

# Product datasheet

Specifications



Head for illuminated push button, Harmony XB5, Harmony XALF, dark grey plastic, yellow flush, 22mm, universal LED,

ZB5AA88

**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: 3606481206459

## Main

Range of product	Harmony XB5 Harmony XALF
Product or component type	Head for illuminated push-button
Device short name	ZB5
Product compatibility	Universal LED
Bezel material	Dark grey plastic
Mounting diameter	22 mm
Sale per indivisible quantity	1
Shape of signaling unit head	Round
Type of operator	spring return
Operator profile	Yellow flush, unmarked
Operator additional information	For insertion of legend

## Complementary

CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	30 mm
Product weight	0.018 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	10000000 cycles
Station name	XALD 1...5 cut-outs XALK 2...5 cut-outs
Cap/operator or lens colour	Yellow
Marking	Unmarked

Disclaimer: 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

<b>Electrical composition code</b>	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 MF1 for <2 contacts using single blocks in front mounting with integral LED MR1 for <2 contacts using single blocks in rear mounting with integral LED C3 for <6 contacts using single blocks in front mounting C4 for <6 contacts using single and double blocks in front mounting C14 for <2 contacts using single blocks in front mounting SF2 for <2 contacts using single blocks in front mounting SR2 for <2 contacts using single blocks in rear mounting
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<b>Device presentation</b>	Basic element
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## Environment

<b>Protective treatment</b>	TC
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Ambient air temperature for operation</b>	-40...70 °C
<b>Overvoltage category</b>	Class II conforming to IEC 60536
<b>IP degree of protection</b>	IP66 conforming to IEC 60529 IP67 IP69 IP69K
<b>Enclosure Type</b>	UL type 4X/13
<b>IK degree of protection</b>	IK03 conforming to IEC 62262
<b>Standards</b>	CSA C22.2 No 14 UL 508 IEC 60947-5-4 GB 14048.5 IEC 60947-5-1 JIS C8201-5-1 IEC 60947-1 JIS C8201-1
<b>Product certifications</b>	BV CSA DNV LROS (Lloyds register of shipping) UL listed
<b>Vibration resistance</b>	5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6
<b>Shock resistance</b>	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

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	3.4 cm
<b>Package 1 Width</b>	5.4 cm
<b>Package 1 Length</b>	8.8 cm
<b>Package 1 Weight</b>	20 g
<b>Unit Type of Package 2</b>	BB1
<b>Number of Units in Package 2</b>	5
<b>Package 2 Height</b>	3.4 cm
<b>Package 2 Width</b>	8.8 cm

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Package 2 Length	26.5 cm
Package 2 Weight	100 g
Unit Type of Package 3	S03
Number of Units in Package 3	150
Package 3 Height	30 cm
Package 3 Width	30 cm
Package 3 Length	40 cm
Package 3 Weight	3.479 kg

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## Logistical informations

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Country of origin FR

## Contractual warranty

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Warranty (in months) 18



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

Total lifecycle Carbon footprint	0.2 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	0.1 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	0 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0 kg CO2 eq.

## Use Better



### Materials and Substances

Average percentage of recycled plastic content	6 %
Average percentage of recycled metal content	29 %
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
EU RoHS Directive	<a href="#">Compliant</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



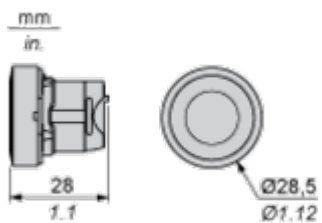
### Repack and remanufacture

Recyclability potential, in %	0
End of life manual availability	<a href="#">End of Life Information</a>
Take-back	No

Dimensions Drawings

Dimensions

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Mounting and Clearance

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

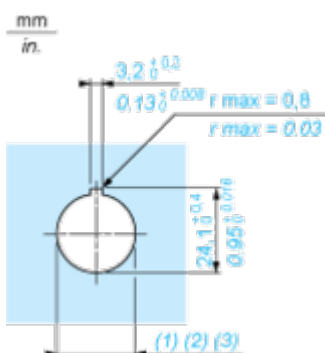
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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

