

Head for illuminated push button, Harmony XB5, red square projecting illum pushbutton Ø22 mm spring return integral LED

ZB5CW143

Discontinued on: 20 October 2020

Main

Range of product	Harmony XB5	
Product or component type	Head for illuminated push-button	
Device short name	ZB5	
Product compatibility	Integral LED	
Bezel material	Dark grey plastic	
Mounting diameter	22 mm	
Sale per indivisible quantity	1	
Head type	Standard	
Shape of signaling unit head	Square	
Type of operator	spring return	
Operator profile	Red projecting, unmarked	
Operator additional information	For insertion of legend	

Complementary

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CAD overall width	30 mm
CAD overall height	30 mm
CAD overall depth	34 mm
Net weight	0.024 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	10000000 cycles
Main group	Illum push-button
Group of product	Proj push integral LED
Station name	XALD 15 cut-outs XALK 25 cut-outs
Cap/Operator or lens colour	Red
Marking	Unmarked
Electrical composition code	M1 for <6 contacts using single blocks in front mounting with integral LED M2 for <6 contacts using single and double blocks in front mounting with integral LED M6 for <2 contacts using single blocks in front mounting with integral LED and transformer

M10 for <2 contacts using single blocks in front mounting with integral LED

Life Is On Schneider Mar 23, 2023

Device presentation	Basic element
Borioc procentation	200.0 0.0

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Protective treatment	TC	
Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-4070 °C	
Overvoltage category	Class II conforming to IEC 60536	
IP degree of protection	IP66 conforming to IEC 60529	
NEMA degree of protection	NEMA 13 NEMA 4X	
IK degree of protection	IK05 conforming to EN 50102	
Product certifications	DNV GL UL listed LROS (Lloyds register of shipping) CSA BV	
Vibration resistance	5 gn (f= 2500 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	Db
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	3.4 cm
Package 1 Length	5.4 cm
Package 1 Weight	21 g

Offer Sustainability

Sustainable offer status	Green Premium product		
REACh Regulation	REACh Declaration		
REACh free of SVHC	Yes		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration		
Toxic heavy metal free	Yes		
Mercury free	Yes		
China RoHS Regulation	China RoHS declaration		
RoHS exemption information	Yes		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	End of Life Information		
California proposition 65 WARNING: This product can expose you to chemicals including: Nickel compounds, who to the State of California to cause cancer, and Di-isodecyl phthalate (DIDP), which is known State of California to cause birth defects or other reproductive harm. For more information www.P65Warnings.ca.gov			

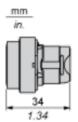
Contractual warranty

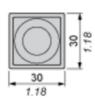
Warranty	18 months	

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Dimensions Drawings

Dimensions

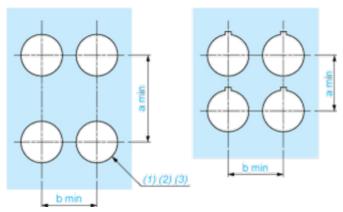




Mounting and Clearance

Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

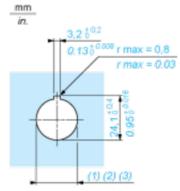
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 (Ø22.3 $_{0}^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 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

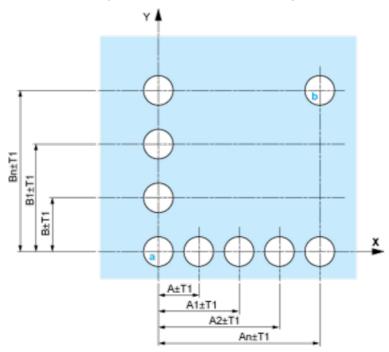


- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended (Ø22.3 $_0^{+0.4}$) / Ø0.89 in. recommended (Ø0.88 in. $_0^{+0.016}$)

Mounting and Clearance

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

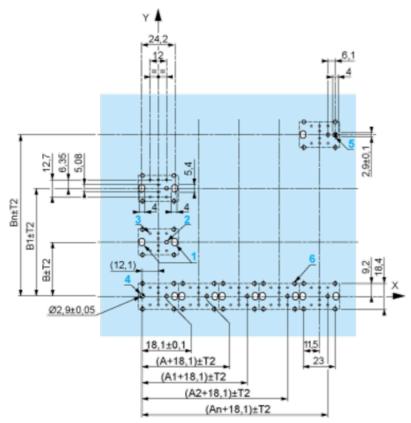
Panel Cut-outs (Viewed from Installer's Side)



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)

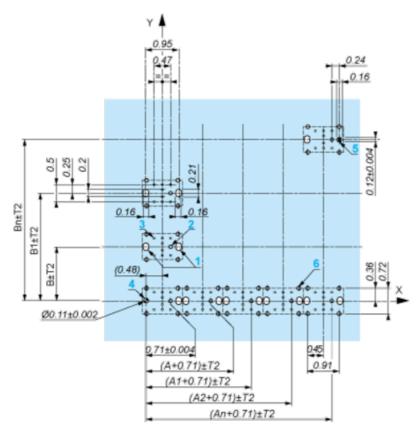
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

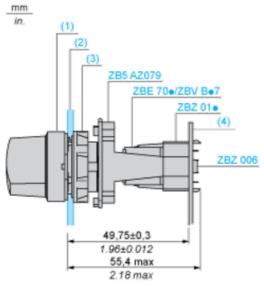
General Tolerances of the Panel and Printed Circuit Board

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:
 - \circ every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
 - \circ $\;$ with each selector switch head (ZB5AD•, ZB5AJ•, ZB5AG•).

The fixing centers marked ${\bf a}$ and ${\bf b}$ are diagonally opposed and must align with those marked ${\bf 4}$ and ${\bf 5}$.



- (1) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

Mounting of Adapter (Socket) ZBZ01•

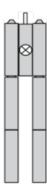
- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ01•
- $3.8 \times \emptyset 1.2 \text{ mm} / 0.05 \text{ in. holes}$
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 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 \pm 0.05 / 0.09 in. \pm 0.002 holes for centring adapter ZBZ01•.

ZB5CW143

Technical Description

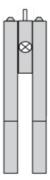
Electrical Composition Corresponding to Codes M1 and M7



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Technical Description

Electrical Composition Corresponding to Codes M2 and M8



ZB5CW143

Technical Description

Electrical Composition Corresponding to Codes M6 and P2



ZB5CW143

Technical Description

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



ZB5CW143

Technical Description

Lea	en	d
Leg	en	u

Single contact



Double contact



Light block



Possible location



Recommended replacement(s)

ZB5CW143 is replaced by the following product range:







Harmony XB5

 $\ensuremath{\text{\emptyset}}$ 22 mm modular plastic pushbuttons, switches, and pilot lights

Products: 2303