

# Product datasheet

Specifications



Key switch selector, plastic, black, Ø22, key n°455, 2 positions, stay put, 1 NO

XB5AG21

## Main

|                               |  |
|-------------------------------|--|
| Range of product              | Harmony XB5  |
| Product or component type     | Selector switch  |
| Device short name             | XB5  |
| Bezel material                | Dark grey plastic  |
| Head type                     | Standard   |
| Mounting diameter             | 22 mm  |
| Sale per indivisible quantity | 1  |
| Shape of signaling unit head  | Round  |
| Type of operator              | stay put   |
| Operator profile              | key switch   |
| Operator position information | 2 positions 90°  |
| Type of keylock               | Key 455  |
| Contacts type and composition | 1 NO   |
| Contact operation             | Slow-break   |
| 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 mm <sup>2</sup> without cable end conforming to EN/IEC 60947-1 |

## Complementary

|                                    |                                       |
|------------------------------------|---------------------------------------|
| Height                             | 42 mm                                 |
| Width                              | 30 mm                                 |
| Depth                              | 96 mm                                 |
| Terminals description ISO n°1      | (13-14)NO                             |
| Net weight                         | 0.831 kg                              |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m |
| Key withdrawal position            | Left-hand                             |
| Contacts usage                     | Standard contacts                     |
| Positive opening                   | Without                               |
| Torque value                       | 0.14 N.m NO changing electrical state |
| Mechanical durability              | 1000000 cycles                        |

|   |   |
|---|---|
| <b>Tightening torque</b>                                      | 0.8...1.2 N.m conforming to EN 60947-1  |
| <b>Shape of screw head</b>                                    | Cross compatible with Philips no 1 screwdriver<br>Cross compatible with pozidriv No 1 screwdriver<br>Slotted compatible with flat Ø 4 mm screwdriver<br>Slotted compatible with flat Ø 5.5 mm screwdriver   |
| <b>Contacts material</b>                                      | Silver alloy (Ag/Ni)  |
| <b>Short-circuit protection</b>                               | 10 A cartridge fuse type gG conforming to EN/IEC 60947-5-1  |
| <b>[I<sub>th</sub>] conventional free air thermal current</b> | 10 A conforming to EN/IEC 60947-5-1   |
| <b>[U<sub>i</sub>] rated insulation voltage</b>               | 600 V (pollution degree 3) conforming to EN 60947-1   |
| <b>[U<sub>imp</sub>] rated impulse withstand voltage</b>      | 6 kV conforming to EN 60947-1   |
| <b>[I<sub>e</sub>] rated operational current</b>              | 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  |
| <b>Electrical durability</b>                                  | 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 |
| <b>Electrical reliability</b>                                 | $\Lambda < 10\text{exp}(-6)$ at 5 V, 1 mA in clean environment conforming to EN/IEC 60947-5-4<br>$\Lambda < 10\text{exp}(-8)$ at 17 V, 5 mA in clean environment conforming to EN/IEC 60947-5-4   |
| <b>Device presentation</b>                                    | Complete product  |
| <b>Environment</b>  |   |
| <b>Protective treatment</b>                                   | TH  |
| <b>Ambient air temperature for storage</b>                    | -40...70 °C   |
| <b>Ambient air temperature for operation</b>                  | -40...70 °C   |
| <b>Electrical shock protection class</b>                      | Class II conforming to IEC 60536  |
| <b>IP degree of protection</b>                                | IP69<br>IP69K<br>IP66 conforming to IEC 60529<br>IP67   |
| <b>NEMA degree of protection</b>                              | NEMA 13<br>NEMA 4X  |
| <b>IK degree of protection</b>                                | IK06 conforming to IEC 50102  |
| <b>Standards</b>  | UL 508<br>CSA C22.2 No 14<br>EN/IEC 60947-5-1<br>EN/IEC 60947-5-4<br>EN/IEC 60947-1<br>JIS C8201-5-1<br>JIS C8201-1   |
| <b>Product certifications</b>                                 | LROS (Lloyds register of shipping)<br>CSA<br>DNV<br>GL<br>BV<br>UL  |
| <b>Vibration resistance</b>                                   | 5 gn (f= 2...500 Hz) conforming to IEC 60068-2-6  |
| <b>Shock resistance</b>                                       | 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  |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 3.600 cm  |
| Package 1 Width              | 5.300 cm  |
| Package 1 Length             | 9.000 cm  |
| Package 1 Weight             | 82.000 g  |
| Unit Type of Package 2       | BB1       |
| Number of Units in Package 2 | 5         |
| Package 2 Height             | 8.600 cm  |
| Package 2 Width              | 26.000 cm |
| Package 2 Length             | 3.300 cm  |
| Package 2 Weight             | 410.000 g |
| Unit Type of Package 3       | S03       |
| Number of Units in Package 3 | 100       |
| Package 3 Height             | 30.000 cm |
| Package 3 Width              | 30.000 cm |
| Package 3 Length             | 40.000 cm |
| Package 3 Weight             | 8.665 kg  |

## Offer Sustainability

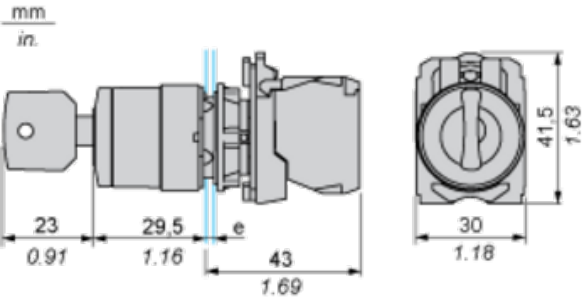
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                           |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a>  |
| RoHS exemption information | <a href="#">Yes</a>   |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

