



## Main

Range of product	Harmony XB5
Product or component type	Head for selector switch
Device short name	ZB5
Bezel material	Dark grey plastic
Mounting diameter	0.87 in (22 mm)
Head type	Standard
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	Spring return right to centre
Operator profile	Black standard handle
Operator position information	3 positions +/- 45°

## Complementary

CAD overall width	1.14 in (29 mm)
CAD overall height	1.14 in (29 mm)
CAD overall depth	1.81 in (46 mm)
Product weight	0.04 lb(US) (0.017 kg)
Mechanical durability	1000000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Electrical composition code	C11 for 3 contacts using single blocks in front mounting SF1 for 3 contacts using single blocks in front mounting C7 for 4 contacts using single blocks in front mounting C8 for 4 contacts using single and double blocks in front mounting SR1 for 3 contacts using single blocks in rear mounting C4 6 contacts using single and double blocks in front mounting C5 for 5 contacts using single blocks in front mounting C6 for 5 contacts using single and double blocks in front mounting C3 6 contacts using single blocks in front mounting

## 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)
overvoltage category	Class II conforming to IEC 60536
IP degree of protection	IP67 conforming to IEC 60529 IP69K IP69 conforming to IEC 60529
NEMA degree of protection	NEMA 13 NEMA 4X
resistance to high pressure washer	1015.26 psi (7000000 Pa) at 131 °F (55 °C), distance: 0.1 m
IK degree of protection	IK06 conforming to IEC 50102
standards	EN/IEC 60947-1 EN/IEC 60947-5-1 EN/IEC 60947-5-4 JIS C 4520 UL 508 CSA C22.2 No 14
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 = 2...500 Hz) conforming to IEC 60068-2-6
shock resistance	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

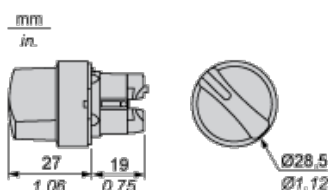
## Offer Sustainability

WARNING: This product can expose you to chemicals including:	WARNING: This product can expose you to chemicals including:
Nickel compounds, which is known to the State of California to cause cancer, and	Nickel compounds, which is known to the State of California to cause cancer, and
Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.	Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm.
For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>	For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a>

## Contractual warranty

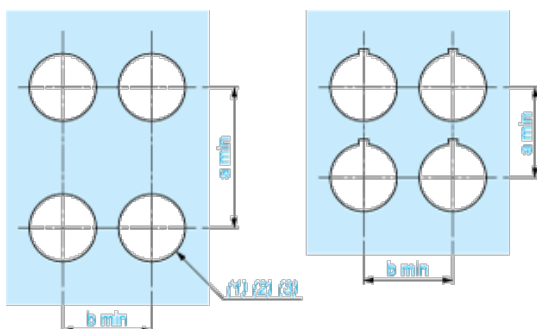
Warranty period	18 months
-----------------	-----------

## Dimensions



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

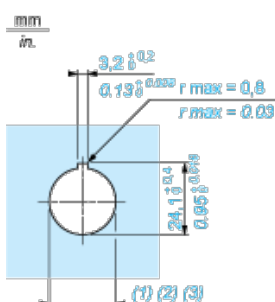
### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (1) Diameter on finished panel or support
- (2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- (3) Ø22.5 mm recommended ( $\text{Ø}22.3 \text{ }_0^{+0.4}$ ) / Ø0.89 in. recommended ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

Connections	a in mm	a in in.	b in mm	b in in.
By screw clamp terminals or plug-in connector	40	1.57	30	1.18
By Faston connectors	45	1.77	32	1.26
On printed circuit board	30	1.18	30	1.18

