Product data sheet Characteristics

ZB4BK1833

green illuminated selector switch head Ø22 3-position spring return

Main	
Commercial Status	Commercialised
Range of product	Harmony XB4
Product or component type	Head for illuminated selector switch
Product compatibility	Integral LED
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return right to centre
Operator profile	Green standard handle
Operator position information	3 positions +/- 45°

Complementary

CAD overall width	29 mm		
CAD overall height	29 mm		
CAD overall depth	43 mm		
Product 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	M4 for <= 4 contacts using single and double blocks in front mounting with integral LED M10 for <= 2 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 M3 for <= 4 contacts using single blocks in front mounting with integral LED		

Environment

Environment			
Protective treatment	TH		
Ambient air temperature for storage	-4070 °C		
Ambient air temperature for operation	-2570 °C		
Class of protection against electric shock	Class I conforming to IEC 60536		
IP degree of protection	IP69K conforming to IEC 60529		
NEMA degree of protection	NEMA 4X NEMA 13		
IK degree of protection	IK06 conforming to IEC 50102		
Standards	CSA C22-2 No 14 EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508		
Product certifications	BV CSA DNV GL LROS (Lloyds register of shipping) RINA UL listed		

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.

Vibration resistance	5 gn (f = 2500 Hz) conforming to IEC 60068-2-6	
Shock resistance	50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27 30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27	

Contractual warranty

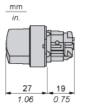
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Period	18 months
Period	10 11011(1)5



Product data sheet Dimensions Drawings

ZB4BK1833

Dimensions





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

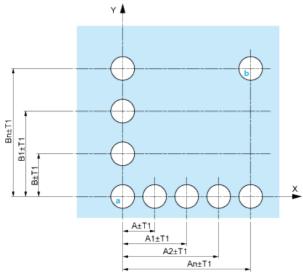
Connection by Faston Connectors

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) \varnothing 22.5 mm / 0.89 in. recommended (\varnothing 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

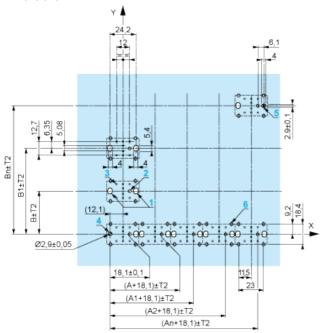
Panel Cut-outs (Viewed from Installer's Side)



- A: 30 mm min. / 1.18 in. min.
- B: 40 mm min. / 1.57 in. min.

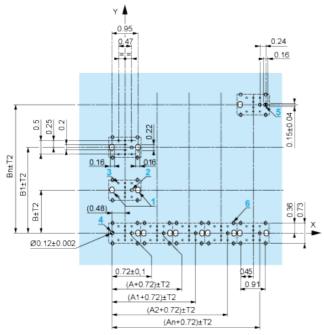
Printed Circuit Board Cut-outs (Viewed from Electrical Block Side)

Dimensions in mm



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





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 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).
 - o 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.

TB4 BD •

(1)

ZB4 BZ009

ZB4 BZ079

ZBE 70 • (ZBV B • 7

ZBZ 01 •

(2)

ZBZ 006

49,85 ± 0,3

1.963 ± 0.012

55,5

2.19

- (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 ± 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•.

Product data sheet Technical Description

ZB4BK1833

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 3-position Selector Switch Body Position 315° Position Push Тор Bottom \triangle Left Right Location State 1 0 N/O Contacts closed open N/C open closed Position 0° Push Тор Position Bottom

Left

0

Right

Location

State

Contacts	N/O		open	open
N/C		closed	closed	

Position 45°



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