



## Main

|                               |  |
|-------------------------------|--|
| Commercial Status             | Commercialised   |
| Range of product              | Harmony XB4  |
| Product or component type     | Complete body/contact assembly   |
| Device short name             | ZB4  |
| Fixing collar material        | Zamak  |
| Sale per indivisible quantity | 1  |
| Contacts type and composition | 2 NC   |
| Contacts operation            | Slow-break   |
| Contact block type            | Single   |
| Additional information        | With body/fixing collar  |
| Connections - terminals       | Screw clamp terminals: $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN 60947-1<br>Screw clamp terminals: $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN 60947-1 |

## Complementary

|  |  |
|--|--|
| CAD overall width  | 30 mm  |
| CAD overall height                                       | 47 mm  |
| CAD overall depth  | 37 mm  |
| Terminals description ISO n°1                            | (11-12)NC  |
| Product weight   | 0.062 kg   |
| 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>1.5 mm (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 $\varnothing 5.5 \text{ mm}$ screwdriver<br>Slotted head compatible with flat $\varnothing 4 \text{ mm}$ 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  |
| [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              | 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   |

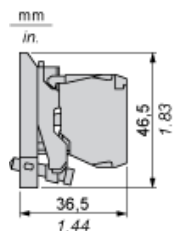
## Environment

|                                       |  |
|---------------------------------------|--|
| Protective treatment                  | TH   |
| Ambient air temperature for storage   | -40...70 °C  |
| Ambient air temperature for operation | -25...70 °C  |
| IP degree of protection               | IP20 conforming to IEC 60529   |
| Standards                             | CSA C22-2 No 14<br>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                                |
| Product certifications                | BV<br>CSA<br>DNV<br>GL<br>LROS (Lloyds register of shipping)<br>RINA<br>UL   |
| Vibration resistance                  | 5 gn (f = 2...500 Hz) conforming to IEC 60068-2-6  |
| Shock resistance                      | 50 gn for 11 ms half sine wave acceleration conforming to IEC 60068-2-27<br>30 gn for 18 ms half sine wave acceleration conforming to IEC 60068-2-27 |

Dimensions of Bodies for Pushbuttons and Switches

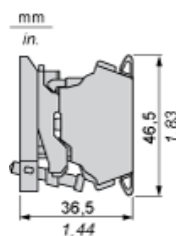
Screw Clamp Terminal Connections

ZB4 BZ10•, ZB4 BZ141



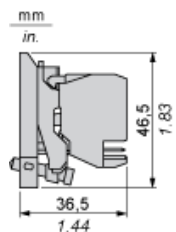
Spring Terminal Connections

ZB4 BZ10•5



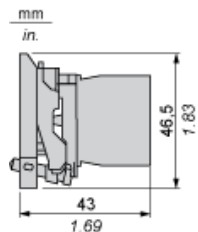
Plug-in Connector

ZB4 BZ10•4, ZB4 BZ1414



High Power Switching with Screw Clamp Terminal Connections

ZBE 50• block + ZB4 BZ009 body



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> |  |