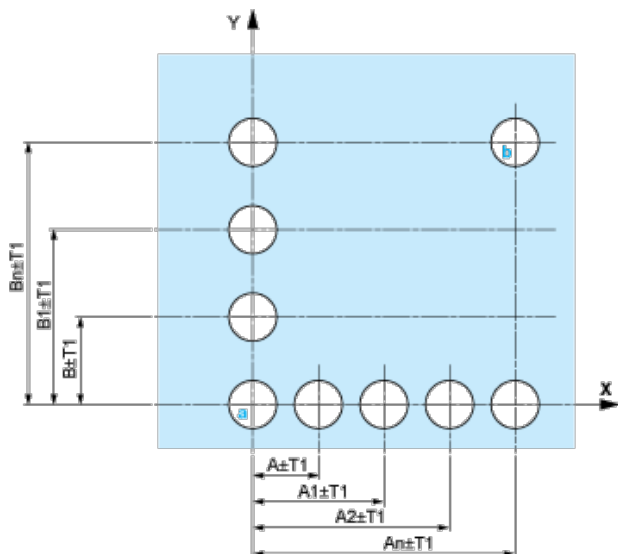
### Detail of Lug Recess



- (3)** Ø22.5 mm recommended (Ø22.3<sub>0</sub><sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.<sub>0</sub><sup>+0.016</sup>)

