## **Product datasheet** Characteristics

## XB7NA42 PB - Spring Rtn, red - 1NC



#### Main

| TTT-COLOR                     |                                                                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product              | Harmony XB7                                                                                                                                                                 |
| Product or component type     | Monolithic push-button                                                                                                                                                      |
| Device short name             | XB7                                                                                                                                                                         |
| Mounting diameter             | 22 mm                                                                                                                                                                       |
| Sale per indivisible quantity | 10                                                                                                                                                                          |
| IP degree of protection       | IP20 (rear face) conforming to IEC 60529<br>IP65 (front face) conforming to IEC 60529                                                                                       |
| Shape of signaling unit head  | Round                                                                                                                                                                       |
| Type of operator              | Spring return                                                                                                                                                               |
| Operator profile              | Red flush unmarked                                                                                                                                                          |
| Contacts type and composition | 1 NC                                                                                                                                                                        |
| Connections - terminals       | Screw clamp terminals: <= 2 x 1.5 mm² with cable end conforming to EN/IEC 60947-1 Screw clamp terminals: 1 x 0.342 x 2.5 mm² without cable end conforming to EN/IEC 60947-1 |

### Complementary

| Main                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of product                                                                                                                                                                                                                        | Harmony XB7                                                                                                                                                                                                                                                                                                                                                                          |
| Product or component type                                                                                                                                                                                                               | Monolithic push-button                                                                                                                                                                                                                                                                                                                                                               |
| Device short name                                                                                                                                                                                                                       | XB7                                                                                                                                                                                                                                                                                                                                                                                  |
| Mounting diameter                                                                                                                                                                                                                       | 22 mm                                                                                                                                                                                                                                                                                                                                                                                |
| Sale per indivisible quantity                                                                                                                                                                                                           | 10                                                                                                                                                                                                                                                                                                                                                                                   |
| IP degree of protection                                                                                                                                                                                                                 | IP20 (rear face) conforming to IEC 60529 IP65 (front face) conforming to IEC 60529                                                                                                                                                                                                                                                                                                   |
| Shape of signaling unit head                                                                                                                                                                                                            | Round                                                                                                                                                                                                                                                                                                                                                                                |
| Type of operator                                                                                                                                                                                                                        | Spring return                                                                                                                                                                                                                                                                                                                                                                        |
| Operator profile                                                                                                                                                                                                                        | Red flush unmarked                                                                                                                                                                                                                                                                                                                                                                   |
| Contacts type and composition                                                                                                                                                                                                           | 1 NC                                                                                                                                                                                                                                                                                                                                                                                 |
| Connections - terminals                                                                                                                                                                                                                 | Screw clamp terminals : <= 2 x 1.5 mm² with cable end conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                                   |
|                                                                                                                                                                                                                                         | Screw clamp terminals : 1 x 0.342 x 2.5 mm² without cable end conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                      |
| CAD overall width                                                                                                                                                                                                                       | 29 mm                                                                                                                                                                                                                                                                                                                                                                                |
| CAD overall width CAD overall height                                                                                                                                                                                                    | 29 mm<br>29 mm                                                                                                                                                                                                                                                                                                                                                                       |
| CAD overall width CAD overall height CAD overall depth                                                                                                                                                                                  | 29 mm<br>29 mm<br>51.5 mm                                                                                                                                                                                                                                                                                                                                                            |
| CAD overall width  CAD overall height  CAD overall depth  Terminals description ISO n°1                                                                                                                                                 | 29 mm<br>29 mm<br>51.5 mm<br>(11-12)NC                                                                                                                                                                                                                                                                                                                                               |
| CAD overall width  CAD overall height  CAD overall depth  Terminals description ISO n°1  Product weight                                                                                                                                 | 29 mm 29 mm 51.5 mm (11-12)NC 0.021 kg                                                                                                                                                                                                                                                                                                                                               |
| CAD overall width  CAD overall height  CAD overall depth  Terminals description ISO n°1  Product weight  Device mounting                                                                                                                | 29 mm<br>29 mm<br>51.5 mm<br>(11-12)NC                                                                                                                                                                                                                                                                                                                                               |
| CAD overall width  CAD overall height  CAD overall depth  Terminals description ISO n°1  Product weight  Device mounting  Fixing center                                                                                                 | 29 mm 29 mm 51.5 mm (11-12)NC 0.021 kg Fixing hole: Ø 22.5 mm (22.3 +0.4/0) conforming to EN/IEC 60947-1 >= 30 x 40 mm on support panel, metal, thickness: 16 mm                                                                                                                                                                                                                     |
| CAD overall width CAD overall height CAD overall depth Terminals description ISO n°1 Product weight Device mounting Fixing center Fixing mode                                                                                           | 29 mm  29 mm  51.5 mm  (11-12)NC  0.021 kg  Fixing hole: Ø 22.5 mm (22.3 +0.4/0) conforming to EN/IEC 60947-1  >= 30 x 40 mm on support panel, metal, thickness: 16 mm >= 30 x 40 mm on support panel, plastic, thickness: 26 mm                                                                                                                                                     |
| CAD overall width  CAD overall height  CAD overall depth  Terminals description ISO n°1  Product weight  Device mounting  Fixing center  Fixing mode  Contacts operation                                                                | 29 mm  51.5 mm  (11-12)NC  0.021 kg  Fixing hole: Ø 22.5 mm (22.3 +0.4/0) conforming to EN/IEC 60947-1  >= 30 x 40 mm on support panel, metal, thickness: 16 mm >= 30 x 40 mm on support panel, plastic, thickness: 26 mm  Fixing nut beneath head recommended torque: 2.2 N.m (+/- 0.2 N.m)                                                                                         |
| CAD overall width  CAD overall height  CAD overall depth  Terminals description ISO n°1  Product weight  Device mounting  Fixing center  Fixing mode  Contacts operation  Positive opening                                              | 29 mm  51.5 mm  (11-12)NC  0.021 kg  Fixing hole: Ø 22.5 mm (22.3 +0.4/0) conforming to EN/IEC 60947-1  >= 30 x 40 mm on support panel, metal, thickness: 16 mm >= 30 x 40 mm on support panel, plastic, thickness: 26 mm  Fixing nut beneath head recommended torque: 2.2 N.m (+/- 0.2 N.m)  Slow-break                                                                             |
| Complementary CAD overall width CAD overall height CAD overall depth Terminals description ISO n°1 Product weight Device mounting Fixing center Fixing mode Contacts operation Positive opening Mechanical durability Tightening torque | 29 mm  51.5 mm  (11-12)NC  0.021 kg  Fixing hole: Ø 22.5 mm (22.3 +0.4/0) conforming to EN/IEC 60947-1  >= 30 x 40 mm on support panel, metal, thickness: 16 mm >= 30 x 40 mm on support panel, plastic, thickness: 26 mm  Fixing nut beneath head recommended torque: 2.2 N.m (+/- 0.2 N.m)  Slow-break  With NC contact positive opening conforming to EN/IEC 60947-5-1 appendix K |

