

| Main |  | 尔 |
| :---: | :---: | :---: |
| Range of product | Harmony XB5 | ＇ |
| Product or component type | Complete body／contact assembly | － |
| Device short name | ZB5 | 兰 |
| Fixing collar material | Plastic | E |
| Sale per indivisible quantity | 1 | \％ |
| Head type | Standard | $\frac{\stackrel{5}{0}}{}$ |
| Contacts type and composition | $1 \mathrm{NO}+1 \mathrm{NC}$ | $\stackrel{\text { ® }}{\text { ® }}$ |
| Contact operation | Slow－break | \％ |
| Contact block type | Single | ． |
| Connections－terminals | Screw clamp terminals $<=2 \times 1.5 \mathrm{~mm}^{2}$ with cable end EN 60947－1 Screw clamp terminals $>=1 \times 0.22 \mathrm{~mm}^{2}$ without cable end EN 60947－1 | W |
| Complementary |  | con |
| CAD overall width | 30 mm | 兰 |
| CAD overall height | 42 mm | \％ |
| CAD overall depth | 32 mm | $\stackrel{5}{5}$ |
| Terminals description ISO $\mathrm{n}^{\circ} 1$ | $\begin{aligned} & (11-12) \mathrm{NC} \\ & (13-14) \mathrm{NO} \end{aligned}$ | 美 |
| Device composition | Body Fixing collar | \％ $\stackrel{0}{0}$ 0 0 0 |
| Contacts usage | Standard contacts | 喈 |
| Positive opening | With positive opening conforming to EN／IEC 60947－5－1 appendix K | ¢ |
| Operating travel | 1.5 mm （NC changing electrical state） <br> 2.6 mm （NO changing electrical state） <br> 4.3 mm （total travel） | \％ \％ \％ O \％ \％ |
| Mechanical durability | 10000000 cycles | 旁 |
| Tightening torque | 0．8．．．1．2 N．m conforming to EN 60947－1 | $\stackrel{\text { \％}}{\text { \％}}$ |
| Shape of screw head | Cross head compatible with Philips no 1 screwdriver Cross head compatible with pozidriv No 1 screwdriver Slotted head compatible with flat $\varnothing 4 \mathrm{~mm}$ screwdriver Slotted head compatible with flat $\varnothing 5.5 \mathrm{~mm}$ screwdriver | 틏 |
| Contacts material | Silver alloy（Ag／Ni） | － |
| Short－circuit protection | 10 A cartridge fuse type gG conforming to EN／IEC 60947－5－1 | $\frac{\square}{\square}$ |


| [lth] 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 60947-1 |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to EN 60947-1 |
| [le] rated operational current | 3 A at $240 \mathrm{~V}, \mathrm{AC}-15, \mathrm{~A} 600$ conforming to EN/IEC 60947-5-1 6 A at $120 \mathrm{~V}, \mathrm{AC}-15, \mathrm{~A} 600$ conforming to EN/IEC 60947-5-1 0.1 A at $600 \mathrm{~V}, \mathrm{DC}-13$, Q600 conforming to EN/IEC 60947-5-1 0.27 A at $250 \mathrm{~V}, \mathrm{DC}-13, \mathrm{Q} 600$ conforming to EN/IEC 60947-5-1 0.55 A at $125 \mathrm{~V}, \mathrm{DC}-13, \mathrm{Q} 600$ conforming to EN/IEC 60947-5-1 1.2 A at $600 \mathrm{~V}, \mathrm{AC}-15$, A600 conforming to EN/IEC 60947-5-1 |
| Electrical durability | 1000000 cycles, AC-15, 2 A at 230 V , operating rate: <= $3600 \mathrm{cyc} / \mathrm{h}$, 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: <= $3600 \mathrm{cyc} / \mathrm{h}$, 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: <= $3600 \mathrm{cyc} / \mathrm{h}$, load factor: 0.5 conforming to $\mathrm{EN} /$ IEC 60947-5-1 appendix C <br> 1000000 cycles, DC-13, 0.2 A at 110 V , operating rate: $<=3600 \mathrm{cyc} / \mathrm{h}$, 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: $<=3600 \mathrm{cyc} / \mathrm{h}$, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C |
| Electrical reliability | $\Lambda<10 \exp (-6)$ at $5 \mathrm{~V}, 1 \mathrm{~mA}$ in clean environment conforming to EN/IEC 60947-5-4 $\Lambda<10 \exp (-8)$ at $17 \mathrm{~V}, 5 \mathrm{~mA}$ in clean environment conforming to EN/IEC 60947-5-4 |

## Environment

| Protective treatment | TH |
| :---: | :---: |
| Ambient air temperature for storage | $-40 . . .70^{\circ} \mathrm{C}$ |
| Ambient air temperature for operation | $-40 . .70^{\circ} \mathrm{C}$ |
| IP degree of protection | IP20 conforming to IEC 60529 |
| Standards | EN/IEC 60947-5-1 <br> UL 508 <br> JIS C 4520 <br> EN/IEC 60947-5-4 <br> CSA C22.2 No 14 <br> EN/IEC 60947-1 |
| Product certifications | GL <br> UL <br> BV <br> CSA <br> DNV <br> LROS (Lloyds register of shipping) RINA |
| Vibration resistance | $5 \mathrm{gn}(\mathrm{f}=2 \ldots 500 \mathrm{~Hz}$ ) conforming to IEC 60068-2-6 |
| Shock resistance | 30 gn (duration $=18 \mathrm{~ms}$ ) for half sine wave acceleration conforming to IEC 60068-2-27 <br> 50 gn (duration $=11 \mathrm{~ms}$ ) for half sine wave acceleration conforming to IEC 60068-2-27 |

Contractual warranty
Warranty period 18 months


Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board

(1) Diameter on finished panel or support
(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
(3) $\quad \varnothing 22.5 \mathrm{~mm}$ recommended $\left(\varnothing 22.3_{0}{ }^{+0.4}\right) / \varnothing 0.89 \mathrm{in}$. recommended $\left(\varnothing 0.88 \mathrm{in} .0^{+0.016}\right)$

| Connections | a in mm | a in in. | b in mm | b in in. |
| :--- | :--- | :--- | :--- | :--- |
| By screw clamp terminals or plug-in connector | 40 | 1.57 | 30 | 1.18 |
| By Faston connectors | 45 | 1.77 | 32 | 1.26 |
| On printed circuit board | 30 | 1.18 | 30 | 1.18 |

Detail of Lug Recess

(2) For selector switches and Emergency stop buttons, use of an anti-rotation plate type ZB5AZ902 is recommended.
(3) $\quad \varnothing 22.5 \mathrm{~mm}$ recommended $\left(\varnothing 22.3_{0^{+0.4}}\right.$ ) / Ø0.89 in. recommended ( $\left.\varnothing 0.88 \mathrm{in} .0^{+0.016}\right)$

