

## Main

|                                 |   |
|---------------------------------|---|
| Commercial Status               | Commercialised  |
| Range of product                | Harmony XB4   |
| Product or component type       | Complete illuminated pushbutton   |
| Device short name               | XB4   |
| Bezel material                  | Chromium plated metal   |
| Fixing collar material          | Zamak   |
| Mounting diameter               | 22 mm   |
| Sale per indivisible quantity   | 1   |
| Shape of signaling unit head    | Round   |
| Type of operator                | Spring return   |
| Operator profile                | Green flush   |
| Operator additional information | With plain lens   |
| Contacts type and composition   | 1 NO + 1 NC   |
| Contacts operation              | Slow-break  |
| Connections - terminals         | Screw clamp terminals: 1 x 0.22...2 x 2.5 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1<br>Screw clamp terminals: <= 2 x 1.5 mm <sup>2</sup> with cable end conforming to EN/IEC 60947-1 |
| Light source                    | Protected LED   |
| Bulb base                       | Integral LED  |
| [Us] rated supply voltage       | 24 V AC/DC, 50/60 Hz  |

## Complementary

|  |   |
|--|---|
| Height   | 47 mm   |
| Width  | 30 mm   |
| Depth  | 57 mm   |
| Terminals description ISO n°1                            | (13-14)NO<br>(21-22)NC  |
| Product weight   | 0.097 kg  |
| Resistance to high pressure washer                       | 7000000 Pa at 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 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<br>3.5 N (NC changing electrical state)   |
| Mechanical durability                                    | 5000000 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 |
| 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   |

|  |   |
|--|---|
| [Ui] rated insulation voltage          | 600 V (degree of pollution: 3) conforming to EN/IEC 60947-1   |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to EN/IEC 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   |
| Signalling type                        | Steady  |
| Supply voltage limits                  | 21.6...26.4 V AC<br>19.2...30 V DC  |
| Current consumption                    | 18 mA   |
| Service life                           | 100000 h at rated voltage and 25 °C   |
| Surge withstand                        | 1 kV conforming to IEC 61000-4-5  |

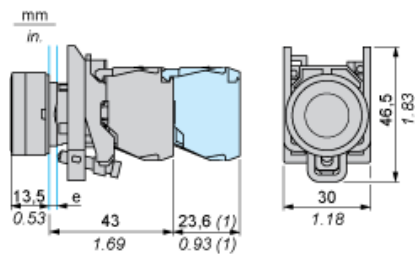
## Environment

|  |  |
|--|--|
| Protective treatment                       | TH   |
| Ambient air temperature for storage        | -40...70 °C  |
| Ambient air temperature for operation      | -25...70 °C  |
| Class of protection against electric shock | Class I conforming to IEC 60536  |
| IP degree of protection                    | IP66 conforming to IEC 60529   |
| NEMA degree of protection                  | NEMA 4X<br>NEMA 13   |
| IK degree of protection                    | IK05 conforming to IEC 50102   |
| Standards                                  | EN/IEC 60947-1<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-5<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 |
| Resistance to fast transients              | 2 kV conforming to IEC 61000-4-4   |
| Resistance to electromagnetic fields       | 10 V/m conforming to IEC 61000-4-3   |
| Resistance to electrostatic discharge      | 8 kV in free air (in insulating parts) conforming to IEC 61000-4-2<br>6 kV on contact (on metal parts) conforming to IEC 61000-4-2   |
| Electromagnetic emission                   | Class B conforming to IEC 55011  |

## Contractual warranty

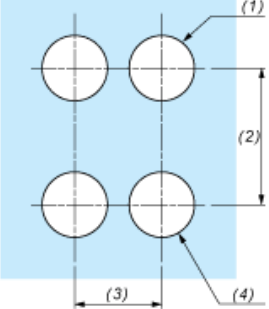
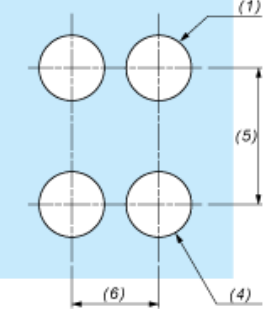
|        |           |
|--------|-----------|
| Period | 18 months |
|--------|-----------|

Dimensions



- e : clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.
- (1) Additional row of contacts or double contact

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   | Connection by Faston Connectors  |
|---|--|
|    |  |
| <p>(1) Diameter on finished panel or support<br/>                 (2) 40 mm min. / 1.57 in. min.<br/>                 (3) 30 mm min. / 1.18 in. min.<br/>                 (4) <math>\varnothing 22.5 \text{ mm} / 0.89 \text{ in. recommended } (\varnothing 22.3 \text{ mm }_0^{+0.4} / 0.88 \text{ in. }_0^{+0.016})</math><br/>                 (5) 45 mm min. / 1.78 in. min.<br/>                 (6) 32 mm min. / 1.26 in. min.</p> |  |