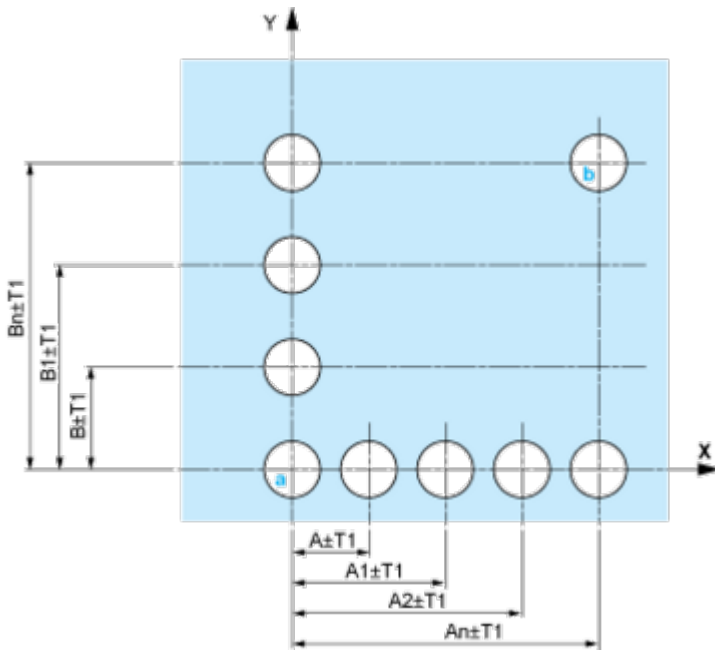
Detail of Lug Recess



- (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 ( $\text{Ø}0.88 \text{ in. }_0^{+0.016}$ )

Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

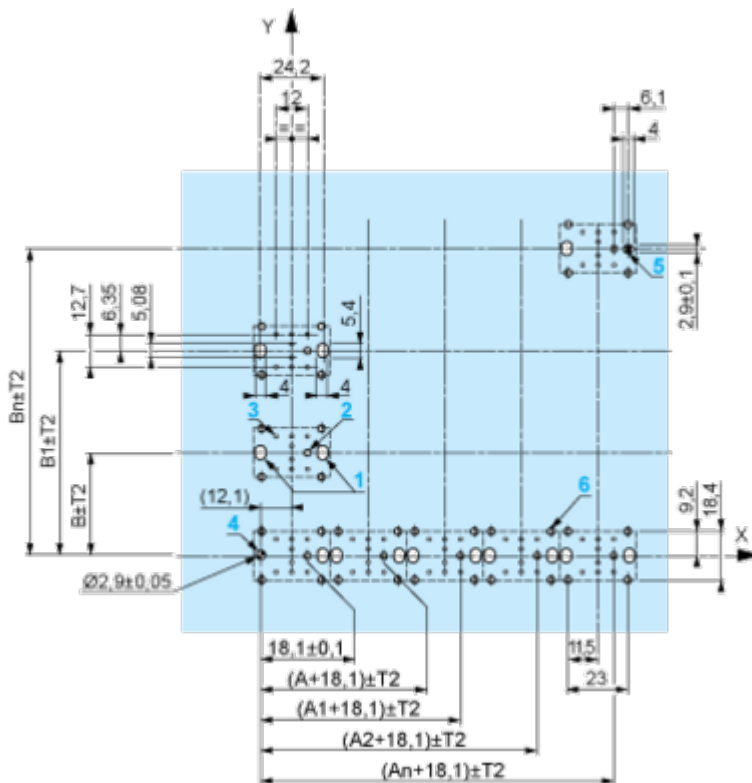


A: 30 mm min. / 1.18 in. min.

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

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

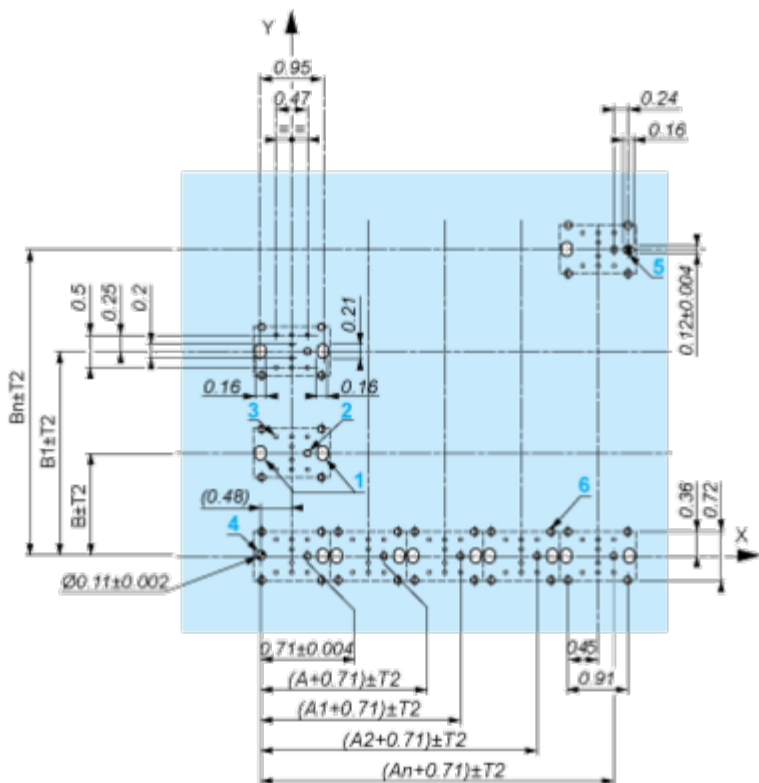
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.



