

# 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
<b>Degree of protection mechanism - connection</b>	<b>Connections / Accessories</b>				
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	●	●
<b>Electrical characteristics</b>					
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
<b>Mechanical characteristics</b>					
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 <sup>7</sup> (IP40) 4x10 <sup>6</sup> (IP 67)	10 <sup>7</sup> (IP40) 4 x 10 <sup>6</sup> (IP67)	10 <sup>7</sup> (IP40) 4 x 10 <sup>6</sup> (IP67)	10 <sup>7</sup> (IP40) 4 x 10 <sup>6</sup> (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 *
<b>Comments</b>					
* 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

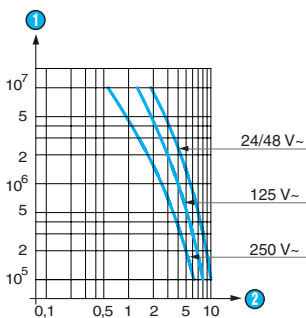
\* Impulse withstand voltage:  $U_{imp} = 2.5 \text{ KV}$

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

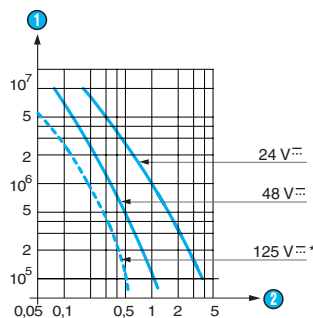
\* Pollution degree = PD3A

## 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



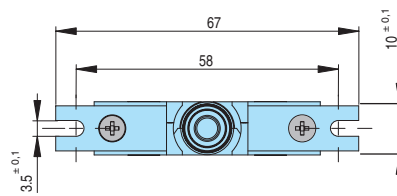
## → Mounting accessories

### 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



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- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
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- Защита от снятия компонента с производства.



#### Как с нами связаться

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