# Product data sheet Characteristics

# ZB5AK1233

Head for illuminated selector switch, Harmony XB5, Harmony XALF, grey plastic, green handle, 22mm, universal LED, 2 positions





Main	
Range of product	Harmony XB5 Harmony XALF
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	Stay put
Operator profile	Green standard handle
Operator position information	2 positions 90°

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 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
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



UL 508				
CSA C22.2 No 14				
JIS C8201-5-1				
EN/IEC 60947-5-5				
EN/IEC 60947-5-1				
EN/IEC 60947-5-4				
EN/IEC 60947-1				
JIS C8201-1				
UL listed[RETURN]DNV[RETURN]LROS (Lloyds register of shipping) [RETURN]BV[RETURN]GL[RETURN]CSA				
5 gn (f= 2500 Hz) conforming to IEC 60068-2-6				
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	5.700 cm
Package 1 Width	5.200 cm
Package 1 Length	3.300 cm
Package 1 Weight	23.000 g
Unit Type of Package 2	S03
Number of Units in Package 2	200
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.249 kg
Unit Type of Package 3	P06
Number of Units in Package 3	1600
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	52.604 kg

# 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) Declaration			
Toxic heavy metal free	Yes			
Mercury free	Yes			
China RoHS Regulation	China RoHS Declaration			
RoHS exemption information	<b>⊡</b> Yes			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	End Of Life Information			

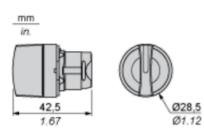
# Contractual warranty

Warranty	18 months

Product data sheet Dimensions Drawings

# ZB5AK1233

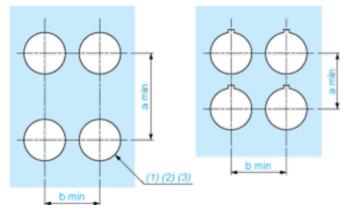
# Dimensions



# ZB5AK1233

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

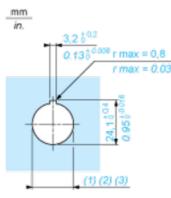
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.  $_0$  <sup>+0.016</sup>)

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

#### Life Is On Schneider

#### 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:
  - 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.



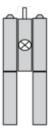
#### Mounting of Adapter (Socket) ZBZ01•

- 1 2 elongated holes for ZBZ006 screw access
- 2 1 hole Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ01•
- 38 × 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•

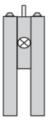
Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

# ZB5AK1233

## Electrical Composition Corresponding to Code M3



#### Electrical Composition Corresponding to Code M4



## Electrical Composition Corresponding to Codes M6 and P2



### 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 2-position Selector Switch Body

### Position 315°



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

# Position 45°



Push	Position	Тор			
Bottom				<u> </u>	
Location	I	Left	Right		
State		1	1		
Contacts	N/O		closed	closed	
N/C		open	open		-