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

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

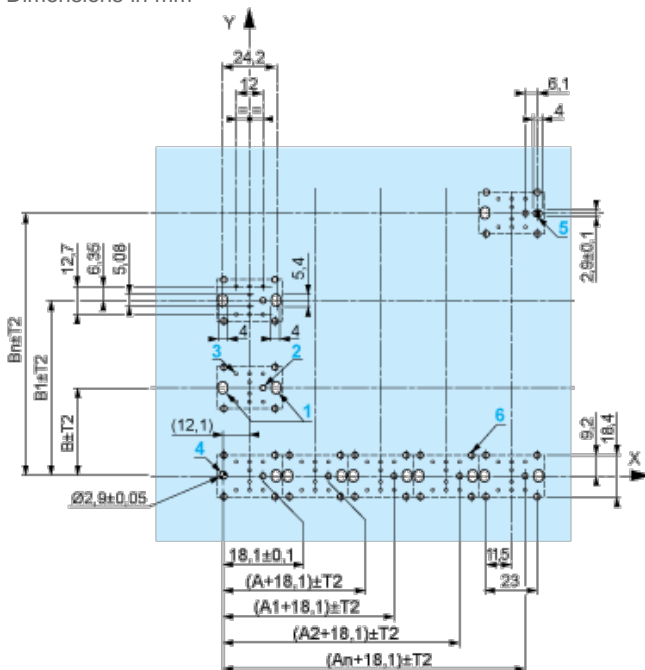


**A:** 30 mm min. / 1.18 in. min.

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

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

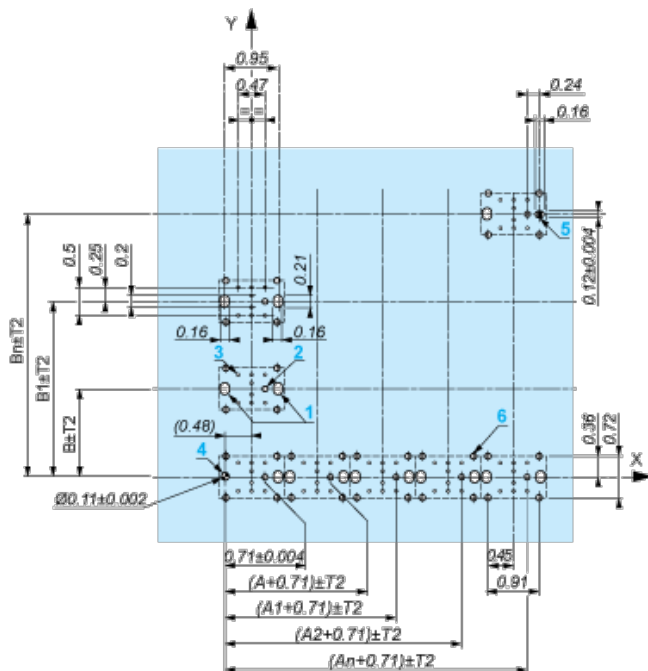
Dimensions in mm



**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.:  $T_1 + T_2 = 0.3 \text{ mm max.}$

### 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 ZB5AZ009:  $\pm 2^\circ 30'$  (excluding cut-outs marked **a** and **b**).
- | Tightening torque of screws ZBZ006: 0.6 N.m (5.3 lbf.in) max.
- | Allow for one ZB5AZ079 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 (ZB5AD•, ZB5AJ•, ZB5AG•).

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



- (1) Head ZB5AD•
- (2) Panel
- (2) Nut
- (4) Printed circuit board

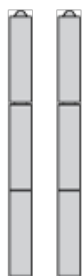
### Mounting of Adapter (Socket) ZBZ01•

- | 1 2 elongated holes for ZBZ006 screw access
- | 2 1 hole  $\varnothing 2.4 \text{ mm} \pm 0.05$  / 0.09 in.  $\pm 0.002$  for centring adapter ZBZ01•
- | 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 Ø 2.4 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the Ø 2.4 mm ± 0.05 / 0.09 in. ± 0.002 holes for centring adapter ZBZ01•.

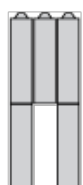
### Electrical Composition Corresponding to Code C3



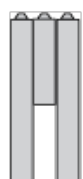
### Electrical Composition Corresponding to Code C4



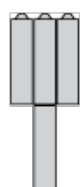
### Electrical Composition Corresponding to Code C5



### Electrical Composition Corresponding to Code C6



### Electrical Composition Corresponding to Code C7



### Electrical Composition Corresponding to Code C8

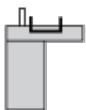


## Electrical Composition Corresponding to Codes C9, C11, SF1 and SR1

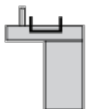


## Electrical Composition Corresponding to Code C15

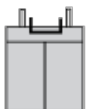
1 N/O



1 N/C



1 N/O + N/C or 1 N/O + N/O or 1 N/C + N/C



## Legend

Single contact



Double contact



Light block





Possible location



## Sequence of Contacts Fitted to 3-position Selector Switch Body





Position 315°



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




Position 0°



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

Position 45°



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



**Стандарт  
Электрон  
Связь**

Мы молодая и активно развивающаяся компания в области поставок электронных компонентов. Мы поставляем электронные компоненты отечественного и импортного производства напрямую от производителей и с крупнейших складов мира.

Благодаря сотрудничеству с мировыми поставщиками мы осуществляем комплексные и плановые поставки широчайшего спектра электронных компонентов.

Собственная эффективная логистика и склад в обеспечивает надежную поставку продукции в точно указанные сроки по всей России.

Мы осуществляем техническую поддержку нашим клиентам и предпродажную проверку качества продукции. На все поставляемые продукты мы предоставляем гарантию .

Осуществляем поставки продукции под контролем ВП МО РФ на предприятия военно-промышленного комплекса России , а также работаем в рамках 275 ФЗ с открытием отдельных счетов в уполномоченном банке. Система менеджмента качества компании соответствует требованиям ГОСТ ISO 9001.

Минимальные сроки поставки, гибкие цены, неограниченный ассортимент и индивидуальный подход к клиентам являются основой для выстраивания долгосрочного и эффективного сотрудничества с предприятиями радиоэлектронной промышленности, предприятиями ВПК и научно-исследовательскими институтами России.

С нами вы становитесь еще успешнее!

**Наши контакты:**

**Телефон:** +7 812 627 14 35

**Электронная почта:** [sales@st-electron.ru](mailto:sales@st-electron.ru)

**Адрес:** 198099, Санкт-Петербург,  
Промышленная ул, дом № 19, литера Н,  
помещение 100-Н Офис 331