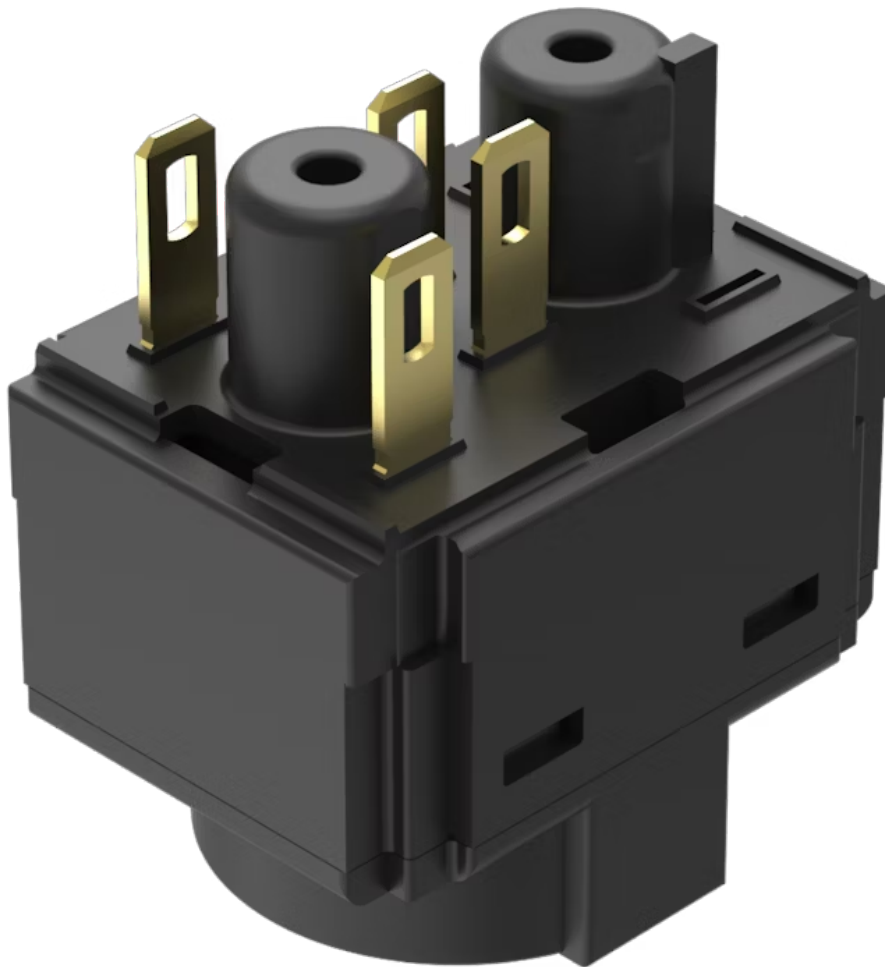


# Switching element

61-8640.37

Distribution by  
DigiKey

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<https://digikey.eao.com/p/61-8640.37>

Your product:

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## 61-8640.37

### Switching element

#### ELECTRICAL CHARACTERISTICS

**Switching voltage and switching current:**

|                                    |  |        |
|------------------------------------|--|--------|
| Switch rating AC with gold contact |  |        |
| Service category AC-15             |  |        |
| according to EN IEC 60947-5-1      |  |        |
| Voltage                            |  | 50 VAC |
| Current                            |  | 0.5 A  |
| Switch rating DC with gold contact |  |        |
| Service category DC-13             |  |        |
| according to EN IEC 60947-5-1      |  |        |
| Voltage                            |  | 50 VDC |
| Current                            |  | 0.1 A  |

**Contacts:**

1 NC

**Rated Operational Voltage  $U_e$ :**

50 VAC / DC, according to EN / IEC 60947-5-1

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

0.8 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 | 10 VAC/DC |
| Current | 2 mA      |

**Switching rating:**

50 V AC/DC @ 0,3 A

**Electric strength:**

4000 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  $I_{th}$ :**

3 A

#### MECHANICAL CHARACTERISTICS

**Terminal:**

Plug-in terminal, 2.8 x 0.5 mm

**Contact material:**

Gold

|                             |                                                                                                                                                                                                                                                                                         |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Switching system:</b>    | Slow-make switching element                                                                                                                                                                                                                                                             |
| <b>Switching system:</b>    | Double-break slow-make system, contact opening width 2 x 1.5 mm, with 2 x 2 contact points per switching element.<br>NC-contact elements in the slow-make elements fulfill requirements of switches with forced opening as per EN / IEC 60947-5-12.17.                                  |
| <b>Switching positions:</b> | 2 positions                                                                                                                                                                                                                                                                             |
| <b>Wire cross section:</b>  | 1 wire flexible: 0.5 ... 0.75 mm <sup>2</sup><br>1 wire super flexible: 0.5 mm <sup>2</sup><br>1 wire rigid: 0.5 ... 1.5 mm <sup>2</sup><br>2 wires flexible: 0.5 ... 0.75 mm <sup>2</sup><br>2 wires super flexible: 0.5 mm <sup>2</sup><br>2 wires rigid: 0.5 ... 1.5 mm <sup>2</sup> |
| <b>Weight:</b>              | 0.008 kg                                                                                                                                                                                                                                                                                |

## AMBIENT CONDITION

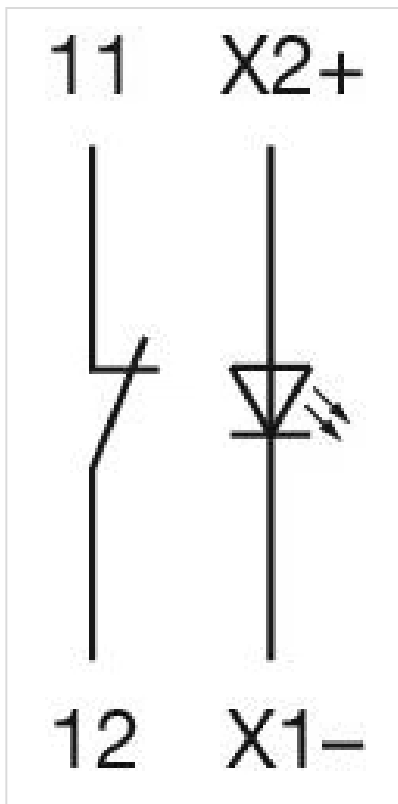
|                               |                                                                                                                                                                                                                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IP Protection:</b>         | IP40                                                                                                                                                                                                                                                                                          |
| <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>    | Damp heat, cyclic: 96 hours, + 25 °C/97 %, + 55 °C/93 % relative humidity, as per EN IEC 60068-2-30<br>Damp heat, steady: 56 days, + 40 °C/93 % relative humidity, according to EN IEC 60068-2-78<br>Rapid change of temperature: 100 cycles, – 40 °C ... + 80 °C, as per EN / IEC 60068-2-14 |

## CERTIFICATE

|                      |                                                                                                                                                |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Approbations:</b> | CB (IEC 60947-5-1), CB (IEC 61058-1), CENELEC CCA-NTR (EN 60947-5-1), CQC, CSA, DNV, EAC, ENEC (EN 61058-1), NFF, SEV (EN / IEC 60947-5-1), UL |
| <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, Slow-make switching element, 50 V AC/DC @ 0,3 A, Gold, 1 NC, Plug-in terminal, 2.8 x 0.5 mm |
| <b>Material:</b>          | Plastic, according to UL 94 V0                                                                                 |
| <b>Hints:</b>             | With lamp terminal                                                                                             |
| <b>Wiring diagrams:</b>   |                                                                                                                |



Component layouts:

