

Double break

→ PBX Secure

- Dimensions according to standard DIN 41 636 type F
- Positive break operation mechanism according to IEC 60947-5-1 Annex K
- Double break changeover switch with electrically separated circuits (form Zb)
- IP 40 or IP 67 / IP 65 versions
- Operating temperature between -50 and +85°C
- Long overtravel
- Standard or Low level version



Main specifications

| | | Standard 83240 | Standard High force 83242 | Low level 83241 | Low level High force 83243 |
|---|---|---|--|--|--|
| Degree of protection mechanism - connection | Connections / Accessories | | | | |
| IP 40 - IP 00 | W3 | 83240000 | 83242000 | 83241000 | 83243000 |
| IP 40 - IP 00 | W3 + Lever | 83240003 | 83242003 | 83241003 | ● |
| IP 40 - IP 00 | W3 + Lever + Mounting plate with holes | 83240004 | 83242004 | 83241004 | 83243004 |
| IP 40 - IP 00 | W3 + Lever + Mounting plate with notches | 83240005 | 83242005 | ● | ● |
| IP 40 - IP 00 | W3 with 90° angle | 83240010 | ● | ● | ● |
| IP 40 - IP 00 | W3 with 90° angle + Lever | 83240013 | ● | ● | ● |
| IP 40 - IP 00 | W3 with 90° angle + Lever + Mounting plate with holes | 83240014 | ● | ● | ● |
| IP 40 - IP 00 | W3 with 90° angle + Lever + Mounting plate with notches | 83240015 | ● | ● | ● |
| IP 40 - IP 00 | W5 | 83240020 | 83242020 | 83241020 | 83243020 |
| IP 40 - IP 00 | W5 + Lever | 83240023 | 83242023 | 83241023 | ● |
| IP 40 - IP 00 | W5 + Lever + Mounting plate with holes | 83240024 | 83242024 | 83241024 | ● |
| IP 40 - IP 20 | W5 + Protective cover | 83240030 | ● | ● | ● |
| IP 40 - IP 20 | W5 + Protective cover + Lever | 83240033 | ● | ● | ● |
| IP 40 - IP 20 | W5 + Protective cover + Lever + Mounting plate with holes | 83240034 | ● | 83241034 | ● |
| IP 67 / IP 65 - IP 00 | W3 | 83240200 | 83242200 | 83241200 | 83243200 |
| IP 67 / IP 65 - IP 00 | W3 + Lever | 83240203 | ● | 83241203 | ● |
| IP 67 / IP 65 - IP 00 | W3 with 90° angle | 83240210 | ● | 83241210 | ● |
| IP 67 / IP 65 - IP 00 | W3 with 90° angle + Lever | 83240213 | ● | 83241213 | ● |
| IP 67 / IP 65 - IP 00 | W5 | 83240220 | 83242220 | 83241220 | 83243220 |
| IP 67 / IP 65 - IP 00 | W5 + Lever | 83240223 | ● | ● | ● |
| IP 67 / IP 65 - IP 00 | W5 + Lever + Mounting plate with holes | 83240224 | 83242224 | ● | ● |
| Electrical characteristics | | | | | |
| Direct opening action | | ↔ | ↔ | | |
| Rating nominal / 250 V~ (A) | | 6 | 6 | - | - |
| Rating nominal / 250 V--- (A) | | 0.6 | 0.6 | - | - |
| Rating Thermal (A) | | 10 | 10 | - | - |
| Operating range / 4 → 30 V--- / ~ (A) | | - | - | 0.001 → 0.1 | 0.001 → 0.1 |
| Mechanical characteristics | | | | | |
| Maximum operating force (N) | | 4.5 | 6.5 | 4.5 | 6.5 |
| Minimum positive opening force (N) | | 28 | 28 | 28 | 28 |
| Maximum rest position (mm) | | 8.9 | 8.9 | 8.9 | 8.9 |
| Operating position (mm) | | 6.6 ±0.25 * | 6.6 ±0.25 * | 6.6 ±0.25 * | 6.6 ±0.25 * |
| Positive opening position (mm) | | 4.4 * | 4.4 * | 4.4 * | 4.4 * |
| Maximum end of travel position (mm) | | 3.4 * | 3.4 * | 3.4 * | 3.4 * |
| Differential travel (mm) | | 1 ±0.3 | 1 ±0.3 | 1 ±0.3 | 1 ±0.3 |
| Operating temperature (°C) | | -50 → +85 | -50 → +85 | -50 → +85 | -50 → +85 |
| Mechanical life (operations) | | 10 ⁷ (IP40) 4x10 ⁶ (IP 67) | 10 ⁷ (IP40) 4 x 10 ⁶ (IP67) | 10 ⁷ (IP40) 4 x 10 ⁶ (IP67) | 10 ⁷ (IP40) 4 x 10 ⁶ (IP67) |
| Contact gap (mm) | | 2 x 1 | 2 x 1 | 2 x 1 | 2 x 1 |
| Max. tightening torque (Nm) | | 1.3 on Ø 4.1 holes | 1.3 on Ø 4.1 holes | 1.3 on Ø 4.1 holes | 1.3 on Ø 4.1 holes |
| Weight (g) | | 22 * | 22 * | 22 * | 22 * |
| Comments | | | | | |
| * Values given for versions without lever (in relation to the reference dimension X0 - See Dimensions section). | | | | | |

Stocked product

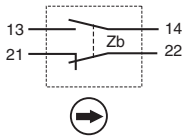
Product made to order

Available on request

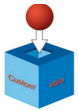
Principles

Function

Four-terminal two-way snap-action contact element (form Zb) with positive break operation. The 2 contacts are electrically separated.



