## Product data sheet Characteristics

#### ZB5AA38C0

Harmony XB5, Illuminated push button head, plastic, flush, green, Ø22, spring return, integral LED, for insertion of legend, unmarked, grey bezel



Main	
Range of product	Harmony XB5
Product or component type	Head for illuminated push-button
Device short name	ZB5
Product compatibility	Integral LED
Bezel material	Plastic colour plated grey
Mounting diameter	22 mm
Sale per indivisible quantity	1
Head type	Standard
Shape of signaling unit head	Round
Type of operator	Spring return
Operator profile	Green flush, unmarked

For insertion of legend

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Complementary	
CAD overall width	29 mm
CAD overall height	29 mm
CAD overall depth	30 mm
Net weight	0.018 kg
Resistance to high pressure washer	7000000 Pa at 55 °C, distance : 0.1 m
Mechanical durability	10000000 cycles
Main group	Illum push-button
Group of product	Flush push with inser of legend
Station name	XALD 15 cut-outs XALK 25 cut-outs
Cap/operator or lens colour	Green
Marking	Unmarked
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 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
Device presentation	Basic element

Operator additional

information

#### Environment

Protective treatment	TC	
Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-4070 °C	
Overvoltage category	Class II conforming to IEC 60536	
IP degree of protection	IP66 conforming to IEC 60529 IP67	
NEMA degree of protection	NEMA 13 NEMA 4X	
IK degree of protection	IK03 conforming to EN 50102	
Standards	EN/IEC 60947-1 JIS C8201-5-1 GB 14048.5 UL 508 CSA C22.2 No 14 EN/IEC 60947-5-4 EN/IEC 60947-5-1 JIS C8201-1	
Product certifications	RINA BV UL listed LROS (Lloyds register of shipping) CSA GL DNV	
Vibration resistance	5 gn (f= 2500 Hz) conforming to IEC 60068-2-6	
Shock resistance	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**

20.000 g
8.600 cm
3.300 cm
5.200 cm

#### Offer Sustainability

REACh Regulation	REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EVEN RoHS  Declaration	
Mercury free	Yes	
RoHS exemption information	₫Yes	
China RoHS Regulation	China RoHS Declaration	

# Product data sheet Dimensions Drawings

## ZB5AA38C0

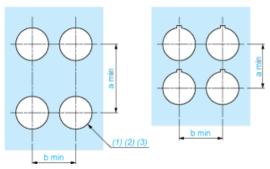
#### **Dimensions**





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

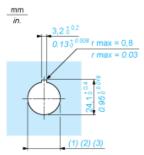
#### Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.  $\emptyset$ 22.5 mm recommended ( $\emptyset$ 22.3  $_0$   $^{+0.4}$ ) /  $\emptyset$ 0.89 in. recommended ( $\emptyset$ 0.88 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**



- (1) Diameter on finished panel or support
- For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
- Ø22.5 mm recommended (Ø22.3  $_0$  <sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 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.



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:
  - o 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 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•

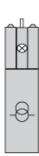
Dimensions An + 18.1 relate to the Ø 2.4 mm  $\pm$  0.05 / 0.09 in.  $\pm$  0.002 holes for centring adapter ZBZ01•.

## ZB5AA38C0

Electrical Composition Corresponding to Code C3
Electrical Composition Corresponding to Code C4
Electrical Composition Corresponding to Codes C14, SF2 and SR2
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

