Specifications



## Head for illuminated selector switch, Harmony XB4, universal LED, white handle, 22mm, 2 positions, spring return

Local distributor code: 237118723 ZB4BK1413

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 EAN Code : 3389110890471

#### Main

wain					
Range of product	Harmony XB4				
Product or component type	Head for illuminated selector switch				
Product compatibility	Universal LED				
Device short name	ZB4				
Bezel material	Chromium plated metal				
Head type	Standard				
Mounting diameter	22 mm				
Sale per indivisible quantity	1				
Shape of signaling unit head	Round				
Type of operator	Right to left spring return				
Operator profile	White standard handle				
Operator position information	2 positions 90°				
Complementary					
CAD overall width	29 mm				
CAD overall height	29 mm				
CAD overall depth	43 mm				

Net weight	0.037 kg				
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m				
Mechanical durability	500000 cycles				
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 M4 for <4 contacts using single and double blocks in front mounting with integral LED				
Device presentation	Basic element				

### Environment

**Protective treatment** 

Disclaimer: 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

Ambient air temperature for storage	-4070 °C				
Ambient air temperature for operation	-4070 °C				
Overvoltage category	Class I conforming to IEC 60536				
IP degree of protection	IP66 conforming to IEC 60529 IP67 IP69 IP69K				
NEMA degree of protection	NEMA 13 NEMA 4X				
IK degree of protection	IK04 conforming to IEC 50102				
Standards	EN/IEC 60947-5-1 EN/IEC 60947-1 EN/IEC 60947-5-5 JIS C8201-5-1 CSA C22.2 No 14 EN/IEC 60947-5-4 UL 508 JIS C8201-1				
Product certifications	CSA DNV BV UL listed GL LROS (Lloyds register of shipping)				
Vibration resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6				
Shock resistance30 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	4.800 cm
Package 1 Width	5.200 cm
Package 1 Length	3.300 cm
Package 1 Weight	42.900 g
Unit Type of Package 2	BB1
Number of Units in Package 2	5
Package 2 Height	4.800 cm
Package 2 Width	26.500 cm
Package 2 Length	3.300 cm
Package 2 Weight	215.000 g
Unit Type of Package 3	S03
Number of Units in Package 3	250
Package 3 Height	30.000 cm
Package 3 Width	30.000 cm
Package 3 Length	40.000 cm
Package 3 Weight	11.370 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) 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				

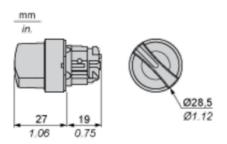
### **Contractual warranty**

Warranty

18 months

**Dimensions Drawings** 

### Dimensions



## ZB4BK1413

Mounting and Clearance

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

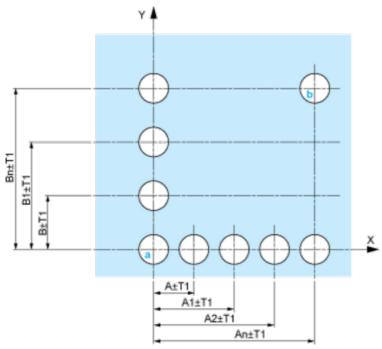
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board	Connection by Faston Connectors			
(1) Diameter on finished panel or support				
(2) 40 mm min. / 1.57 in. min.				
(3) 30 mm min. / 1.18 in. min.				
(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm $_0^{+0.4}$ / 0.88 in. $_0^{+0.016}$ )				
<b>(5)</b> 45 mm min. / 1.78 in. min.				
(6) 32 mm min. / 1.26 in. min.				

## ZB4BK1413

Mounting and Clearance

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

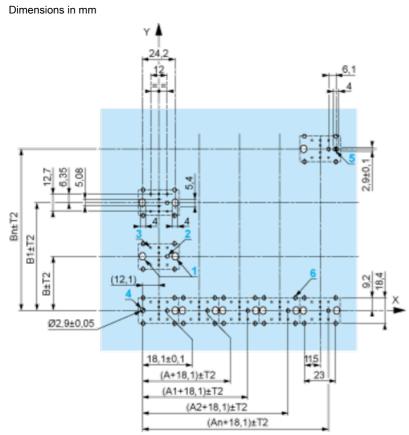
### Panel Cut-outs (Viewed from Installer's Side)



A: 30 mm min. / 1.18 in. min.

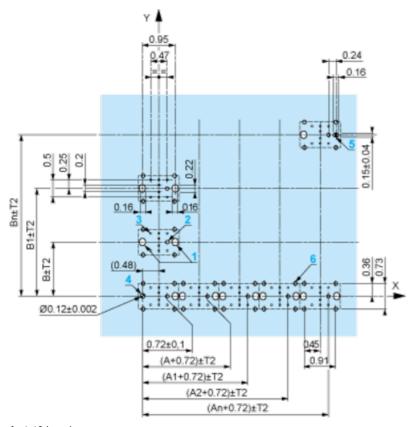
**B:** 40 mm min. / 1.57 in. min.

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



**A:** 30 mm min. **B:** 40 mm min.

Dimensions in in.





B: 1.57 in. min.

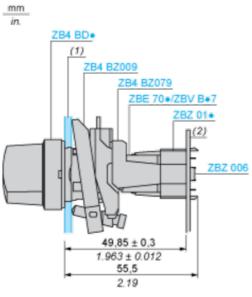
#### General Tolerances of the Panel and Printed Circuit Board

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 ZB4 BZ009: ± 2<sup>°</sup>30' (excluding cut-outs marked a and b).
- Tightening torque of screws ZBZ 006: 0.6 N.m (5.3 lbf.in) max.
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
  - $\circ~$  every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked a and b are diagonally opposed and must align with those marked 4 and 5.



(1) Panel

(2) Printed circuit board

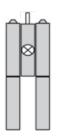
#### Mounting of Adapter (Socket) ZBZ 01•

- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 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 ZBZ 01•

Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ 01+.

Technical Description

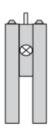
Electrical Composition Corresponding to Code M3





Technical Description

Electrical Composition Corresponding to Code M4



Technical Description

Electrical Composition Corresponding to Codes M6 and P2





## ZB4BK1413

Technical Description

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



**Technical Description** 

### Legend

Single contact



#### Double contact



#### Light block



#### Possible location



## ZB4BK1413

Technical Description

### Sequence of Contacts Fitted to 2-position Selector Switch Body

### Position 315°



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

### Position 45°



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

Recommended replacement(s)