

# ZB4BW0B11

white light block with body/fixing collar with  
integral LED 24V 1NO



## 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 NO                                                                                                                                                                                                     |
| 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           | White                                                                                                                                                                                                    |
| [Us] rated supply voltage     | 24 V AC/DC, 50/60 Hz                                                                                                                                                                                     |

## Complementary

|                               |                                                                |
|-------------------------------|----------------------------------------------------------------|
| CAD overall width             | 30 mm                                                          |
| CAD overall height            | 47 mm                                                          |
| Terminals description ISO n°1 | (13-14)NO                                                      |
| Product weight                | 0.064 kg                                                       |
| Contacts usage                | Standard                                                       |
| Positive opening              | Without positive opening                                       |
| Operating travel              | 2.6 mm (NO changing electrical state)<br>4.3 mm (total travel) |
| Operating force               | 2.3 N (NO changing electrical state)                           |
| Operating torque              | 0.05 N.m (NO 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<br>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>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 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Supply voltage limits                                    | 19.2...30 V DC<br>21.6...26.4 V AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Current consumption                                      | 18 mA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Service life                                             | 100000 h at rated voltage and 25 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Surge withstand                                          | 1 kV conforming to IEC 61000-4-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

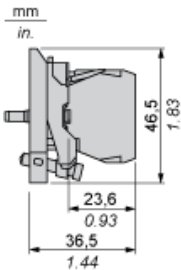
## Environment

|                                            |                                                                                                                                                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                       | TH                                                                                                                                                                             |
| Ambient air temperature for storage        | -40...70 °C                                                                                                                                                                    |
| Ambient air temperature for operation      | -40...70 °C                                                                                                                                                                    |
| Class of protection against electric shock | Class I conforming to IEC 60536                                                                                                                                                |
| Standards                                  | EN/IEC 60947-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-5-5<br>JIS C 4520<br>EN/IEC 60947-5-1<br>UL 508<br>CSA C22.2 No 14                                                          |
| Product certifications                     | CSA<br>UL listed<br>BV<br>DNV<br>GL<br>RINA<br>LROS (Lloyds register of shipping)                                                                                              |
| 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 |
| 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                                                                                                                                                |

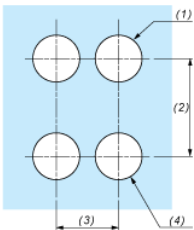
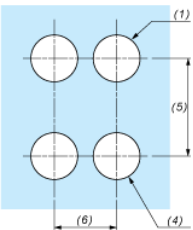
Contractual warranty

|                 |           |
|-----------------|-----------|
| 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> |                                                                                    |