



## Main

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|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product              | Harmony XB5                                                                                                                                                                                                                                                                                                                                                                                                                |
| Product or component type     | Complete double-headed push-button                                                                                                                                                                                                                                                                                                                                                                                         |
| Device short name             | XB5                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Bezel material                | Plastic                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Fixing collar material        | Plastic                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 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                                                                                                                                                                                                                                                                                                                                                                                                                |
| Contacts operation            | Slow-break                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Connections - terminals       | Spring terminals : $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1<br>Spring terminals : $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1<br>Screw clamp terminals : $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN/IEC 60947-1<br>Screw clamp terminals : $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN/IEC 60947-1 |

## Complementary

|                                             |                                                                                                                                                                                                                                                                                  |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Height                                      | 50 mm                                                                                                                                                                                                                                                                            |
| Width                                       | 30 mm                                                                                                                                                                                                                                                                            |
| Depth                                       | 59 mm                                                                                                                                                                                                                                                                            |
| Terminals description ISO n°1               | (13-14)NO<br>(21-22)NC                                                                                                                                                                                                                                                           |
| Product weight                              | 0.053 kg                                                                                                                                                                                                                                                                         |
| Resistance to high pressure washer          | 7000000 Pa at 55 °C, distance: 0.1 m                                                                                                                                                                                                                                             |
| Colour of marking                           | Black marking when white caps<br>White marking when green, red or black caps                                                                                                                                                                                                     |
| Operator profile                            | Red projecting, white O<br>Green flush, white I                                                                                                                                                                                                                                  |
| Contacts usage                              | Standard contacts                                                                                                                                                                                                                                                                |
| Positive opening                            | With positive opening conforming to EN/IEC 60947-5-1 appendix K                                                                                                                                                                                                                  |
| Operating travel                            | 4.3 mm (total travel)<br>2.6 mm (NO changing electrical state)<br>1.5 mm (NC changing electrical state)                                                                                                                                                                          |
| Operating force                             | 3.8 N (NO changing electrical state)<br>3.5 N (NC changing electrical state)                                                                                                                                                                                                     |
| Mechanical durability                       | 1000000 cycles                                                                                                                                                                                                                                                                   |
| Tightening torque                           | 0.8...1.2 N.m conforming to EN 60947-1                                                                                                                                                                                                                                           |
| Shape of screw head                         | Slotted head compatible with flat Ø 5.5 mm screwdriver<br>Slotted head compatible with flat Ø 4 mm screwdriver<br>Cross head compatible with pozidriv No 1 screwdriver<br>Cross head compatible with Philips no 1 screwdriver<br>Cross head compatible with JIS No 1 screwdriver |
| Contacts material                           | Silver alloy (Ag/Ni)                                                                                                                                                                                                                                                             |
| Short circuit protection                    | 10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                       |
| [Ith] conventional free air thermal current | 10 A conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                                              |

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|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage          | 600 V (degree of pollution: 3) conforming to EN 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to EN 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ie] rated operational current         | 1.2 A at 600 V, AC-15, A600 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>0.27 A at 250 V, DC-13, Q600 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>6 A at 120 V, AC-15, A600 conforming to EN/IEC 60947-5-1<br>3 A at 240 V, AC-15, A600 conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                                                                            |
| Electrical durability                  | 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<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, 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, 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, 2 A at 230 V, operating rate: 3600 cyc/h, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C |
| Electrical reliability IEC 60947-5-4   | $\Lambda < 10\exp(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4<br>$\Lambda < 10\exp(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

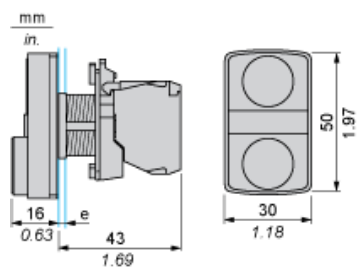
## Environment

|                                            |                                                                                                                                                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                       | TH                                                                                                                                                                             |
| Ambient air temperature for storage        | -40...70 °C                                                                                                                                                                    |
| Ambient air temperature for operation      | -25...70 °C                                                                                                                                                                    |
| Class of protection against electric shock | Class II conforming to IEC 60536                                                                                                                                               |
| IP degree of protection                    | IP69K conforming to IEC 60529<br>IP66 conforming to IEC 60529                                                                                                                  |
| NEMA degree of protection                  | NEMA 4X<br>NEMA 13                                                                                                                                                             |
| IK degree of protection                    | IK03 conforming to IEC 50102                                                                                                                                                   |
| Standards                                  | EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>JIS C 4520<br>UL 508<br>CSA C22.2 No 14                                                                              |
| Product certifications                     | BV<br>CSA<br>DNV<br>GL<br>LROS (Lloyds register of shipping)<br>RINA<br>UL listed                                                                                              |
| Vibration resistance                       | 5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6                                                                                                                              |
| Shock resistance                           | 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27<br>30 gn (duration = 18 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

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Dimensions

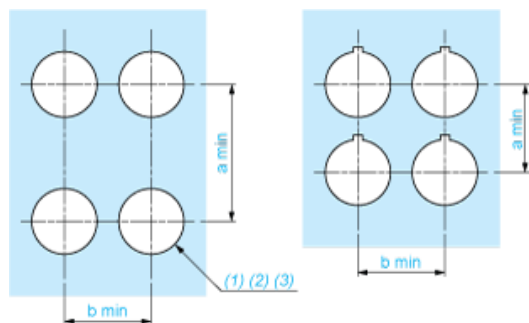
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e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

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

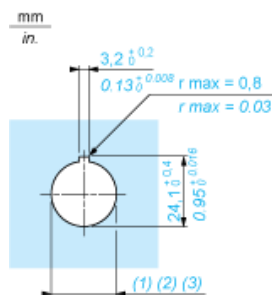
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



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