## Product data sheet Characteristics

# ZB5AH053

Harmony XB5, Illuminated push button head, plastic, flush, orange, Ø22, push-push, integral LED,





### Main

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Range of Product	Harmony XB5
Product or Component Type	Head for illuminated push-button
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	push-push
Operator profile	Orange flush, unmarked

#### Complementary

Device presentation	Basic element			
	MF1 2 single front mounting integral LED MR1 2 single rear mounting integral LED			
	M10 2 single front mounting integral LED			
	M6 2 single front mounting integral LED and transformer			
Electrical composition code	M5 2 single front mounting integral LED			
	XALK 25 cut-outs			
Station name	XALD 15 cut-outs			
Mechanical durability	5000000 cycles			
Net Weight	0.04 lb(US) (0.017 kg)			
CAD overall depth	1.18 in (30 mm)			
CAD overall height	1.14 in (29 mm)			
CAD overall width	1.14 in (29 mm)			
<u>eemplementary</u>				

#### Environment

Environment			
Protective treatment	TH		
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)		
Ambient air temperature for operation	-13158 °F (-2570 °C)		
Electrical shock protection class	Class II IEC 60536		
IP degree of protection	IP66 IEC 60529 IP67 IEC 60529 IP69 IEC 60529 IP69K ISO 20653		
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	IK05 IEC 50102		



Standards	JIS C8201-5-1	
	EN/IEC 60947-5-5	
	EN/IEC 60947-1	
	EN/IEC 60947-5-1	
	CSA C22.2 No 14	
	EN/IEC 60947-5-4	
	UL 508	
	JIS C8201-1	
Product Certifications	BV	
	DNV	
	UL Listed	
	GL	
	CSA	
	LROS (Lloyds register of shipping)	
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	3389110137774		
Nbr. of units in pkg.	1		
Package weight(Lbs)	0.63 oz (18 g)		
Returnability	No		
Country of origin	FR		

### Packing Units

Unit Type of Package 1	PCE
Package 1 Height	1.42 in (3.6 cm)
Package 1 width	1.97 in (5 cm)
Package 1 Length	1.26 in (3.2 cm)
Unit Type of Package 2	S03
Number of Units in Package 2	200
Package 2 Weight	8.96 lb(US) (4.066 kg)
Package 2 Height	11.81 in (30 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 3 Height	1.77 in (4.5 cm)

## Offer Sustainability

Sustainable offer status	Green Premium product WARNING: This product can expose you to chemicals including: 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. For more information go to www.P65Warnings.ca.gov			
California proposition 65				
REACh Regulation				
REACh free of SVHC	Yes			
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) CEU RoHS Declaration			
Mercury free	Yes			
RoHS exemption information	<b>₽</b> Yes			
China RoHS Regulation	China RoHS Declaration			
Environmental Disclosure	Product Environmental Profile			
Circularity Profile	Part of Life Information			

Warranty

18 months

#### Dimensions



## ZB5AH053

#### 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  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.  $_0$  <sup>+0.016</sup>)

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)  $\emptyset$ 22.5 mm recommended ( $\emptyset$ 22.3  $_0$  <sup>+0.4</sup>) /  $\emptyset$ 0.89 in. recommended ( $\emptyset$ 0.88 in.  $_0$  <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.





## 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.
- ٠ Cut-out diameter: 22.4 mm ± 0.1 / 0.88 in. ± 0.004
- ٠ 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•
- 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 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+.

## ZB5AH053

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



Electrical Composition Corresponding to Codes M6 and P2



#### Legend

Single contact

Double contact

Light block

#### Possible location