|                                        | Cross head compatible with pozidriv No 1 screwdriver Slotted head compatible with flat $\emptyset$ 4 mm screwdriver Slotted head compatible with flat $\emptyset$ 5.5 mm screwdriver                                                                                                                                                                                                                |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short circuit protection               | 4 A cartridge fuse type gG conforming to EN/IEC 60947-5-1                                                                                                                                                                                                                                                                                                                                           |
| [Ui] rated insulation voltage          | 250 V (degree of pollution: 3) conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                                                                         |
| [Uimp] rated impulse withstand voltage | 4 kV conforming to EN/IEC 60947-1                                                                                                                                                                                                                                                                                                                                                                   |
| [le] rated operational current         | 0.1 A at 250 V, DC-13, R300 conforming to EN/IEC 60947-5-1 0.22 A at 125 V, DC-13, R300 conforming to EN/IEC 60947-5-1 0.3 A at 240 V, AC-14, D300 conforming to EN/IEC 60947-5-1 0.6 A at 120 V, AC-14, D300 conforming to EN/IEC 60947-5-1                                                                                                                                                        |
| Electrical durability                  | 1000000 cycles, DC-13, 0.3 A at 24 V, operating rate: 216000 cyc/mn, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 0.03 A at 230 V, operating rate: 216000 cyc/mn, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C 1000000 cycles, AC-15, 0.09 A at 240 V, operating rate: 108000 cyc/mn, load factor: 0.5 conforming to EN/IEC 60947-5-1 appendix C |
| Electrical reliability IEC 60947-5-4   | Λ <= 10exp(-6) at 17 V, 5 mA conforming to EN/IEC 60947-5-4                                                                                                                                                                                                                                                                                                                                         |
| Environment                            |                                                                                                                                                                                                                                                                                                                                                                                                     |
| Protective treatment                   | ТН                                                                                                                                                                                                                                                                                                                                                                                                  |
| Ambient air temperature for storage    | -4070 °C                                                                                                                                                                                                                                                                                                                                                                                            |
| Ambient air temperature for operation  | -2570 °C                                                                                                                                                                                                                                                                                                                                                                                            |
| Overvoltage category                   | Class II conforming to IEC 61140                                                                                                                                                                                                                                                                                                                                                                    |

| Protective treatment                  | TH                                                                                                                                                                          |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ambient air temperature for storage   | -4070 °C                                                                                                                                                                    |
| Ambient air temperature for operation | -2570 °C                                                                                                                                                                    |
| Overvoltage category                  | Class II conforming to IEC 61140                                                                                                                                            |
| NEMA degree of protection             | NEMA 12 conforming to UL 50 E<br>NEMA 3 conforming to UL 50 E                                                                                                               |
| Standards                             | JIS C 4520<br>CSA C22.2 No 14<br>UL 508<br>EN/IEC 60947-5-1<br>EN/IEC 60947-1                                                                                               |
| Product certifications                | GOST<br>CCC                                                                                                                                                                 |
| Vibration resistance                  | 5 gn (f = 2500 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 50 gn (duration = 11 ms) for half sine wave acceleration conforming to IEC 60068-2-27 |

#### Offer Sustainability

| Sustainable offer status | Not Green Premium product |
|--------------------------|---------------------------|

#### Contractual warranty

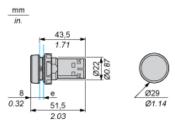
| Warranty period | 18 months |
|-----------------|-----------|

# Product datasheet Dimensions Drawings

## XB7NA42

## Pushbutton, Flush Type

#### Dimensions



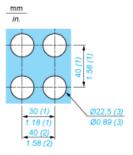
e Support panel thickness: 1 to 6 mm/0.4 to 0.24 in. (metal), 2 to 6 mm/0.8 to 0.24 in. (plastic).

# Product datasheet Mounting and Clearance

## XB7NA42

#### Mounting

#### Diameter of Finished Fixing Holes



- (1) Minimum value.
- (2) 40 mm/1.58 in. for Emergency switching off pushbutton only.
- (3) Standard value: Ø 22.3 (0; + 0.4) mm/Ø 0.88 (0; + 0.02) in.

## Product datasheet Mounting and Clearance

## XB7NA42

## "U" Type Tag Connection



- 6.5 mm/0.26 in. recommended, 7 mm/0.28 in. max.
- (1) (2) M3 screw clamp terminal.

## Product datasheet Connections and Schema

## XB7NA42

Wiring

