

### Main

|                               |  |
|-------------------------------|--|
| Range of product              | Harmony XB5  |
| Product or component type     | Complete illuminated selector switch   |
| Device short name             | XB5  |
| Bezel material                | Plastic  |
| Mounting diameter             | 0.87 in (22 mm)  |
| Sale per indivisible quantity | 1  |
| Shape of signaling unit head  | Round  |
| Type of operator              | Stay put   |
| Operator profile              | Red standard handle  |
| Operator position information | 3 positions +/- 45°  |
| Contacts type and composition | 1 NO + 1 NC  |
| Contact operation             | Slow-break   |
| Connections - terminals       | Screw clamp terminals: <= 2 x 1.5 mm <sup>2</sup> with cable end conforming to EN/IEC 60947-1<br>Screw clamp terminals: >= 1 x 0.22 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1 |
| Bulb base                     | Integral LED   |
| [Us] rated supply voltage     | 24 V AC/DC, 50/60 Hz   |

### Complementary

|                                    |   |
|------------------------------------|---|
| Height                             | 1.65 in (42 mm)   |
| Width                              | 1.18 in (30 mm)   |
| Depth                              | 2.76 in (70 mm)   |
| Terminals description ISO n°1      | (13-14)NO<br>(11-12)NC  |
| Product weight                     | 1.14 lb(US) (0.516 kg)  |
| Resistance to high pressure washer | 1015.26 psi (7000000 Pa) at 131 °F (55 °C), distance: 0.1 m   |
| Contacts usage                     | Standard contacts   |
| Positive opening                   | With positive opening conforming to EN/IEC 60947-5-1 appendix K   |
| Operating torque                   | 1.24 lbf.in (0.14 N.m) (NO changing electrical state)   |
| Mechanical durability              | 1000000 cycles  |
| Tightening torque                  | 7.08...10.62 lbf.in (0.8...1.2 N.m) conforming to EN 60947-1  |
| Shape of screw head                | Cross head compatible with Philips no 1 screwdriver<br>Cross head compatible with pozidriv No 1 screwdriver |

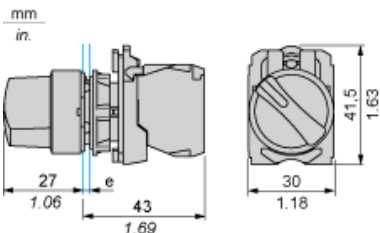
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|--|---|
|  | Slotted head compatible with flat Ø 4 mm screwdriver<br>Slotted head compatible with flat Ø 5.5 mm screwdriver  |
| Contacts material  | Silver alloy (Ag/Ni)  |
| Short-circuit protection                                 | 10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1  |
| [I <sub>th</sub> ] conventional free air thermal current | 10 A conforming to EN/IEC 60947-5-1   |
| [U <sub>i</sub> ] rated insulation voltage               | 600 V (degree of pollution: 3) conforming to EN 60947-1   |
| [U <sub>imp</sub> ] rated impulse withstand voltage      | 6 kV conforming to EN 60947-1   |
| [I <sub>e</sub> ] rated operational current              | 3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1<br>6 A at 120 V, AC-15, A600 conforming to EN/IEC 60947-5-1<br>0.1 A at 600 V, DC-13, Q600 conforming to EN/IEC 60947-5-1<br>0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60947-5-1<br>0.55 A at 125 V, DC-13, Q600 conforming to EN/IEC 60947-5-1<br>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<br>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<br>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<br>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<br>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<br>$\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4   |
| Signalling type  | Steady  |
| Light source   | Protected LED   |
| Supply voltage limits                                    | 19.2...30 V DC<br>21.6...26.4 V AC  |
| Current consumption                                      | 18 mA   |
| Service life   | 100000 h at rated voltage and 25 °C   |
| Surge withstand  | 1 kV conforming to IEC 61000-4-5  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Protective treatment                  | TH   |
| Ambient air temperature for storage   | -40...158 °F (-40...70 °C)   |
| Ambient air temperature for operation | -40...158 °F (-40...70 °C)   |
| Electrical shock protection class     | Class II conforming to IEC 60536   |
| IP degree of protection               | IP69<br>IP66 conforming to IEC 60529<br>IP67 conforming to IEC 60529<br>IP69K  |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X   |
| IK degree of protection               | IK05 conforming to IEC 50102   |
| Standards                             | UL 508<br>JIS C 4520<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>CSA C22.2 No 14<br>EN/IEC 60947-1  |
| Product certifications                | UL<br>GL<br>BV<br>RINA<br>LROS (Lloyds register of shipping)<br>DNV<br>CSA   |
| Vibration resistance                  | 5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6  |
| Shock resistance                      | 30 gn (duration = 18 ms) half sine wave acceleration conforming to IEC 60068-2-27<br>50 gn (duration = 11 ms) half sine wave acceleration conforming to IEC 60068-2-27 |
| Resistance to fast transients         | 2 kV conforming to IEC 61000-4-4   |

|                                       |  |
|---------------------------------------|--|
| Resistance to electromagnetic fields  | 9.14 V/d (10 V/m) conforming to IEC 61000-4-3  |
| Resistance to electrostatic discharge | 6 kV on contact (on metal parts) conforming to IEC 61000-4-2<br>8 kV in free air (in insulating parts) conforming to IEC 61000-4-2 |
| Electromagnetic emission              | Class B conforming to IEC 55011  |

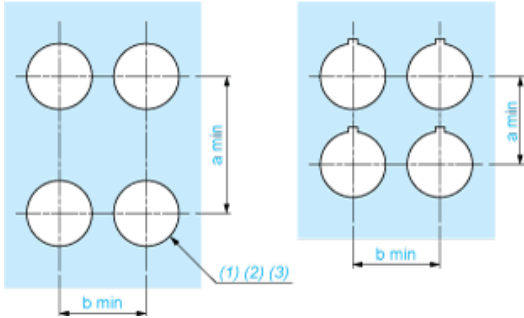
Dimensions



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)

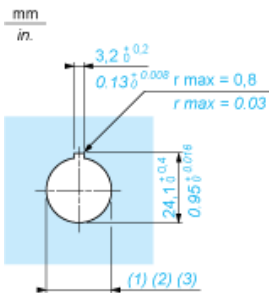
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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

Product Life Status

END OF COMMERCIALIZATION