

# ZB5AK1513

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



## 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	0.87 in (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	1.14 in (29 mm)
CAD overall height	1.14 in (29 mm)
CAD overall depth	1.69 in (43 mm)
Net Weight	0.04 lb(US) (0.016 kg)
Mechanical durability	1000000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Electrical composition code	M3 4 single front mounting integral LED 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 M4 4 single and double front mounting integral LED
Device presentation	Basic element

## 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	IP66 IEC 60529 IP67 IP69 IP69K
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	IK06 IEC 50102

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

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 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	3389110138047
Returnability	No
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.38 in (3.5 cm)
Package 1 Width	2.13 in (5.4 cm)
Package 1 Length	2.36 in (6 cm)
Package 1 Weight	0.85 oz (24 g)
Unit Type of Package 2	S03
Number of Units in Package 2	200
Package 2 Height	11.81 in (30 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	11.65 lb(US) (5.286 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>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

## Contractual warranty

Warranty	18 months
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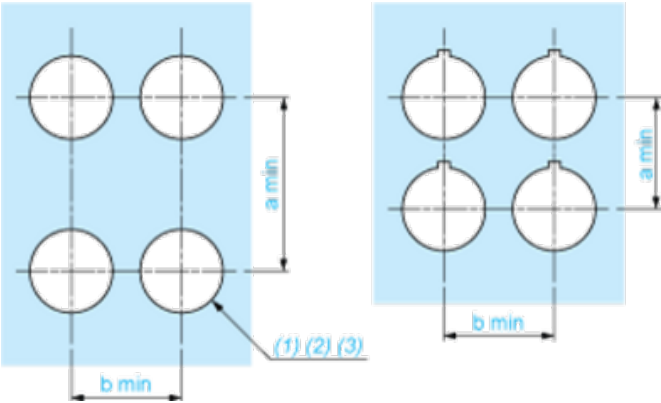
Dimensions

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

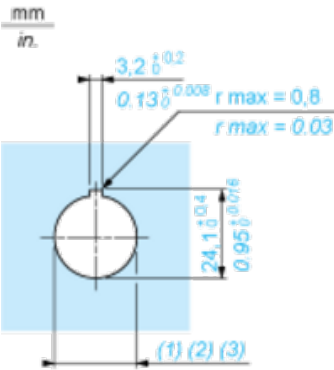
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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 ( $\text{Ø}22.3_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88\text{ in.}_0^{+0.016}$ )

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

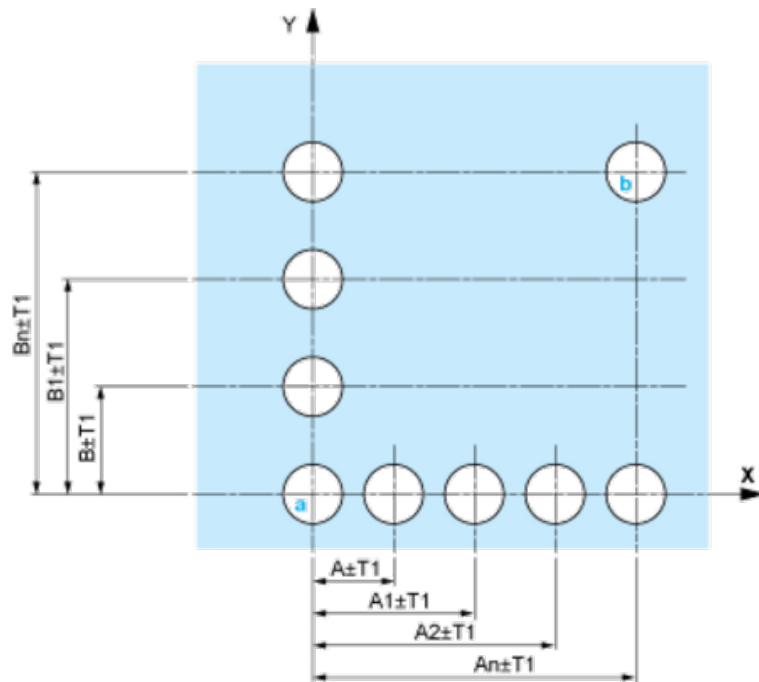
Detail of Lug Recess



- (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) Ø22.5 mm recommended ( $\text{Ø}22.3_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88\text{ in.}_0^{+0.016}$ )

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.



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

- 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•).

Technical drawing of a ZB5 AZ079 assembly. The drawing shows a side view of the component with various dimensions and labels. The dimensions are:

- 49.75 ± 0.3
- 1.96 ± 0.012
- 55.4 max
- 2.18 max

The labels and callouts are:

- (1)
- (2)
- (3)
- ZB5 AZ079
- ZBE 70●/ZBV B●7
- ZBZ 01●
- (4)
- ZBZ 006

The drawing also includes a scale bar indicating mm and in.

- (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 Code M3

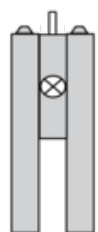
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Electrical Composition Corresponding to Code M4

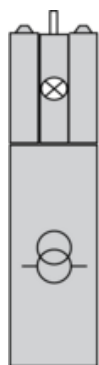
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Electrical Composition Corresponding to Codes M6 and P2

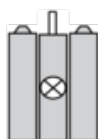
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Electrical Composition Corresponding to Codes M5, M10, MF1, MR1 and MF2

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Legend

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Single contact



Double contact

Light block

Possible location



Sequence of Contacts Fitted to 3-position Selector Switch Body





Position 315°



Push	Position	Top			
Bottom					
Location		Left	Right		
State		1	0		
Contacts	N/O		closed	open	
N/C		open	closed		





Position 0°



Push	Position	Top			
Bottom					
Location		Left	Right		
State		0	0		
Contacts	N/O		open	open	
N/C		closed	closed		

### Position 45°



Push	Position	Top			
Bottom					
Location		Left	Right		
State		0	1		
Contacts	N/O		open	closed	
N/C		closed	open		