

# Product data sheet

Specifications



Push button, Harmony XB5, plastic, flush, green, 22mm, spring return, unmarked, 1NO

XB5AA31

## Main

|                               |                                                                                                                                                                                   |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product              | Harmony XB5                                                                                                                                                                       |
| Product or component type     | Push-button                                                                                                                                                                       |
| Device short name             | XB5                                                                                                                                                                               |
| Bezel material                | Plastic<br>Dark grey plastic                                                                                                                                                      |
| Head type                     | Standard                                                                                                                                                                          |
| Fixing collar material        | Plastic                                                                                                                                                                           |
| Mounting diameter             | 22 mm                                                                                                                                                                             |
| Sale per indivisible quantity | 1                                                                                                                                                                                 |
| Shape of signaling unit head  | Round                                                                                                                                                                             |
| Type of operator              | spring return                                                                                                                                                                     |
| Operator profile              | Green flush, unmarked                                                                                                                                                             |
| Contacts type and composition | 1 NO                                                                                                                                                                              |
| Contact operation             | Slow-break                                                                                                                                                                        |
| Connections - terminals       | Screw clamp terminals, <= 2 x 1.5 mm² with cable end conforming to EN/IEC 60947-1<br>Screw clamp terminals, 1 x 0.22...2 x 2.5 mm² without cable end conforming to EN/IEC 60947-1 |

## Complementary

|                                    |                                                                |
|------------------------------------|----------------------------------------------------------------|
| Height                             | 42 mm                                                          |
| Width                              | 30 mm                                                          |
| Depth                              | 52 mm                                                          |
| Terminals description ISO n°1      | (13-14)NO                                                      |
| Net weight                         | 0.037 kg                                                       |
| Resistance to high pressure washer | 7000000 Pa at 55 °C, distance : 0.1 m                          |
| Contacts usage                     | Standard contacts                                              |
| Positive opening                   | Without                                                        |
| Operating travel                   | 2.6 mm (NO changing electrical state)<br>4.3 mm (total travel) |
| Operating force                    | 3.8 N NO changing electrical state                             |
| Mechanical durability              | 10000000 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>[Ith] conventional free air thermal current</b> | 10 A conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>[Ui] rated insulation voltage</b>               | 600 V (pollution degree 3) conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>[Uimp] rated impulse withstand voltage</b>      | 6 kV conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>[Ie] 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>                      | $\Lambda < 10\exp(-6)$ at 5 V and 1 mA in clean environment conforming to EN/IEC 60947-5-4<br>$\Lambda < 10\exp(-8)$ at 17 V and 5 mA in clean environment conforming to EN/IEC 60947-5-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Device presentation</b>                         | Complete product                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Customizable</b>                                | No<br><br>1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>GCR BRIDGE</b>                                  | XB5AACUST01                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Compatibility code</b>                          | XB5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <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>Overvoltage category</b>                        | Class II conforming to IEC 60536                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>IP degree of protection</b>                     | IP66 conforming to IEC 60529<br>IP67<br>IP69<br>IP69K                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>NEMA degree of protection</b>                   | NEMA 13<br>NEMA 4X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>IK degree of protection</b>                     | IK03 conforming to IEC 50102                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Standards</b>                                   | UL 508<br>EN/IEC 60947-5-4<br>CSA C22.2 No 14<br>JIS C8201-5-1<br>EN/IEC 60947-5-1<br>EN/IEC 60947-1<br>JIS C8201-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Product certifications</b>                      | RINA<br>DNV<br>BV<br>CSA<br>LROS (Lloyds register of shipping)<br>GL<br>UL listed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|                      |                                                                                                                                                                                |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 |

### Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 3.500 cm  |
| Package 1 Width              | 5.500 cm  |
| Package 1 Length             | 8.500 cm  |
| Package 1 Weight             | 35.600 g  |
| Unit Type of Package 2       | S03       |
| Number of Units in Package 2 | 150       |
| Package 2 Height             | 30.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 5.861 kg  |
| Unit Type of Package 3       | P06       |
| Number of Units in Package 3 | 1200      |
| Package 3 Height             | 75.000 cm |
| Package 3 Width              | 80.000 cm |
| Package 3 Length             | 60.000 cm |
| Package 3 Weight             | 54.888 kg |

