



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

ZB5AK1553

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

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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	Orange 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	1000000 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 TH

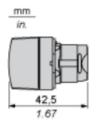
	-4070 °C
Ambient air temperature for storage	16
Ambient air temperature for operation	-4070 °C
Overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K
NEMA degree of protection	NEMA 13 NEMA 4X
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
IK degree of protection	IK06 conforming to IEC 50102
Standards	EN/IEC 60947-5-5 UL 508 EN/IEC 60947-5-1 EN/IEC 60947-1 JIS C8201-5-1 EN/IEC 60947-5-4 CSA C22.2 No 14 JIS C8201-1
Product certifications	GL CSA LROS (Lloyds register of shipping) BV DNV UL listed
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	
Packing Units Unit Type of Package 1	
Packing Units Unit Type of Package 1 Number of Units in Package 1	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db
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Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Length	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm 26.5 cm 3.3 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Length Package 2 Weight	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm 26.5 cm 3.3 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Width Package 2 Weight Unit Type of Package 3	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm 26.5 cm 3.3 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Width Package 2 Weight Unit Type of Package 3 Number of Units in Package 3	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm 26.5 cm 3.3 cm 117 g Doboz 200
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Width Package 2 Weight Unit Type of Package 3 Number of Units in Package 3 Package 3 Height	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm 26.5 cm 3.3 cm 117 g Doboz 200 30 cm
Packing Units Unit Type of Package 1 Number of Units in Package 1 Package 1 Height Package 1 Width Package 1 Length Package 1 Weight Unit Type of Package 2 Number of Units in Package 2 Package 2 Height Package 2 Width Package 2 Weight Unit Type of Package 3 Number of Units in Package 3 Package 3 Height Package 3 Width	50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 Db 1 4.5 cm 5.2 cm 3.3 cm 23.4 g Gyári csomagolás 5 4.5 cm 26.5 cm 3.3 cm 117 g Doboz 200 30 cm
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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: 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
Contractual warranty	
Warranty	18 months

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Dimensions Drawings

Dimensions

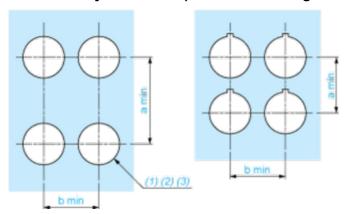




Mounting and Clearance

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

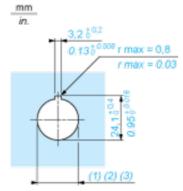
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

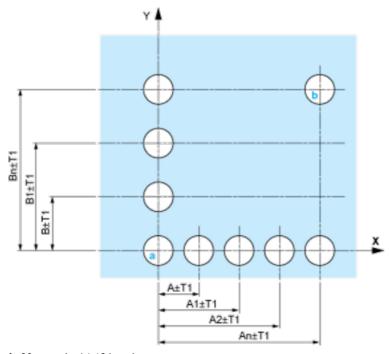
Detail of Lug Recess



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

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

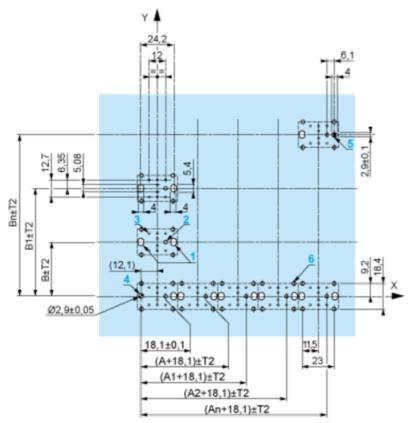
Panel Cut-outs (Viewed from Installer's Side)



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)

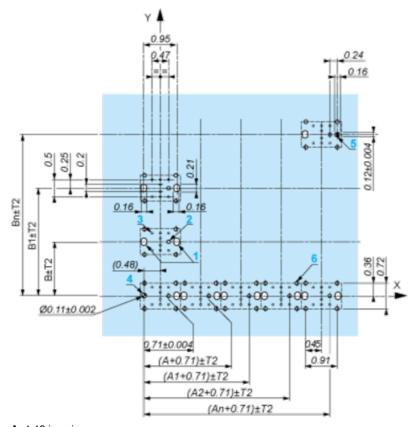
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



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

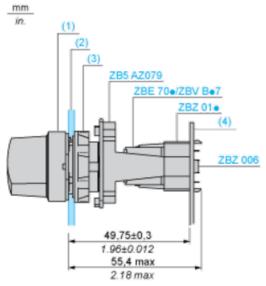
General Tolerances of the Panel and Printed Circuit Board

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•.

ZB5AK1553

Technical Description

Electrical Composition Corresponding to Code M3



ZB5AK1553

Technical Description

Electrical Composition Corresponding to Code M4



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Technical Description

Electrical Composition Corresponding to Codes M6 and P2



ZB5AK1553

Technical Description

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



ZB5AK1553

Technical Description

Lea	en	d
-09		•

Single contact



Double contact



Light block



Possible location



ZB5AK1553

Technical Description

Sequence of Contacts Fitted to 3-position Selector Switch Body

Position 315°



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

Position 0°



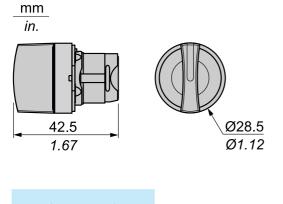
Push	Position	Тор		
		Bottom	\triangle	\triangle
	Location		Left	Right
	State		0	0
Contacts	N/O		open	open
	N/C		closed	closed

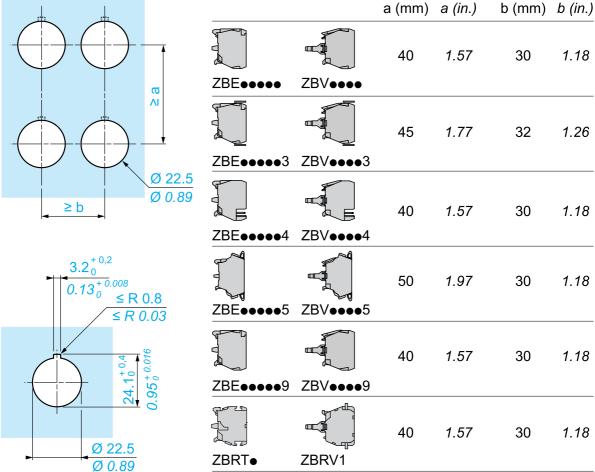
Position 45°



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

Dimensions





Recommended replacement(s)