

Product data sheet

Specifications



Double-headed push button,
Harmony XB5, plastic, 22mm,
1 green flush marked I + 1 red
projecting marked O, 1NO+1NC

XB5AL73415

Main

| | |
|-------------------------------|--|
| Range of product | Harmony XB5 |
| Product or component type | Double-headed push-button |
| Device short name | XB5 |
| Bezel material | Dark grey plastic |
| Fixing collar material | Plastic |
| Head type | Standard |
| Mounting diameter | 22 mm |
| Shape of signaling unit head | Rectangular |
| Type of operator | spring return |
| Operator profile | 1 flush - 1 projecting push-buttons |
| Operators description | Green "I" - red "O" |
| Contacts type and composition | 1 NO + 1 NC |
| Contact operation | Slow-break |
| Connections - terminals | Screw clamp terminals, $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1 Screw clamp terminals, $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1 Spring terminals, $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1 Spring terminals, $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1 |
| Device presentation | Complete product |

Complementary

| | |
|------------------------------------|---|
| Height | 50 mm |
| Width | 30 mm |
| Depth | 59 mm |
| Terminals description ISO n°1 | (21-22)NC (13-14)NO |
| Net weight | 0.053 kg |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m |
| Colour of marking | White marking when green, red or black caps Black marking when white caps Green flush, I (white) Red projecting, O (white) |
| Contacts usage | Standard contacts |

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|---|---|
| Positive opening | With conforming to EN/IEC 60947-5-1 appendix K |
| Operating travel | 1.5 mm (NC changing electrical state) 2.6 mm (NO changing electrical state) 4.3 mm (total travel) |
| Operating force | 3.5 N NC changing electrical state 3.8 N NO changing electrical state |
| Mechanical durability | 1000000 cycles |
| Tightening torque | 0.8...1.2 N.m conforming to EN 60947-1 |
| Shape of screw head | Cross compatible with JIS No 1 screwdriver Cross compatible with Philips no 1 screwdriver Cross compatible with pozidriv No 1 screwdriver Slotted compatible with flat Ø 4 mm screwdriver Slotted compatible with flat Ø 5.5 mm screwdriver |
| Contacts material | Silver alloy (Ag/Ni) |
| Short-circuit protection | 10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1 |
| [I_{th}] conventional free air thermal current | 10 A conforming to EN/IEC 60947-5-1 |
| [U_i] rated insulation voltage | 600 V (pollution degree 3) conforming to EN 60947-1 |
| [U_{imp}] rated impulse withstand voltage | 6 kV conforming to EN 60947-1 |
| [I_e] rated operational current | 3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1 6 A at 120 V, AC-15, A600 conforming to EN/IEC 60947-5-1 0.1 A at 600 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 0.55 A at 125 V, DC-13, Q600 conforming to EN/IEC 60947-5-1 1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1 |
| Electrical durability | 1000000 cycles AC-15, 2 A at 230 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1: appendix C 1000000 cycles AC-15, 3 A at 120 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1: appendix C 1000000 cycles AC-15, 4 A at 24 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1: appendix C 1000000 cycles DC-13, 0.2 A at 110 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1: appendix C 1000000 cycles DC-13, 0.5 A at 24 V, operating rate <3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1: appendix C |
| Electrical reliability | $\Lambda < 10\exp(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4 $\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4 |
| Environment | |
| Protective treatment | TH |
| Ambient air temperature for storage | -40...70 °C |
| Ambient air temperature for operation | -40...70 °C |
| Overvoltage category | Class II conforming to IEC 60536 |
| IP degree of protection | IP67 conforming to IEC 60529 IP69 IP69K |
| NEMA degree of protection | NEMA 13 NEMA 4X |
| IK degree of protection | IK03 conforming to IEC 50102 |
| Standards | EN/IEC 60947-5-4 JIS C8201-5-1 EN/IEC 60947-5-1 CSA C22.2 No 14 EN/IEC 60947-1 UL 508 JIS C8201-1 |
| Product certifications | CSA GL UL listed LROS (Lloyds register of shipping) DNV BV |

