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# **Protected**

# → 83 112

- Double break switching
- Built-in screw connections
- Options for operation in stable positions
- Choice of actuators and mouniting accessories



#### **Main specifications** Built-in screw connections 83 112 0 Connections Function I (changeover) W1 83 112 001 **Electrical characteristics** Rating nominal / 250 V AC (A) 5 Rating thermal / 250 V AC (A) Mechanical characteristics 17.5 Maximum operating force (N) 4 Min. Release force (N) Tripping point (mm) 11.45 + 0.2 - 0.25 0.7 Min. overtravel (mm) Mechanical life (operations) 10<sup>7</sup> Max. permitted overtravel force (N) 20 Rest position max. (mm) 12.75 differential travel (mm) $0.5^{\pm0.2}$ -40 **→** +85 Ambient operating temperature (°C) Contact gap (mm) 0.4 x 2 Weight (g) 14.5

# **Additional specifications**

#### Components

#### Material

- Case : polyamide UL94V2 - Contacts : nickel silver

#### Levers

- Mild steel (zinc)Roller : polyamide
- Adjusting screws : self-retaining
- Plates : iridescent passivated mild steel (zinc)

NB: Fixing holes for these microswitches have metal ferrules.

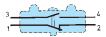
#### **Product adaptations**



- Special levers
- Reinforced spring
- Special contacts
- Approvals : UL cUL

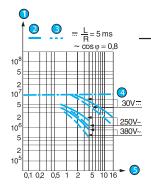
# **Principles**

Double break changeover snap-action switch



#### Curves

Operating curve for type 83 112 0

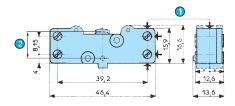


- Number of cycles
- Resistive circuit
- 3 Inductive circuit
- Mechanical life limit
- 5 Current in Amps

# **Dimensions**

#### → Product

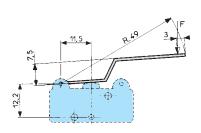
83 112 0



- 1 Connection
- 2 OL = 10.65

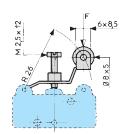
#### → Actuators

Α



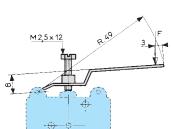
Lever cross-section 1 x 6.4 mm

Q



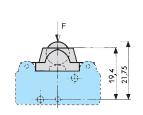
Lever cross-section 1 x 6.4 mm

В

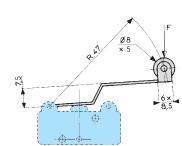


Lever cross-section 1 x 6.4 mm

В9

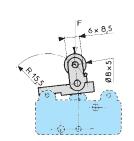


Ε



Lever cross-section 1 x 6.4 mm

٧3

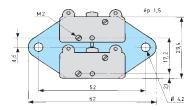


Lever cross-section 1 x 6.4 mm

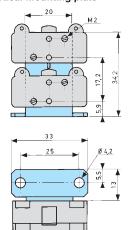
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## → Mounting accessories

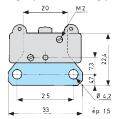
2-pole side mounting plate



2-pole vertical mounting plate



# Horizontal single-pole mounting plate



Unless indicated, the thickness of plates is 1.5 mm

# **Actuators and mounting accessories**

|    | 70500888      | 70500828                                 | 70500813                                              | 70500840                                                                                                                                                                     | 70500870                                                                                                                                                                                                                  | 70500170                                                                                                                                                                                                                                                                                                                                                                  |
|----|---------------|------------------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | <b>A</b> P49  | <b>B</b> P47                             | EP47                                                  | Q                                                                                                                                                                            | <b>V3</b> R15,5                                                                                                                                                                                                           | B9                                                                                                                                                                                                                                                                                                                                                                        |
|    |               | ***                                      |                                                       |                                                                                                                                                                              |                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                           |
| N  | 1.2           | 1.2                                      | 1.2                                                   | 2.8                                                                                                                                                                          | 4                                                                                                                                                                                                                         | 4                                                                                                                                                                                                                                                                                                                                                                         |
| N  | 0.25          | 0.25                                     | 0.2                                                   | 0.45                                                                                                                                                                         | 0.8                                                                                                                                                                                                                       | 1                                                                                                                                                                                                                                                                                                                                                                         |
| mm | 6.2           | 6.2                                      | 6.2                                                   | 3.2                                                                                                                                                                          | 1.45                                                                                                                                                                                                                      | 1.5                                                                                                                                                                                                                                                                                                                                                                       |
| mm | 2.1 ±0.9      | 2.1 ±0.9                                 | 2.1 ±0.9                                              | 1.05 ±0.4                                                                                                                                                                    | 0.5 ±0.2                                                                                                                                                                                                                  | 0.5 ±0.2                                                                                                                                                                                                                                                                                                                                                                  |
| mm | 7.5           | 8.4                                      | 7.5                                                   | 4.5                                                                                                                                                                          | 1.9                                                                                                                                                                                                                       | 1.9                                                                                                                                                                                                                                                                                                                                                                       |
|    | N<br>mm<br>mm | N 1.2<br>N 0.25<br>mm 6.2<br>mm 2.1 **09 | N 1.2 1.2 N 0.25 0.25 mm 6.2 6.2 mm 2.1 ±0.9 2.1 ±0.9 | A P49     B P47     E P47       N     1.2     1.2     1.2       N     0.25     0.25     0.2       mm     6.2     6.2     6.2       mm     2.1 ±0.9     2.1 ±0.9     2.1 ±0.9 | A P49     B P47     E P47     Q       N     1.2     1.2     1.2     2.8       N     0.25     0.25     0.2     0.45       mm     6.2     6.2     6.2     3.2       mm     2.1 ±0.9     2.1 ±0.9     2.1 ±0.9     1.05 ±0.4 | A P49         B P47         E P47         Q         V3 P15,5           N         1.2         1.2         1.2         2.8         4           N         0.25         0.25         0.2         0.45         0.8           mm         6.2         6.2         6.2         3.2         1.45           mm         2.1 ±0.9         2.1 ±0.9         1.05 ±0.4         0.5 ±0.2 |

Except where otherwise indicated, the flat and roller levers are mounted as shown in the dimensional drawings (mounted on the left)...

| Mounting accessories                | 70500208                                          | 70500218                             | 70500216                                 |  |
|-------------------------------------|---------------------------------------------------|--------------------------------------|------------------------------------------|--|
|                                     | <b>H</b> Horizontal single-pole<br>mounting plate | <b>02</b> 2-pole side mounting plate | <b>K2</b> 2-pole vertical mounting plate |  |
|                                     |                                                   |                                      |                                          |  |
| Screws: Length 14.5 <b>70599106</b> | 0                                                 | 6                                    | B C                                      |  |

#### Other information

#### **Mounting - Operation**

See basic technical concepts

To ensure protection against electric shock after installation in the application, please consult us when conductive parts are located less than 3mm from case/cover rear mating surfaces, opposite to button side.

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