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

**Dimensions**

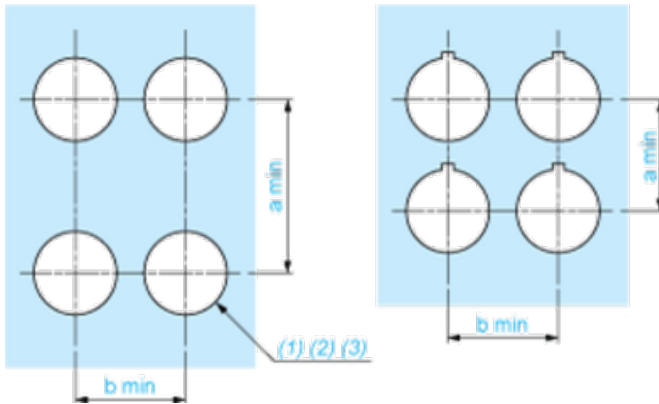
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e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.

**Panel Cut-out for Pushbuttons, Switches and Pilot Lights (Finished Holes, Ready for Installation)**

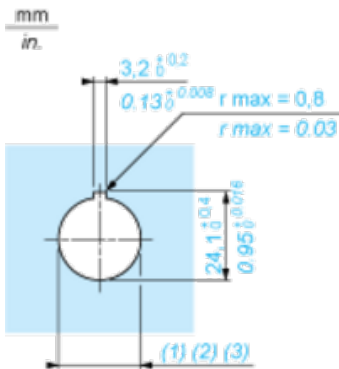
**Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board**



- (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)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

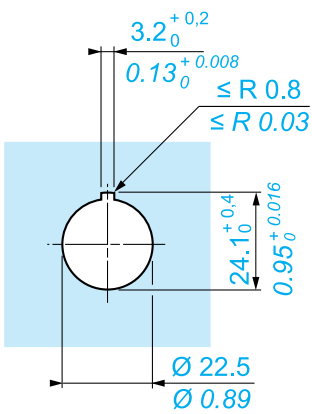
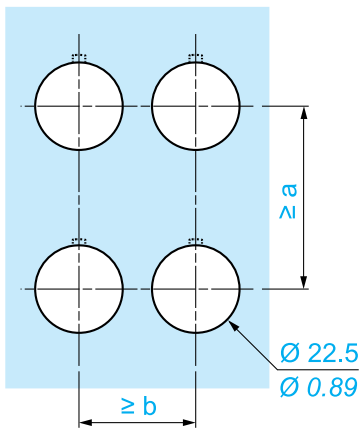
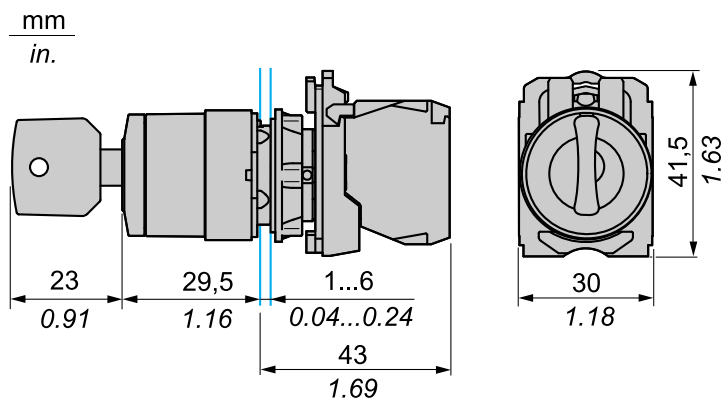
| Connections                                   | a in mm | a in in. | b in mm | b in in. |
|---|---------|----------|---------|----------|
| By screw clamp terminals or plug-in connector | 40      | 1.57     | 30      | 1.18     |
| By Faston connectors                          | 45      | 1.77    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

**Detail of Lug Recess**



- (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)  $\varnothing 22.5$  mm recommended ( $\varnothing 22.3 \text{ }_0^{+0.4}$ ) /  $\varnothing 0.89$  in. recommended ( $\varnothing 0.88 \text{ in. }_0^{+0.016}$ )

Dimensions



|           |           | a (mm) | a (in.) | b (mm) | b (in.) |
|-----------|-----------|--------|---------|--------|---------|
|           |           | 40     | 1.57    | 30     | 1.18    |
| ZBE●●●●●  | ZBV●●●●●  |        |         |        |         |
|           |           | 45     | 1.77    | 32     | 1.26    |
| ZBE●●●●●3 | ZBV●●●●●3 |        |         |        |         |
|           |           | 40     | 1.57    | 30     | 1.18    |
| ZBE●●●●●4 | ZBV●●●●●4 |        |         |        |         |
|           |           | 50     | 1.97    | 30     | 1.18    |
| ZBE●●●●●5 | ZBV●●●●●5 |        |         |        |         |
|           |           | 40     | 1.57    | 30     | 1.18    |
| ZBE●●●●●9 | ZBV●●●●●9 |        |         |        |         |
|           |           | 40     | 1.57    | 30     | 1.18    |
| ZBRT●     | ZBRV1     |        |         |        |         |

Recommended replacement(s)