# Product data sheet Characteristics

# ZB5AK1843

Head for illuminated selector switch, Harmony XB5, XB4, red Ø22 mm 3 position spring return





Main	
Range of Product	Harmony XB5
Product or Component Type	Head for illuminated selector switch
Product Compatibility	Integral LED
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	Right to centre spring return
Operator profile	Red standard handle
Operator position information	3 positions +/- 45°

### Complementary

Device presentation	Basic element	
	M4 4 single and double front mounting integral LED	
	MR1 2 single rear mounting integral LED	
	MF1 2 single front mounting integral LED	
	M10 2 single front mounting integral LED	
	M6 2 single front mounting integral LED and transformer	
Electrical composition code	M3 4 single front mounting integral LED	
	XALK 25 cut-outs	
Station name	XALD 15 cut-outs	
Mechanical durability	1000000 cycles	
Net Weight	0.04 lb(US) (0.016 kg)	
CAD overall depth	1.69 in (43 mm)	
CAD overall height	1.14 in (29 mm)	
CAD overall width	1.14 in (29 mm)	

#### Environment

Protective treatment	ТН			
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)			
Ambient Air Temperature for Operation	-40158 °F (-4070 °C)			
Overvoltage category	Class II IEC 60536			
IP degree of protection	IP66 IEC 60529 IP67 IP69 IP69K			
NEMA degree of protection	NEMA 13 NEMA 4X			
Resistance to high pressure washer	1015.26 psi (7000000 Pa) 131 °F (55 °C) 0.1 m			
IK degree of protection	IK06 IEC 50102			



Standards	EN/IEC 60947-5-1
	EN/IEC 60947-1
	UL 508
	CSA C22.2 No 14
	EN/IEC 60947-5-4
	JIS C8201-5-1
	EN/IEC 60947-5-5
	JIS C8201-1
Product Certifications	BV
	LROS (Lloyds register of shipping)
	CSA
	GL
	UL Listed
	DNV
Vibration resistance	5 gn 2500 Hz)IEC 60068-2-6
Shock resistance	30 gn 18 ms) half sine wave acceleration IEC 60068-2-27
	50 gn 11 ms) half sine wave acceleration IEC 60068-2-27

## Ordering and shipping details

Category	22467-PUSHBUTTONS,22MM(PLASTIC) NEW			
Discount Schedule	CS2			
GTIN	3389110906325			
Nbr. of units in pkg.	1			
Package weight(Lbs)	0.74 oz (21.0 g)			
Returnability	No			
Country of origin	FR			

## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.20 in (5.6 cm)
Package 1 width	1.34 in (3.4 cm)
Package 1 Length	2.13 in (5.4 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	100
Package 2 Weight	5.85 lb(US) (2.655 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

# Offer Sustainability

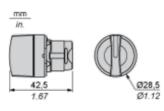
Green Premium product			
WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov			
REACh Declaration			
Yes			
Pro-active compliance (Product out of EU RoHS legal scope)			
Yes			
Yes			
₽ Yes			
China RoHS Declaration			
Product Environmental Profile			
der End Of Life Information			

## Contractual warranty

Warranty

18 months

## Dimensions

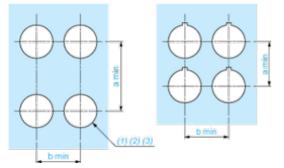




# ZB5AK1843

## 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



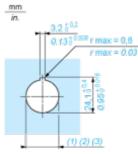
(1) Diameter on finished panel or support

(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.

(3) Ø22.5 mm recommended (Ø22.3  $_{0}^{+0.4}$ ) / Ø0.89 in. recommended (Ø0.88 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**



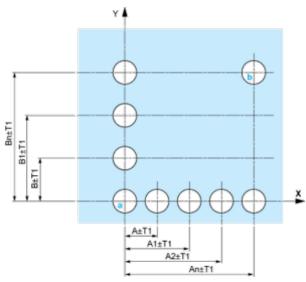
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Pushbuttons, Switches and Pilot Lights for Printed Circuit Board Connection

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

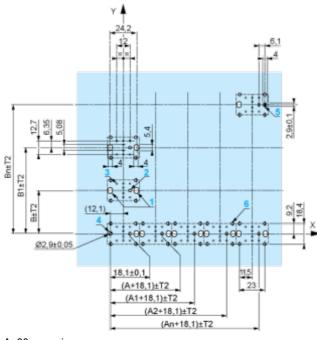


A: 30 mm min. / 1.18 in. min.

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

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

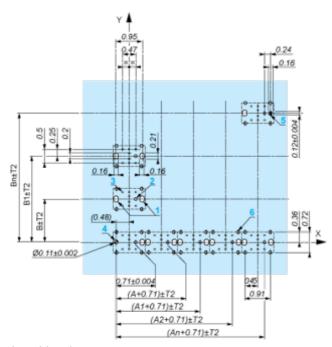
Dimensions in mm



A: 30 mm min.

B: 40 mm min.

Dimensions in in.







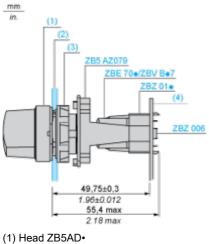
## General Tolerances of the Panel and Printed Circuit Board

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:
  - $\circ~$  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.



- (2) Panel
- (2) Nut
- (4) Printed circuit board

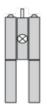
### Mounting of Adapter (Socket) ZBZ01•

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

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

# ZB5AK1843

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°

315°

)					
Push	Position	Тор		$\otimes$	
Bottom		$\bigtriangleup$			
Location		Left	Right		
State		1	0		
Contacts	N/O		closed	open	
N/C		open	closed		-

## Position 0°



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



### Position 45°



<u> </u>					
Push	Position	Тор		$\otimes$	
Bottom	$\bigtriangleup$				
Location		Left	Right		
State		0	1		
Contacts	N/O		open	closed	
N/C		closed	open		