

# ZB4BW0G52

orange light block with body/fixing collar with  
integral LED 110...120V 1NC



## Main

|                               |                                                                                                                                                                                                          |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product              | Harmony XB4                                                                                                                                                                                              |
| Product or component type     | Complete body/contact assembly and light block                                                                                                                                                           |
| Device short name             | ZB4                                                                                                                                                                                                      |
| Fixing collar material        | Zamak                                                                                                                                                                                                    |
| Sale per indivisible quantity | 1                                                                                                                                                                                                        |
| Contacts type and composition | 1 NC                                                                                                                                                                                                     |
| Contacts operation            | Slow-break                                                                                                                                                                                               |
| Connections - terminals       | Screw clamp terminals : $\leq 2 \times 1.5 \text{ mm}^2$ with cable end conforming to EN 60947-1<br>Screw clamp terminals : $\geq 1 \times 0.22 \text{ mm}^2$ without cable end conforming to EN 60947-1 |
| Light source                  | Protected LED                                                                                                                                                                                            |
| Bulb base                     | Integral LED                                                                                                                                                                                             |
| Light block supply            | Direct                                                                                                                                                                                                   |
| Light source colour           | Orange                                                                                                                                                                                                   |
| [Us] rated supply voltage     | 110...120 V AC, 50/60 Hz                                                                                                                                                                                 |

## Complementary

|                               |                                                                 |
|-------------------------------|-----------------------------------------------------------------|
| CAD overall width             | 30 mm                                                           |
| CAD overall height            | 47 mm                                                           |
| Terminals description ISO n°1 | (11-12)NC                                                       |
| Product weight                | 0.064 kg                                                        |
| Contacts usage                | Standard                                                        |
| Positive opening              | With positive opening conforming to EN/IEC 60947-5-1 appendix K |
| Operating travel              | 1.5 mm (NC changing electrical state)<br>4.3 mm (total travel)  |
| Operating force               | 2 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           | Cross head compatible with Philips no 1 screwdriver             |

|                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                          | Cross head compatible with pozidriv No 1 screwdriver<br>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>0.55 A at 125 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>1.2 A at 600 V, AC-15, A600 conforming to EN/IEC 60947-5-1<br>0.27 A at 250 V, DC-13, Q600 conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                                                                            |
| Electrical durability                                    | 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<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                     | $\Lambda < 10\exp(-6)$ 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Current consumption                                      | 14 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Service life                                             | 100000 h at rated voltage and 25 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Surge withstand                                          | 1 kV conforming to IEC 61000-4-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Compatibility code                                       | ZB4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

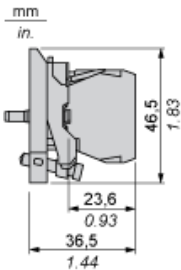
## Environment

|                                            |                                                                                                                                                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                       | TH                                                                                                                                                                             |
| Ambient air temperature for storage        | -40...70 °C                                                                                                                                                                    |
| Ambient air temperature for operation      | -40...70 °C                                                                                                                                                                    |
| Class of protection against electric shock | Class I conforming to IEC 60536                                                                                                                                                |
| Standards                                  | EN/IEC 60947-5-5<br>JIS C 4520<br>EN/IEC 60947-1<br>CSA C22.2 No 14<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>UL 508                                                          |
| Product certifications                     | DNV<br>LROS (Lloyds register of shipping)<br>CSA<br>RINA<br>GL<br>BV<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      | 6 kV on contact (on metal parts) conforming to IEC 61000-2-6<br>8 kV in free air (in insulating parts) conforming to IEC 61000-2-6                                             |
| Electromagnetic emission                   | Class B conforming to IEC 55011                                                                                                                                                |

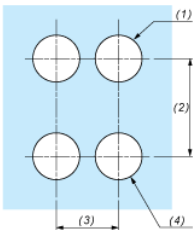
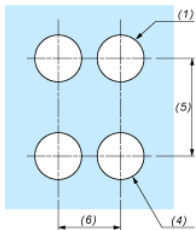
## Contractual warranty

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

Dimensions



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</p> <p>(2) 40 mm min. / 1.57 in. min.</p> <p>(3) 30 mm min. / 1.18 in. min.</p> <p>(4) Ø 22.5 mm / 0.89 in. recommended (Ø 22.3 mm <math>^{+0.4}_0</math> / 0.88 in. <math>^{+0.016}_0</math>)</p> <p>(5) 45 mm min. / 1.78 in. min.</p> <p>(6) 32 mm min. / 1.26 in. min.</p> |                                                                                    |