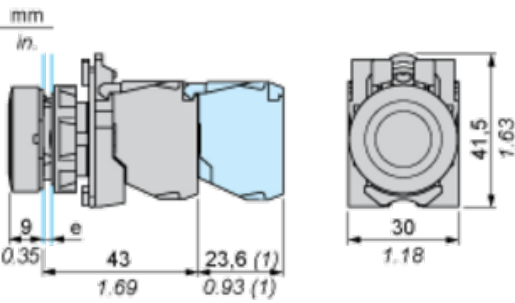
### Offer Sustainability

|                            |                                                                                                                                                                                                                                                                                       |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                 |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                     |
| REACH free of SVHC         | Yes                                                                                                                                                                                                                                                                                   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope)<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                                                     |
| Toxic heavy metal free     | Yes                                                                                                                                                                                                                                                                                   |
| 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                                                                                                                                                           |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Di-isodecyl phthalate (DIDP), which is known to the State of California to cause birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

### Contractual warranty

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

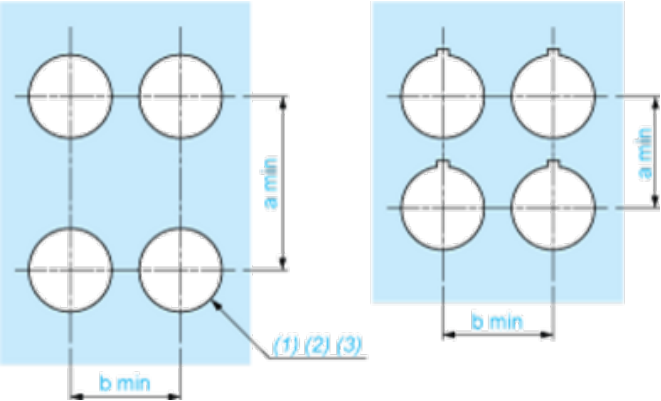
Dimensions



e: clamping thickness: 1 to 6 mm / 0.04 to 0.24 in.  
(1) Additional row of contacts or double contact

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

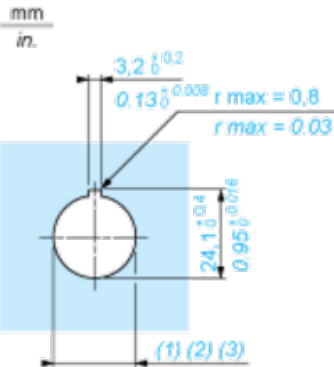
Connection by Screw Clamp Terminals or Plug-in Connectors or on Printed Circuit Board



- (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) Ø22.5 mm recommended (Ø22.3<sub>0</sub><sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.<sub>0</sub><sup>+0.016</sup>)

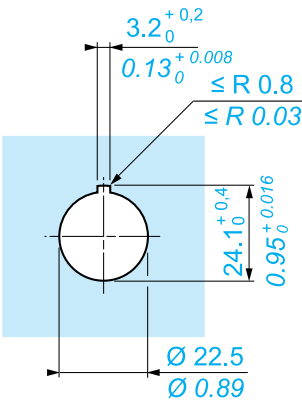
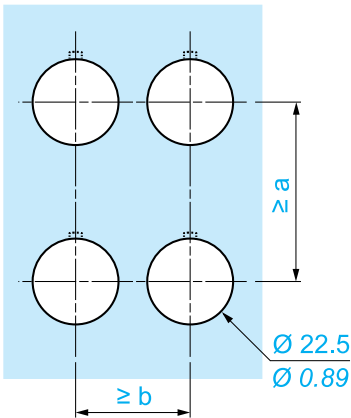
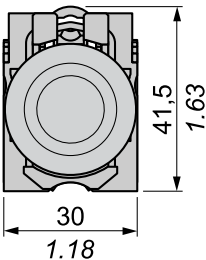
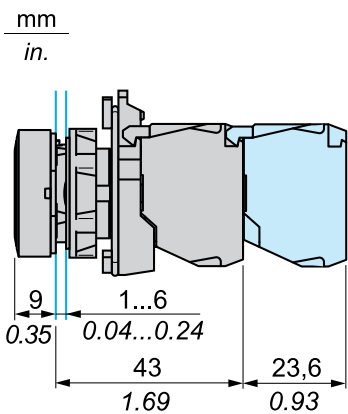
| Connections                                   | a in mm | a in in. | b in mm | b in in. |
|-----------------------------------------------|---------|----------|---------|----------|
| By screw clamp terminals or plug-in connector | 40      | 1.57     | 30      | 1.18     |
| By Faston connectors                          | 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) Ø22.5 mm recommended (Ø22.3<sub>0</sub><sup>+0.4</sup>) / Ø0.89 in. recommended (Ø0.88 in.<sub>0</sub><sup>+0.016</sup>)

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)