



### Main

Range of product	Harmony XB4
Product or component type	Head for illuminated double-headed push-button
Product compatibility	Integral LED
Device short name	ZB4
Bezel material	Black metal
Head type	Standard
Mounting diameter	0.87 in (22 mm)
Sale per indivisible quantity	1
Shape of signaling unit head	Rectangular
Type of operator	Spring return
Operator profile	1 flush - 1 projecting push-buttons - 1 central pilot light
Operators description	Green "I" - red "O"

### Complementary

CAD overall width	1.18 in (30 mm)
CAD overall height	1.97 in (50 mm)
CAD overall depth	1.18 in (30 mm)
Product weight	0.12 lb(US) (0.056 kg)
Resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (55 °C), distance: 0.1 m
Colour of marking	Black marking when white caps White marking when green, red or black caps
Operator profile	Green flush, white I Red projecting, white O
Mechanical durability	1000000 cycles
Electrical composition code	M1 for 6 contacts using single blocks in front mounting with integral LED M2 for 6 contacts using single and double 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

### Environment

protective treatment	TH
ambient air temperature for storage	-40...158 °F (-40...70 °C)
ambient air temperature for operation	-40...158 °F (-40...70 °C)
electrical shock protection class	Class I conforming to IEC 61140
IP degree of protection	IP66 conforming to IEC 60529 IP69K IP69 conforming to IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
IK degree of protection	IK06 conforming to IEC 50102
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 EN/IEC 60947-5-5 JIS C 4520 UL 508 CSA C22.2 No 14
product certifications	BV CSA DNV GL LROS (Lloyds register of shipping)

The information provided in this documentation contains general descriptions and/or technical characteristics 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 = 2...500 Hz) conforming to IEC 60068-2-6
----------------------	---

## Offer Sustainability

WARNING: This product can expose you to chemicals including:

Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.

WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm.

For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

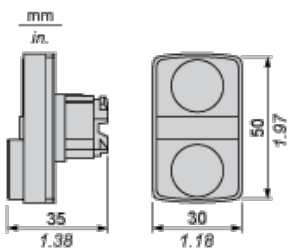
For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

## Contractual warranty

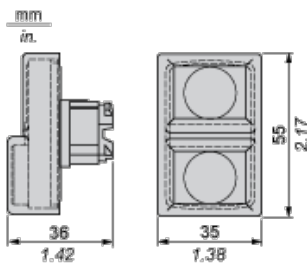
Warranty period	18 months
-----------------	-----------

## Dimensions

### Without Boot



### With Boot ZBA710

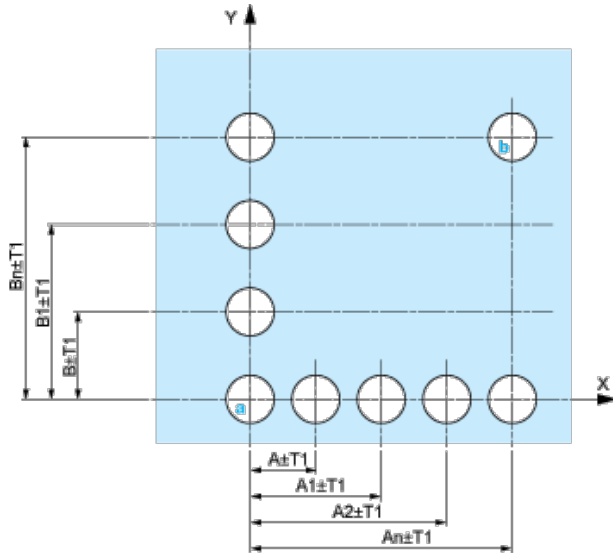


## Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)

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

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

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

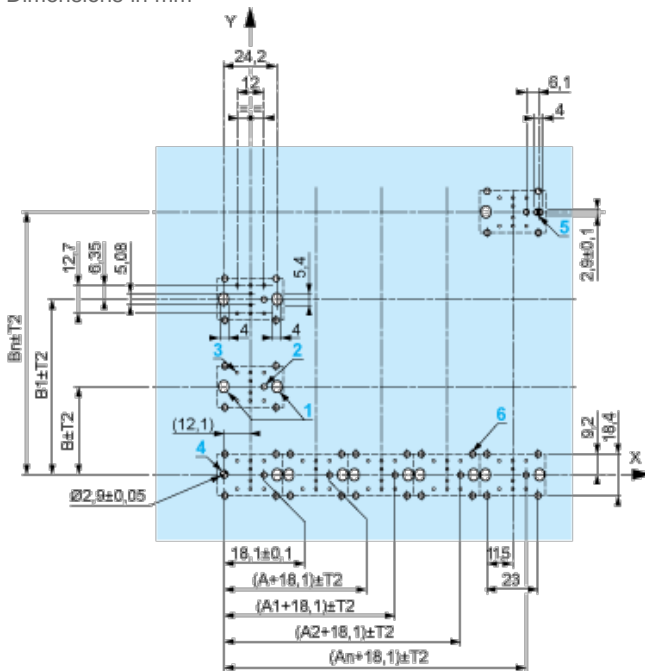


A: 30 mm min. / 1.18 in. min.

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.



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:  $T1 + T2 = 0.3 \text{ mm max.}$

### Installation Precautions

- | Minimum thickness of circuit board: 1.6 mm / 0.06 in.
- | Cut-out diameter: 22.4 mm  $\pm 0.1$  / 0.88 in.  $\pm 0.004$
- | Orientation of body/fixing collar ZB4 BZ009:  $\pm 2^\circ 30'$  (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:
  - | 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.

$\frac{\text{mm}}{\text{in.}}$



(1) Panel

(2) Printed circuit board

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

- | 1 2 elongated holes for ZBZ 006 screw access
- | 2 1 hole  $\varnothing 2.4 \text{ mm} \pm 0.05$  / 0.09 in.  $\pm 0.002$  for centring adapter ZBZ 01•
- | 3 8  $\times \varnothing 1.2 \text{ mm}$  / 0.05 in. holes
- | 4 1 hole  $\varnothing 2.9 \text{ mm} \pm 0.05$  / 0.11 in.  $\pm 0.002$ , 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  $\varnothing 2.4 \text{ mm}$  / 0.09 in. for clipping in adapter ZBZ 01•

### Electrical Composition Corresponding to Codes M1 and M7



### Electrical Composition Corresponding to Codes M2 and M8



### 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



## Данный компонент на территории Российской Федерации

### Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

<http://moschip.ru/get-element>

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

### Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: [info@moschip.ru](mailto:info@moschip.ru)

Skype отдела продаж:

moschip.ru

moschip.ru\_4

moschip.ru\_6

moschip.ru\_9