A: 1.18 in. min.  
 B: 1.57 in. min.

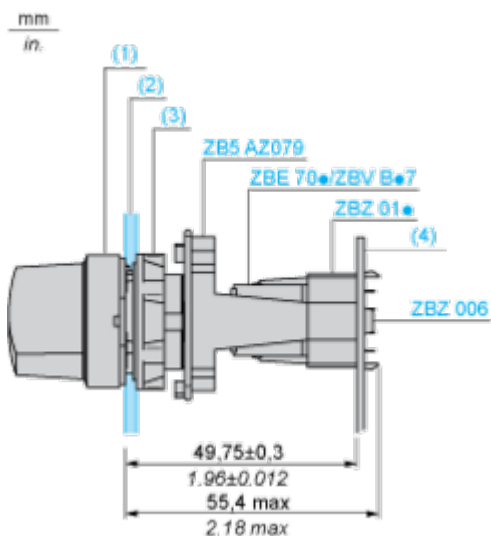
**General Tolerances of the Panel and Printed Circuit Board**

The cumulative tolerance must not exceed 0.3 mm / 0.012 in.: T1 + T2 = 0.3 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 ZB5AZ009: ± 2° 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 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 for centring adapter ZBZ01•
- 3 8  $\times$   $\varnothing$  1.2 mm / 0.05 in. holes
- 4 1 hole  $\varnothing$  2.9 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 mm / 0.09 in. for clipping in adapter ZBZ01•

Dimensions An + 18.1 relate to the  $\varnothing$  2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.

Technical Description

Electrical Composition Corresponding to Code C3

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Electrical Composition Corresponding to Code C4

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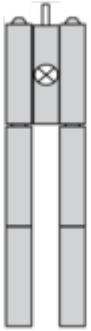
Electrical Composition Corresponding to Codes C14, SF2 and SR2

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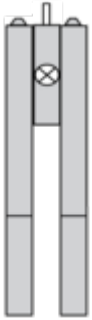
Electrical Composition Corresponding to Codes M1 and M7

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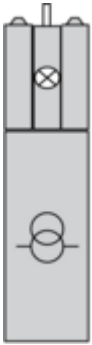
Electrical Composition Corresponding to Codes M2 and M8

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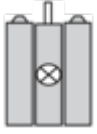


Electrical Composition Corresponding to Codes M6 and P2

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



**Legend**

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Single contact



Double contact



Light block

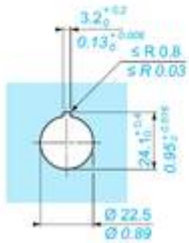
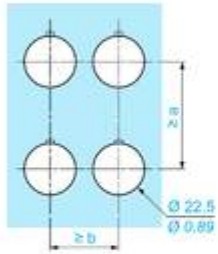
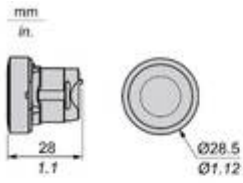


Possible location



Technical Illustration

Dimensions



		a (mm)	a (in.)	b (mm)	b (in.)
		40	1.57	30	1.18
ZBE.....	ZBV.....				
		45	1.77	32	1.26
ZBE.....3	ZBV.....3				
		40	1.57	30	1.18
ZBE.....4	ZBV.....4				
		50	1.97	30	1.18
ZBE.....5	ZBV.....5				
		40	1.57	30	1.18
ZBE.....9	ZBV.....9				
		40	1.57	30	1.18
ZBRT..	ZBRV1				

Image of product / Alternate images

Alternative

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