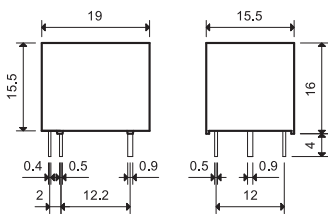


## Features

### Printed circuit mount 10 A relay

- New smaller size
- 1 Pole changeover contacts or 1 Pole normally open contact
- Miniature - "Sugar cube" package
- DC coil - 360 mW
- Wash tight: RT III
- Cadmium Free contact material
- RoHS conform



### 36.11-4001

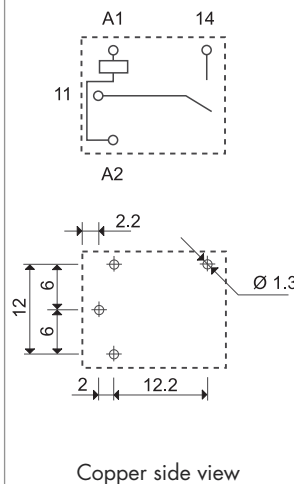
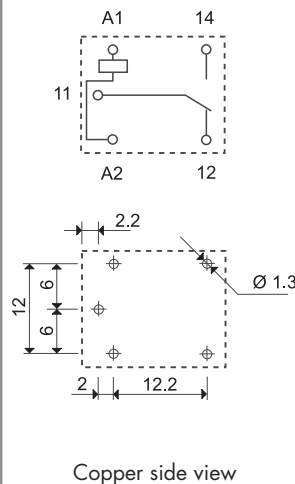


- 1 CO (SPDT), 10 A
- Sugar cube size
- PCB mount

### 36.11-4301



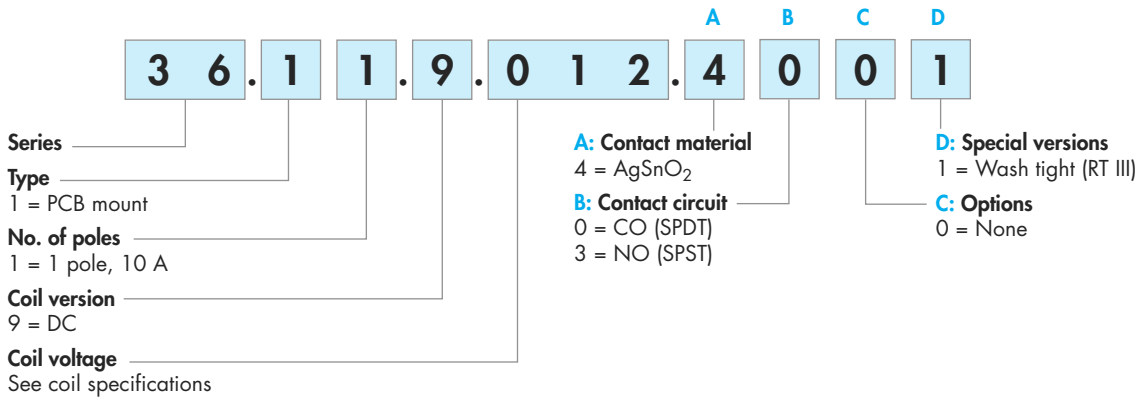
- 1 NO (SPST-NO), 10 A
- Sugar cube size
- PCB mount