Product adaptations



- Wire outputs, cable outputs
- Special levers and actuators
- Connections:
 - W3 terminals with angle between 0° and 90°
 - special add-on terminals
- Special protective cover
- UL CSA, CCC, GOST and VDE certification on request

Additional characteristics

Components

Material

- Case/cover: PC GF 20 FR. (UL 94-V0, GWFI 960°C, NFF 16-101/102 I2F1)
- Contacts: AgNi for Standard version and AgPd for low level version
- Terminals: Brass
- Button membrane: Silicone
- Screws: zinc protected steel (stainless steel on request)

Conformity to standards

- Construction and performance according to IEC 60947-5-1
- Positive opening operation according to IEC 60947-5-1 Annex K
- Dimensions conforming to standard DIN 41 636 type F

- Insulation characteristics according to standard IEC 60947-5-1

* Impulse withstand voltage: $U_{imp} = 4 \text{ KV}$

* Rated insulation voltage: $U_i = 400 \text{ V}$

* Pollution degree = 3

- Insulation characteristics according to standard EN 50124-1

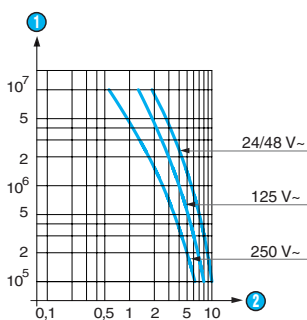
* Impulse withstand voltage: $U_{imp} = 2.5 \text{ KV}$

* Rated insulation voltage: $U_i = 150 \text{ V}$

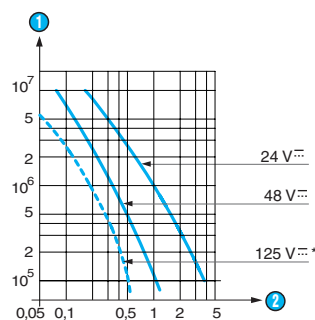
* Pollution degree = PD3A

Curves

Operating curve for category AC15



Operating curve for category DC13



① Number of operations

② Current in Amps

* For IP67 versions used in 125 V DC, please consult us.

Dimensions (mm)

→ Product

83240 - 83241 - 83242 - 83243



- ① Fixing screw threaded length
- ② Fixing nuts 2 x M3

→ Connections

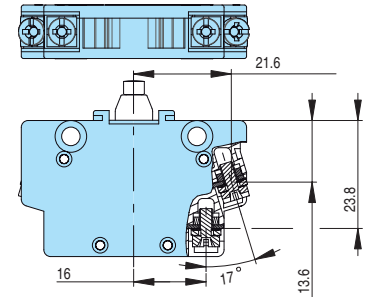
W3 for 6.35 mm x 0.8 mm female connector



W3 with 90° angle



W5 with screws



4 x M3 screws with saddle

W5 with screws and IP20 protective covers



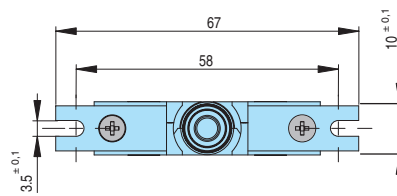
→ Mounting accessories

Mounting plates with holes



Thickness: 1 mm

Mounting plates with notches



Thickness: 1 mm

→ Actuators

Roller lever



Mechanical features of lever versions

| With reference to dimension X1 | 83240/83241 | 83242/83243 |
|-------------------------------------|----------------|----------------|
| Maximum operating force (N) | 2,7 | 3,9 |
| Min. positive opening force (N) | 19 | 19 |
| Maximum rest position (mm) | 21 | 21 |
| Operating position (mm) | 16,6 \pm 0,6 | 16,6 \pm 0,6 |
| Positive opening position (mm) | 13,2 | 13,2 |
| Maximum end of travel position (mm) | 12 | 12 |
| Differential travel (mm) | 1,8 \pm 0,55 | 1,8 \pm 0,55 |

Other information

How to order

8324Xxxx (Contact/Force)

- 0: Standard/4.5N
- 1: Low level/4.5N
- 2: Standard/6.5N High force
- 3: Low level/6.5N High force

8324xXxx (Sealing)

- 0: IP 40
- 2: IP 67

8324xxXx (Connection)

- 0: W3 terminals for 6.35 mm female connector
- 1: W3 90B terminals with 90° angle for 6.35 mm female connector
- 2: W5 terminals with screw
- 3: W5 terminals with screw and protective cover
- 4: W5 terminals supplied without screws

8324xxxX (Accessory fitted)

- 0: Without
- 1: Mounting plates with holes
- 2: Mounting plates with notches
- 3: Roller lever (without plate)
- 4: Roller lever with mounting plates with holes
- 5: Roller lever with mounting plates with notches

Example: A PBX with Standard contact (AgNi), 6.5 N force, IP 67 sealing, W3 terminals and Roller lever accessory with mounting plates with holes = **83242204**

Accessories supplied separately:

- 79552459: Mounting plates with holes
- 79552460: Mounting plates with notches
- 79552456: Roller lever (without plate)
- 79552457: Roller lever with mounting plates with holes
- 79552458: Roller lever with mounting plates with notches