

# Head for illuminated selector switch, Harmony XB4, metal, blue handle, 22mm, universal LED, 3 positions, right to center

Local distributor code: 237119515 ZB4BK1863

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: 3389110891065

Main

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 centre spring return			
Operator profile	Blue 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	0.036 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 TH

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 60947-5-5 UL 508 JIS C8201-5-1 EN/IEC 60947-1 EN/IEC 60947-5-4 EN/IEC 60947-5-1 CSA C22.2 No 14 JIS C8201-1
Product certifications	LROS (Lloyds register of shipping) UL listed DNV CSA BV 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	8.8 cm
Package 1 Width	3.4 cm
Package 1 Length	5.4 cm
Package 1 Weight	80 g
Unit Type of Package 2	BB1
Number of Units in Package 2	10
Package 2 Height	7 cm
Package 2 Width	26.5 cm
Package 2 Length	100 cm
Package 2 Weight	800 g
Unit Type of Package 3	S01
Number of Units in Package 3	50
Package 3 Height	15 cm
Package 3 Width	15 cm
Package 3 Length	40 cm
Package 3 Weight	2.275 kg
Offer Sustainability	
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration

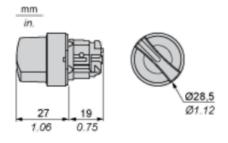
REACh free of SVHC	Yes				
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration				
Toxic heavy metal free	Yes				
Mercury free	Yes				
China RoHS Regulation	China RoHS declaration				
RoHS exemption information	Yes				
Environmental Disclosure	Product Environmental Profile				
Circularity Profile	End of Life Information				

Warranty 18 months

### **ZB4BK1863**

**Dimensions Drawings** 

#### **Dimensions**



### **ZB4BK1863**

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

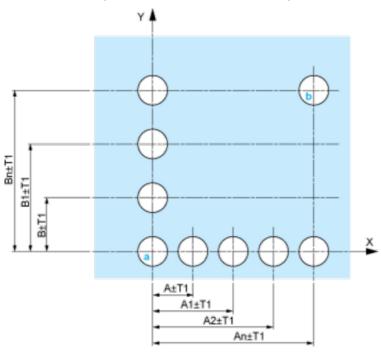
Connection by Faston Connectors

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.  $_0^{+0.016}$ )
- (5) 45 mm min. / 1.78 in. min.
- (6) 32 mm min. / 1.26 in. min.

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

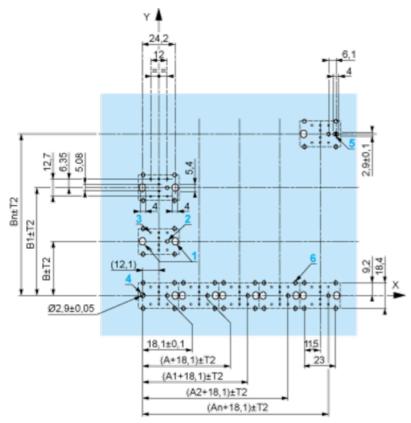
#### Panel Cut-outs (Viewed from Installer's Side)



**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)

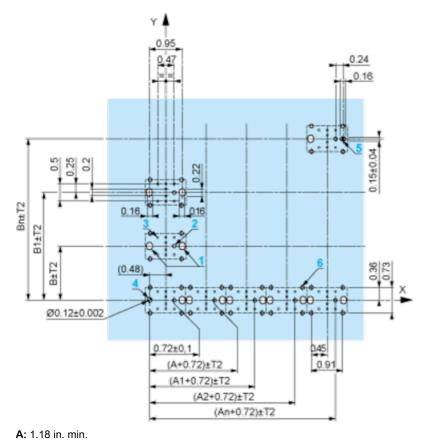
Dimensions in mm



**A:** 30 mm min.

**B**: 40 mm min.

Dimensions in in.



**B:** 1.57 in. min.

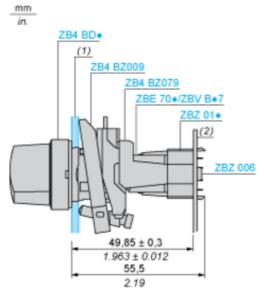
#### General Tolerances of the Panel and Printed Circuit Board

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 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:
  - o every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y).
  - $\circ$   $\,$  with each selector switch head (ZB4 BD•, ZB4 BJ•, ZB4 BG•).

The fixing centers marked  ${\bf a}$  and  ${\bf b}$  are diagonally opposed and must align with those marked  ${\bf 4}$  and  ${\bf 5}$ .



- (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 ± 0.05 / 0.09 in. ± 0.002 for centring adapter ZBZ 01•
- 3 8 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm  $\pm$  0.05 / 0.11 in.  $\pm$  0.002, for aligning the printed circuit board (with cut-out marked a)
- ${\bf 5}$  1 elongated hole for aligning the printed circuit board (with cut-out marked  ${\bf b}$ )
- 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•.

### **ZB4BK1863**

Technical Description

**Electrical Composition Corresponding to Code M3** 



**ZB4BK1863** 

Technical Description

**Electrical Composition Corresponding to Code M4** 



### **ZB4BK1863**

Technical Description

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



## **ZB4BK1863**

Technical Description

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



### **ZB4BK1863**

**Technical Description** 

Lea	en	d
Leg	en	u

Single contact



Double contact



Light block



Possible location



### **ZB4BK1863**

**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

#### Recommended replacement(s)