| Contact specification                            |                 | 36.11-4001                   | 36.11-4301                   |
|--|-----------------|------------------------------|------------------------------|
| Contact configuration                            |                 | 1 CO (SPDT)                  | 1 NO (SPST-NO)               |
| Rated current/Maximum peak current               | A               | 10/15                        | 10/15                        |
| Rated voltage/Maximum switching voltage V AC     |                 | 250/250                      | 250/250                      |
| Rated load AC1                                   | VA              | 2,500                        | 2,500                        |
| Rated load AC15 (230 V AC)                       | VA              | 500                          | 500                          |
| Single phase motor rating (230 V AC)             | kW              | 0.37                         | 0.37                         |
| Breaking capacity DC1: 30/110/220 V              | A               | 10/0.3/0.12                  | 10/0.3/0.12                  |
| Minimum switching load                           | mW (V/mA)       | 500 (5/100)                  | 500 (5/100)                  |
| Standard contact material                        |                 | AgSnO <sub>2</sub>           | AgSnO <sub>2</sub>           |
| Coil specification                               |                 | 36.11-4001                   | 36.11-4301                   |
| Nominal voltage (U <sub>N</sub> )                | V AC (50/60 Hz) | —                            | —                            |
|  | V DC            | 3 - 5 - 6 - 9 - 12 - 24 - 48 | 3 - 5 - 6 - 9 - 12 - 24 - 48 |
| Rated power AC/DC                                | VA (50 Hz)/W    | —/0.36                       | —/0.36                       |
| Operating range                                  | AC              | —                            | —                            |
|  | DC              | (0.75...1.5)U <sub>N</sub>   | (0.75...1.5)U <sub>N</sub>   |
| Holding voltage                                  | AC/DC           | —/0.4 U <sub>N</sub>         | —/0.4 U <sub>N</sub>         |
| Must drop-out voltage                            | AC/DC           | —/0.1 U <sub>N</sub>         | —/0.1 U <sub>N</sub>         |
| Technical data                                   |                 | 36.11-4001                   | 36.11-4301                   |
| Mechanical life AC/DC                            | cycles          | —/10 · 10 <sup>6</sup>       | —/10 · 10 <sup>6</sup>       |
| Electrical life at rated load AC1                | cycles          | 100 · 10 <sup>3</sup>        | 100 · 10 <sup>3</sup>        |
| Operate/release time                             | ms              | 9/3                          | 9/2                          |
| Insulation between coil and contacts (1.2/50 μs) | kV              | 4                            | 4                            |
| Dielectric strength between open contacts V AC   |                 | 1,000                        | 1,000                        |
| Ambient temperature range                        | °C              | −40...+85                    | −40...+85                    |
| Environmental protection                         |                 | RT III                       | RT III                       |
| Approvals (according to type)                    |                 |                              |                              |

## Ordering information

Example: 36 series miniature PCB relay, 1 CO (SPDT) - 10 A contacts, 12 V DC coil.



**Selecting features and options: only combinations in the same row are possible.**  
Preferred selections for best availability are shown in **bold**.

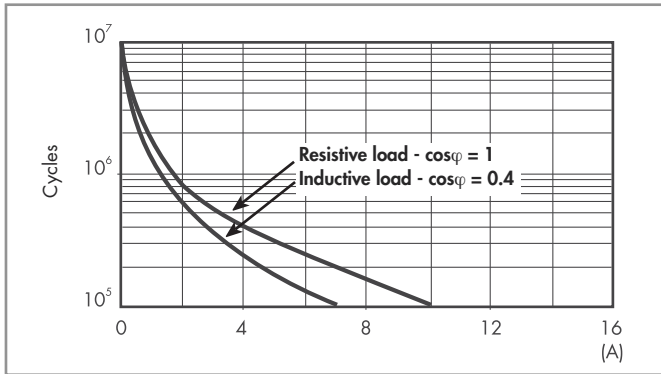
| Type  | Coil version | A        | B            | C        | D        |
|-------|--------------|----------|--------------|----------|----------|
| 36.11 | DC           | <b>4</b> | <b>0</b> - 3 | <b>0</b> | <b>1</b> |

