

Head for illuminated selector switch, Harmony XB5, dark grey plastic, white handle, 22mm, universal LED, 3 positions,

ZB5AK1513

Important message: A change in appearance may be noted on the product but does not affect its use in terms of function and safety. This makes it compatible with our Universal LED blocks

#### Main

Range Of Product	Harmony XB5		
Product Or Component Type	Head for illuminated selector switch		
Product Compatibility	Universal LED		
Device Short Name	ZB5		
Bezel Material	Dark grey plastic		
Mounting Diameter	22 mm		
Head Type	Standard		
Sale Per Indivisible Quantity	1		
Shape Of Signaling Unit Head	Round		
Type Of Operator	To centre spring return		
Operator Profile	White standard handle		
Operator Position Information	3 positions +/- 45°		

## **Complementary**

Cad Overall Width	29 mm
Cad Overall Height	29 mm
Cad Overall Depth	43 mm
Net Weight	0.016 kg
Mechanical Durability	500000 cycles
Station Name	XALD 15 cut-outs XALK 25 cut-outs
Electrical Composition Code	M3 for <4 contacts using single 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 MF1 for <2 contacts using single blocks in front mounting with integral LED MR1 for <2 contacts using single blocks in rear mounting with integral LED M4 for <4 contacts using single and double blocks in front mounting with integral LED
Device Presentation	Basic element

#### **Environment**

Protective Treatment	тн
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 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	IK04 conforming to IEC 50102			
Standards	EN/IEC 60947-5-4 CSA C22.2 No 14 EN/IEC 60947-5-1 JIS C8201-5-1 EN/IEC 60947-5-5 EN/IEC 60947-1 UL 508 JIS C8201-1			
Product Certifications	CSA BV LROS (Lloyds register of shipping) DNV UL listed GL			
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	PCE
Number Of Units In Package 1	1
Package 1 Height	3.5 cm
Package 1 Width	5.4 cm
Package 1 Length	6 cm
Package 1 Weight	24 g
Unit Type Of Package 2	S03
Number Of Units In Package 2	200
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	5.286 kg

# **Contractual warranty**

Warranty 18 months

# Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



RoHS/REACh

# Well-being performance

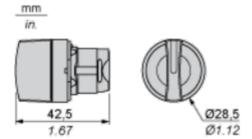
<b>⊘</b>	Reach Free Of Svhc	
<b>⊘</b>	Toxic Heavy Metal Free	
<b>⊘</b>	Mercury Free	
<b>9</b>	Rohs Exemption Information	Yes

### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
China Rohs Regulation	China RoHS 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

# **Dimensions Drawings**

## **Dimensions**

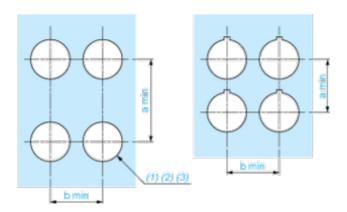


### **ZB5AK1513**

#### Mounting and Clearance

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

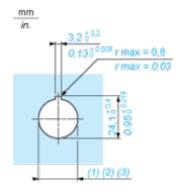
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

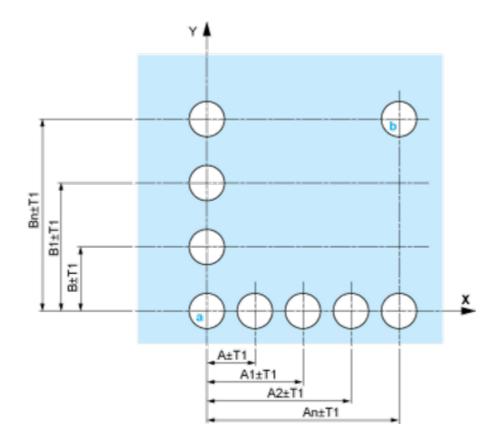
#### **Detail of Lug Recess**



- (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.  $_0^{+0.016}$ )

### Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

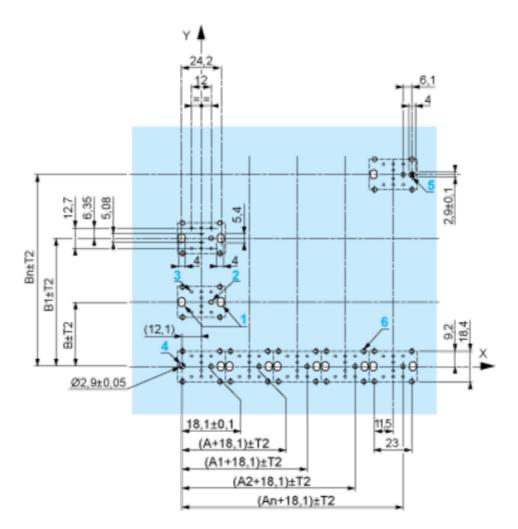


**A:** 30 mm min. / 1.18 in. min. **B:** 40 mm min. / 1.57 in. min.

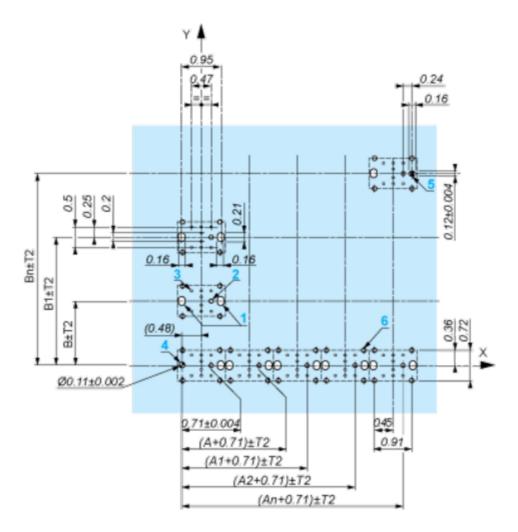
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm

# **ZB5AK1513**



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

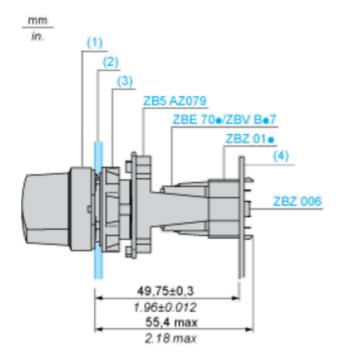
The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 mm max.

#### **Installation Precautions**

- $_{\bullet}$  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).
  - o 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  ${\bf 5}$ .

### **ZB5AK1513**



- (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 × Ø 1.2 mm / 0.05 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•

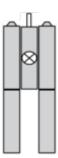
Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.

# **Product data sheet**

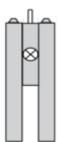
# **ZB5AK1513**

**Technical Description** 

**Electrical Composition Corresponding to Code M3** 



## **Electrical Composition Corresponding to Code M4**



## **Electrical Composition Corresponding to Codes M6 and P2**



# **Product data sheet**

# ZB5AK1513

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

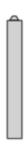


## Legend

Single contact



Double contact



Light block



Possible location



# Sequence of Contacts Fitted to 3-position Selector Switch Body

#### Position 315°



	Position	Тор			
Push	Position	Bottom		$\otimes$	$\triangle$
	Location		Left		Right
	State		1		0
Cantasta	N/O		closed		open
Contacts	N/C		open		closed

## Position 0°



	Position	Тор		
Push		Bottom		$\triangle$
	Location		Left	Right
	State		0	0
Contacts	N/O		open	open
Contacts	N/C		closed	closed

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### Position 45°



	Position	Тор			
Push	Position	Bottom		$\otimes$	
	Location		Left		Right
	State		0		1
Contacts	N/O		open		closed
Contacts	N/C		closed		open