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| Vibration resistance | 5 gn (f= 2...500 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

| | |
|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 3.500 cm |
| Package 1 Width | 5.500 cm |
| Package 1 Length | 9.000 cm |
| Package 1 Weight | 52.800 g |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 100 |
| Package 2 Height | 30.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 5.709 kg |
| Unit Type of Package 3 | P06 |
| Number of Units in Package 3 | 800 |
| Package 3 Height | 75.000 cm |
| Package 3 Width | 80.000 cm |
| Package 3 Length | 60.000 cm |
| Package 3 Weight | 53.672 kg |

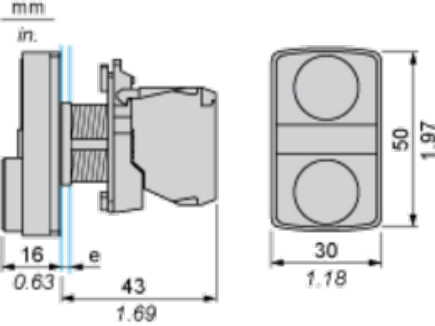
Offer Sustainability

| | |
|-----------------------------------|---|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End of Life Information |
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |

Contractual warranty

| | |
|-----------------|-----------|
| Warranty | 18 months |
|-----------------|-----------|

Dimensions



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

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

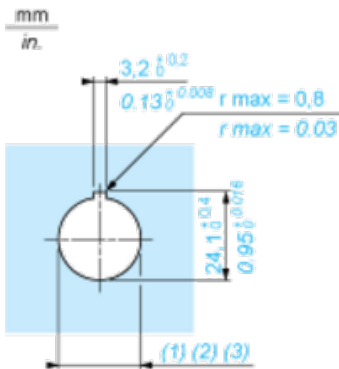
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

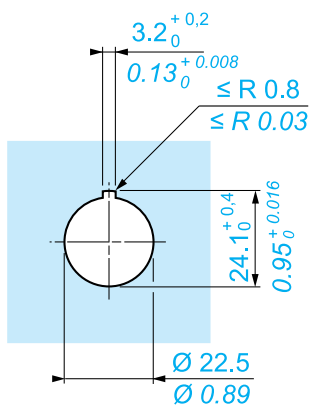
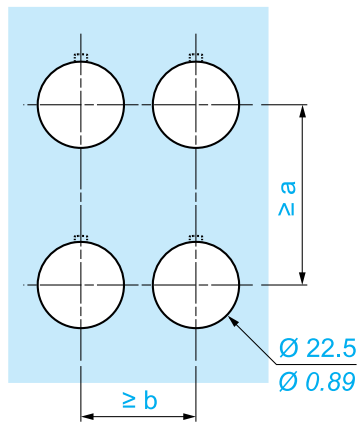
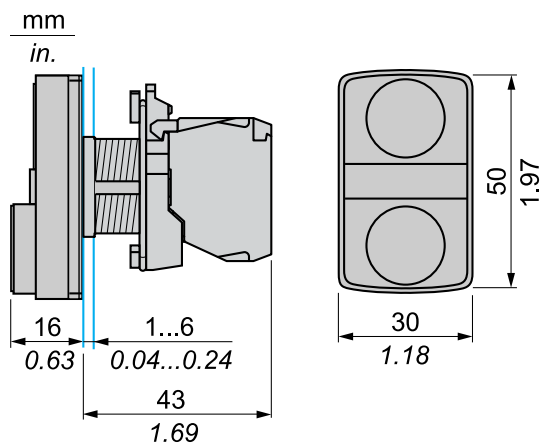
| Connections | a in mm | a in in. | b in mm | b in in. |
|---|---------|----------|---------|----------|
| By screw clamp terminals or plug-in connector | 40 | 1.57 | 30 | 1.18 |
| By Faston connectors | 45 | 1.77 | 32 | 1.26 |
| On printed circuit board | 30 | 1.18 | 30 | 1.18 |

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) $\varnothing 22.5$ mm recommended ($\varnothing 22.3 \text{ }_0^{+0.4}$) / $\varnothing 0.89$ in. recommended ($\varnothing 0.88 \text{ in. }_0^{+0.016}$)

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 | | | | |

Recommended replacement(s)