## Technical data

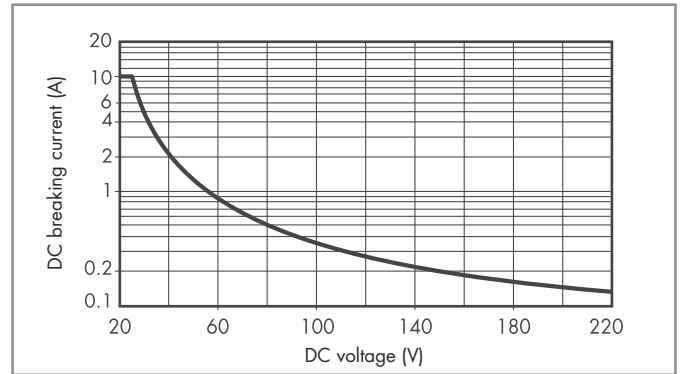
| Insulation according to EN 61810-1                 |                         |                     |                      |
|--|-------------------------|---------------------|----------------------|
| Nominal voltage of supply system                   | V AC                    | 230/400             |                      |
| Rated insulation voltage                           | V AC                    | 250                 |                      |
| Pollution degree                                   |                         | 2                   |                      |
| Insulation between coil and contact set            |                         |                     |                      |
| Type of insulation                                 |                         | Basic               |                      |
| Overvoltage category                               |                         | II                  |                      |
| Rated impulse voltage                              | kV (1.2/50 μs)          | 2.5                 |                      |
| Dielectric strength                                | V AC                    | 2,500               |                      |
| Insulation between open contacts                   |                         |                     |                      |
| Type of disconnection                              |                         | Micro-disconnection |                      |
| Dielectric strength                                | V AC/kV (1.2/50 μs)     | 1,000/1.5           |                      |
| Other data   |                         |                     |                      |
| Bounce time: NO/NC                                 | ms                      | 1/6 (changeover)    | 1/– (normally open)  |
| Vibration resistance (5...55)Hz: NO/NC             | g                       | 15/15 (changeover)  | 15/– (normally open) |
| Shock resistance                                   | g                       | 16                  |                      |
| Power lost to the environment                      | without contact current | W                   | 0.4                  |
|  | with rated current      | W                   | 1.4                  |
| Recommended distance between relays mounted on PCB | mm                      | ≥ 5                 |                      |

## Contact specification

F 36 - Electrical life (AC) v contact current



H 36 - Maximum DC1 breaking capacity



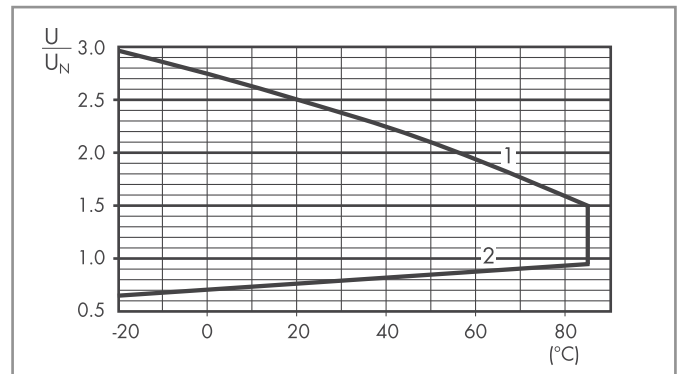
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of  $\geq 100 \cdot 10^3$  can be expected.
- In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.  
Note: the release time for the load will be increased.

## Coil specifications

DC coil data

| Nominal voltage<br>$U_N$<br>V | Coil code | Operating range |                | Resistance<br>R<br>$\Omega$ | Rated coil consumption<br>I at $U_N$<br>mA |
|-------------------------------|-----------|-----------------|----------------|-----------------------------|--|
|                               |           | $U_{min}$<br>V  | $U_{max}$<br>V |                             |  |
| 3                             | 9.003     | 2.2             | 4.5            | 25                          | 120  |
| 5                             | 9.005     | 3.7             | 7.5            | 70                          | 72   |
| 6                             | 9.006     | 4.5             | 9              | 100                         | 60   |
| 9                             | 9.009     | 6.7             | 13.5           | 225                         | 40   |
| 12                            | 9.012     | 9               | 18             | 400                         | 30   |
| 24                            | 9.024     | 18              | 36             | 1,600                       | 15   |
| 48                            | 9.048     | 36              | 72             | 6,400                       | 7.5  |

R 36 - DC coil operating range v ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.

