### Product data sheet Characteristics

## ZB4BG9 PUSH BUTTON

Product availability: Stock - Normally stocked in distribution facility



Main	
Range of product	Harmony XB4
Product or component type	Head for key selector switch
Device short name	ZB4
Bezel material	Chromium plated metal
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Operator profile	Black key switch
Type of operator	Stay put
Operator position infor- mation	3 positions +/- 45°
Type of keylock	Ronis 455
Key withdrawal position	Left

#### Complementary

Device presentation	Basic element			
	C3 6 contacts using single blocks in front mounting			
	C6 for 5 contacts using single and double blocks in front mounting			
	C5 for 5 contacts using single blocks in front mounting			
	C4 6 contacts using single and double blocks in front mounting			
	C8 4 contacts using single and double blocks in front mounting			
	C7 4 contacts using single blocks in front mounting			
Electrical composition code	C11 3 contacts using single blocks in front mounting			
Mechanical durability	1000000 cycles			
Resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (55 °C),distance: 0.1 m			
Product weight	0.22 lb(US) (0.098 kg)			
CAD overall depth	2.83 in (72 mm)			
CAD overall height	1.14 in (29 mm)			
CAD overall width	1.14 in (29 mm)			

#### Environment

Protective treatment	TH			
Ambient air temperature for storage	-40158 °F (-4070 °C)			
Ambient air temperature for operation	-40158 °F (-4070 °C)			
Overvoltage category	Class I conforming to IEC 60536			
IP degree of protection	IP69 IP67 IP66 conforming to IEC 60529 IP69K			
NEMA degree of protection	NEMA 13 NEMA 4X			
IK degree of protection	IK06 (with keyhole cover ZBGP) conforming to IEC 50102			
Standards	GB 14048.5 CSA C22.2 No 14 UL 508 EN/IEC 60947-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 EN/IEC 60947-5-1			

DNV
GL
UL listed
RINA
BV
CSA
LROS (Lloyds register of shipping)
5 gn (f = 2500 Hz) conforming to IEC 60068-2-6
30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC
60068-2-27
50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27

#### Ordering and shipping details

Category	22468 - PUSHBUTTONS,22MM(METAL) NEW		
Discount Schedule	CS2		
GTIN	00785901371274		
Nbr. of units in pkg.	1		
Package weight(Lbs)	0.23000000000001		
Returnability	Y		
Country of origin	FR		

#### Offer Sustainability

California proposition 65	WARNING: This product can expose you to chemicals including:
Substance 1	Nickel compounds, which is known to the State of California to cause cancer, and
Substance 2	Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
More information	For more information go to www.p65warnings.ca.gov

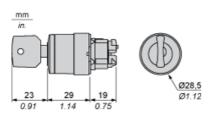
#### Contractual warranty

Warranty period

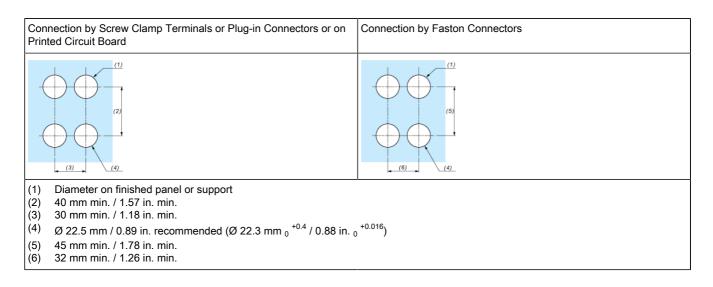
18 months

Product data sheet Dimensions Drawings ZB4BG9

Dimensions

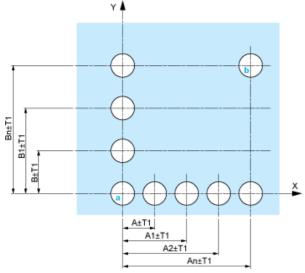


#### Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)



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

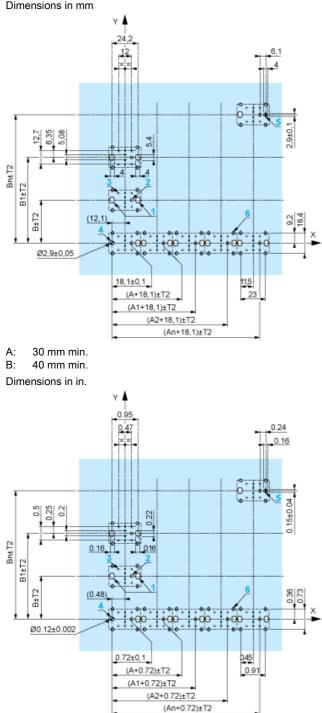
#### Panel Cut-outs (Viewed from Installer's Side)



- 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



1.18 in. min. A:

B: 1.57 in. min.

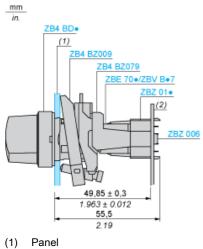
#### General Tolerances of the Panel and Printed Circuit Board

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. ٠
- Allow for one ZB4 BZ079 fixing collar/pillar and its fixing screws:
  - every 90 mm / 3.54 in. horizontally (X), and 120 mm / 4.72 in. vertically (Y). 0
  - 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.



(2) Printed circuit board

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

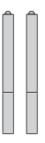
- 1 2 elongated holes for ZBZ 006 screw access
- 2 1 hole Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ 01•
- 38 × Ø 1.2 mm / 0.05 in. holes
- 4 1 hole Ø 2.9 mm ± 0.05 / 0.11 in. ± 0.002, for aligning the printed circuit board (with cut-out marked a)
- 5 1 elongated hole for aligning the printed circuit board (with cut-out marked b)
- 6 4 holes Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ 01•

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

#### Electrical Composition Corresponding to Code C3



#### Electrical Composition Corresponding to Code C4



#### Electrical Composition Corresponding to Code C5

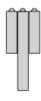


#### Electrical Composition Corresponding to Code C6



#### Electrical Composition Corresponding to Code C7





#### Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1



Legend

#### Single contact

Double contact

Light block



#### Possible location

Sequence of Contacts Fitted to 3-position Selector Switch Body

#### Position 315°

315°
$\bigcirc$
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Push	Position	Тор			
Bottom					
Location		Left	Centre	Right	
State	·	1	1	0	
Contacts	N/O		closed	closed	open
N/C		open	open	closed	

#### Position 0°

# Ű

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

#### Position 45°

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

# **Mouser Electronics**

Authorized Distributor

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Schneider Electric: ZB4BG9