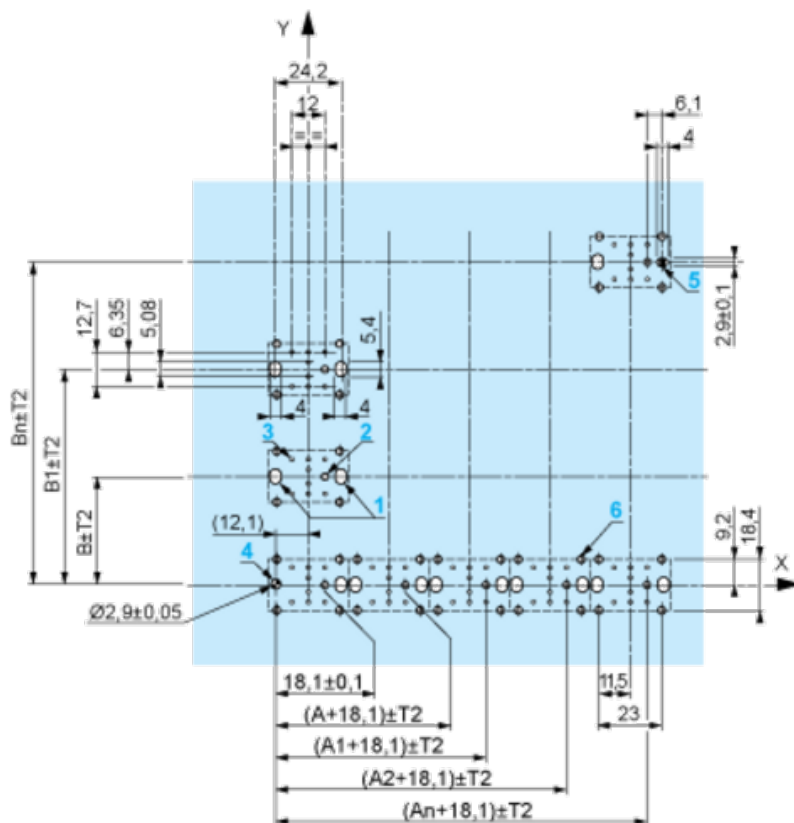


A: 30 mm min. / 1.18 in. min.

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

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

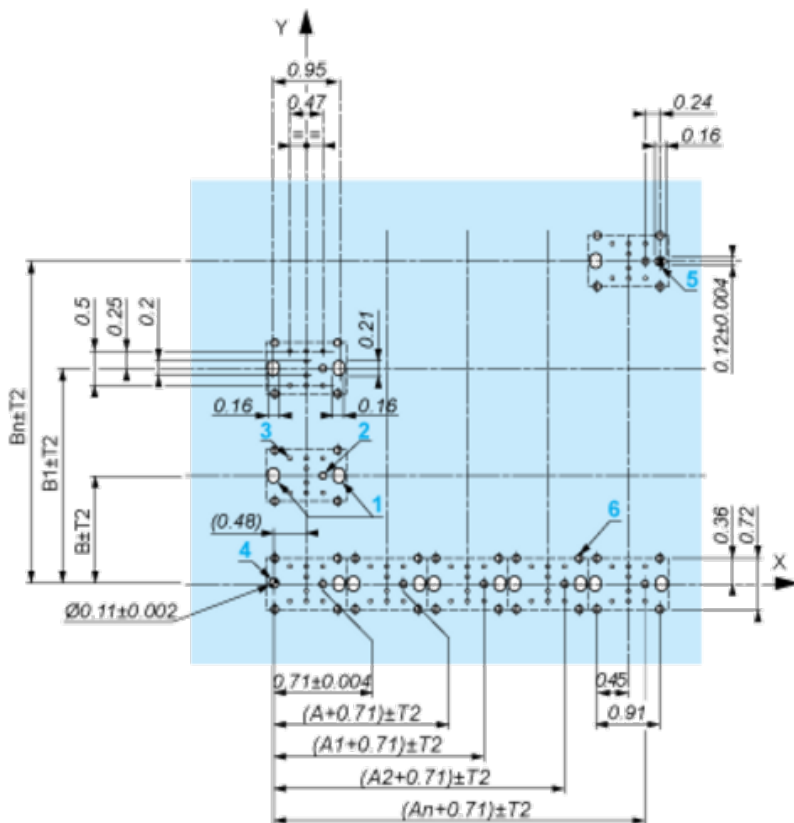
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.

B: 1.57 in. min.

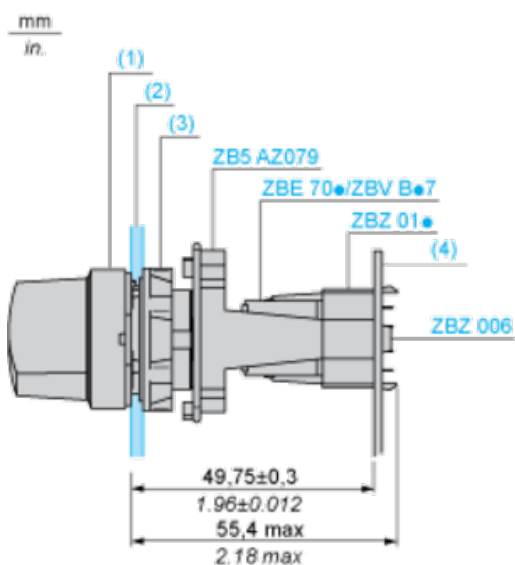
### General Tolerances of the Panel and Printed Circuit Board

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 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•

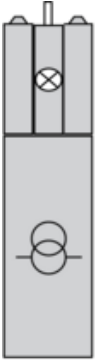
Dimensions An + 18.1 relate to the  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.



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Electrical Composition Corresponding to Codes M6 and P2

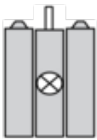
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Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2

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Legend

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Single contact

Double contact

Light block

Possible location

