

# XB4BP581EX

yellow pushbutton Ø 22 - spring return - for  
insertion of legend - 1 NO - ATEX



## Main

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| Range of product                | Harmony XB4                                    |
| Product or component type       | Complete push-button                           |
| Device short name               | XB4                                            |
| Bezel material                  | Chromium plated metal                          |
| Fixing collar material          | Zamak                                          |
| Head type                       | Standard                                       |
| Mounting diameter               | 22 mm                                          |
| Sale per indivisible quantity   | 1                                              |
| Dust zone                       | Zone 21 - 22                                   |
| Type of operator                | spring return                                  |
| Operator profile                | Yellow projecting                              |
| Operator additional information | Booted (clear silicon) for insertion of legend |
| Contacts type and composition   | 1 NO                                           |

## Complementary

|                                    |                                                                                                                                                                                                           |
|------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m                                                                                                                                                                     |
| Device mounting                    | Fixing hole - diameter: 22.5 mm 22.3 +0.4/0 conforming to EN/IEC 60947-1                                                                                                                                  |
| Fixing center                      | >= 30 x 40 mm (support panel)                                                                                                                                                                             |
| Embedding depth                    | 43 mm                                                                                                                                                                                                     |
| Marking                            | Ex tb IIIC                                                                                                                                                                                                |
| Shape of signaling unit head       | Round                                                                                                                                                                                                     |
| Contact operation                  | Slow-break                                                                                                                                                                                                |
| Positive opening                   | Without                                                                                                                                                                                                   |
| Operating travel                   | 2.6 mm (NO changing electrical state)<br>4.3 mm (total travel)                                                                                                                                            |
| Operating force                    | 3.8 N NO changing electrical state                                                                                                                                                                        |
| Mechanical durability              | 5000000 cycles                                                                                                                                                                                            |
| 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...2 x 2.5 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1 |
| Tightening torque                  | 0.8...1.2 N.m conforming to EN 60947-1                                                                                                                                                                    |
| Shape of screw head                | Cross compatible with Philips no 1 screwdriver<br>Cross compatible with pozidriv No 1 screwdriver                                                                                                         |

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | Slotted compatible with flat Ø 4 mm screwdriver<br>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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [Ith] conventional free air thermal current | 10 A conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| [Ui] rated insulation voltage               | 600 V (pollution degree 3) conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [Uimp] rated impulse withstand voltage      | 6 kV EN/IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| [Ie] 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

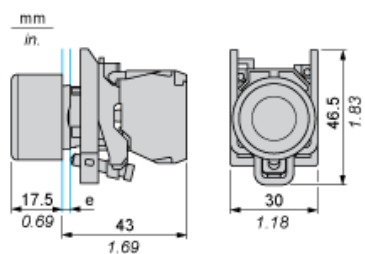
## Environment

|                                       |                                                                                                                                                                                |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                  | TH                                                                                                                                                                             |
| Ambient air temperature for storage   | -40...70 °C                                                                                                                                                                    |
| Ambient air temperature for operation | -40...70 °C                                                                                                                                                                    |
| Overvoltage category                  | I conforming to IEC 60536                                                                                                                                                      |
| IP degree of protection               | IP66 conforming to IEC 60529<br>IP67                                                                                                                                           |
| NEMA degree of protection             | NEMA 13<br>NEMA 4X                                                                                                                                                             |
| IK degree of protection               | IK03 conforming to IEC 50102                                                                                                                                                   |
| Standards                             | EN 50014<br>EN 50281-1-1<br>IEC 61241-0<br>IEC 61241-1                                                                                                                         |
| Directives                            | 94/9/EC - ATEX directive                                                                                                                                                       |
| Product certifications                | INERIS 04ATEX9004U<br>GL<br>DNV                                                                                                                                                |
| 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<br>50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

## Contractual warranty

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

Pushbutton



e : support 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                                                                                                                                                                                                                                                                                                                                           | Connection by Faston Connectors                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                |  |
| <div><div>(1)</div><div>Diameter on finished panel or support</div><div>(2)</div><div>40 mm min. / 1.57 in. min.</div><div>(3)</div><div>30 mm min. / 1.18 in. min.</div><div>(4)</div><div>Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <sub>0</sub><sup>+0.4</sup> / 0.88 in. <sub>0</sub><sup>+0.016</sup>)</div><div>(5)</div><div>45 mm min. / 1.78 in. min.</div><div>(6)</div><div>32 mm min. / 1.26 in. min.</div></div> |                                                                                   |