

# Switching element

61-8440.22



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Your product:



## 61-8440.22

### Switching element

#### ELECTRICAL CHARACTERISTICS

##### Switching voltage and switching current:

|                                                                          |         |
|--------------------------------------------------------------------------|---------|
| Switch rating AC with silver contact or silver contact with gold plating |         |
| Service category AC-15                                                   |         |
| according to EN IEC 60947-5-1                                            |         |
| Voltage                                                                  | 125 VAC |
| Current                                                                  | 2.5 A   |
| Switch rating DC with silver contact or silver contact with gold plating |         |
| Service category DC-13                                                   |         |
| according to EN IEC 60947-5-1                                            |         |
| Voltage                                                                  | 250 VDC |
| Current                                                                  | 0.15 A  |

##### Contacts:

1 NC

##### Rated Operational Voltage $U_e$ :

250 VAC/DC according to EN IEC 60947-1

##### Rated impulse withstand voltage $U_{imp}$ :

4 kV, according to EN/IEC 60947-5-1

##### Rated insulation voltage $U_i$ :

320 VAC, according to EN / IEC 60947-5-1

##### Recommended minimum operational data:

|         |          |
|---------|----------|
| Voltage | 5 VAC/DC |
| Current | 10 mA    |

##### Switching rating:

250 V AC/DC @ 5 A

##### Electrical lifetime:

≥50 000 cycles of operation at 250VAC, 2A,  $\cos\phi$  0.95,

##### Electric strength:

2500 VAC, 50 Hz, 1 minute, as per DIN / IEC 60512-2 between all terminals and earth

##### Overvoltage category:

III, according to EN / IEC 60947-5-1

##### Pollution degree:

2, according to EN IEC 60947-1

##### Protection class:

II, according to EN / IEC 61058-1

##### Standards:

The switches comply with the "Standards for low-voltage switching devices" EN IEC 61058-1, EN IEC 60947-5-1

##### Thermal current $I_{th}$ :

5 A

#### MECHANICAL CHARACTERISTICS

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Terminal:</b>            | Plug-in terminal, 2.8 x 0.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Contact material:</b>    | Gold                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Switching system:</b>    | Snap-action switching element                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Switching system:</b>    | <p>Self-cleaning, double-break snap-action switching system with contact opening width 2mm x 0.5mm (switch with small contact opening width as per EN IEC 61058-1).</p> <p>The switching elements are optionally equipped with the following switching functions: One to three normally open (NO) or normally closed (NC), or any combination of NO and NC plus connections for T1 3/4 LED or lamp.</p> <p>The number of switching elements cannot exceed three. The switching elements provided for the 3-position switch actuators are equipped with max. 2 NC or 2 NO or any combination. The number of switching elements cannot exceed two.</p> |
| <b>Switching positions:</b> | 2 positions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Wire cross section:</b>  | <p>1 wire flexible: 0.5 ... 0.75 mm<sup>2</sup></p> <p>1 wire super flexible: 0.5 mm<sup>2</sup></p> <p>1 wire rigid: 0.5 ... 1.5 mm<sup>2</sup></p> <p>2 wires rigid: 0.75 mm<sup>2</sup></p> <p>2 wires flexible: 0.5 mm<sup>2</sup></p>                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Weight:</b>              | 0.005 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## AMBIENT CONDITION

|                               |                                                                                                                                                                                                                                                                                                              |
|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Operating temperature:</b> | – 25 °C ... + 55 °C                                                                                                                                                                                                                                                                                          |
| <b>Storage temperature:</b>   | – 40 °C ... + 85 °C                                                                                                                                                                                                                                                                                          |
| <b>Shock resistance:</b>      | Max. 100 m / s <sup>2</sup> , pulse width, 3-axis (sinusoidal EN IEC 60068-2-27)                                                                                                                                                                                                                             |
| <b>Vibration resistance:</b>  | Max. 100 m / s <sup>2</sup> from 10 Hz ... 500 Hz, (sinusoidal EN IEC 60068-2-6)                                                                                                                                                                                                                             |
| <b>Climate resistance:</b>    | <p>Damp heat, cyclic: 96 hours, + 25 °C/97 %, + 55 °C/93 % relative humidity, as per EN IEC 60068-2-30</p> <p>Damp heat, steady: 56 days, + 40 °C/93 % relative humidity, according to EN IEC 60068-2-78</p> <p>Rapid change of temperature: 100 cycles, – 40 °C ... + 80 °C, as per EN / IEC 60068-2-14</p> |

## CERTIFICATE

|                      |                                                             |
|----------------------|-------------------------------------------------------------|
| <b>Approbations:</b> | CB (IEC 61058-1), CQC, CSA, DNV, ENEC (EN 61058-1), UL, VDE |
| <b>Conformities:</b> | CE, UKCA, 2011 / 65 / EC (RoHS), 2014 / 35 / EU (LVD)       |
| <b>REACH:</b>        | REACH compliant                                             |
| <b>RoHS:</b>         | RoHS compliant                                              |

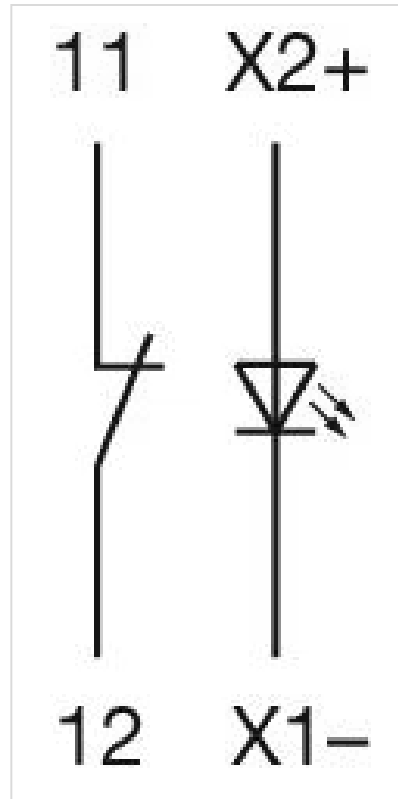
## OTHER

|                           |                                                                                                                 |
|---------------------------|-----------------------------------------------------------------------------------------------------------------|
| <b>Short Description:</b> | Switching element, Snap-action switching element, 250 V AC/DC @ 5 A, Gold, 1 NC, Plug-in terminal, 2.8 x 0.5 mm |
| <b>Material:</b>          | Plastic, according to UL 94 V0                                                                                  |

**Hints:**

With lamp terminal

**Wiring diagrams:**



**Component layouts:**

