

# Miniature PCB relays 10 A



Burners, boilers and furnaces



Jacuzzis and hot tubs



Washing machines



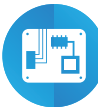
Hi-Fi systems



Refrigerators



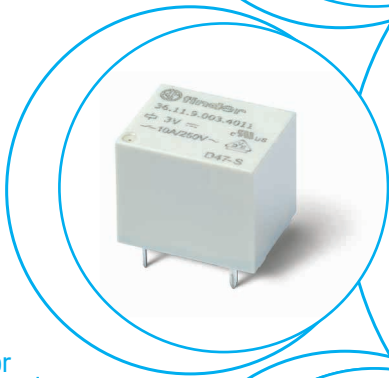
Automation for blinds, grilles and shutters



Electronic circuit boards



Electronic kits





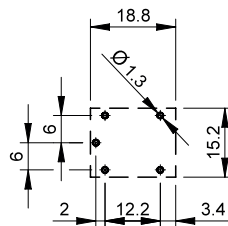
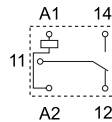
**Printed circuit mount 10 A relay**

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

**36.11-4011**



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



Copper side view

For outline drawing see page 5

**Contact specification**

Contact configuration		1 CO (SPDT)
Rated current/Maximum peak current	A	10/15 (NO) - 5/10 (NC)
Rated voltage/ Maximum switching voltage	V AC	250/277
Rated load AC1	VA	2500 (NO) - 1250 (NC)
Rated load AC15 (230 V AC)	VA	500 (NO)
Single phase motor rating (230 V AC)	kW	0.37 (NO)
Breaking capacity DC1: 28 V	A	10 (NO)
Minimum switching load	mW (V/mA)	500 (5/100)
Standard contact material		AgSnO <sub>2</sub>

**Coil specification**

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	—
	V DC	3 - 5 - 6 - 9 - 12 - 18 - 24 - 48
Rated power AC/DC	VA (50 Hz)/W	—/0.36
Operating range	AC	—
	DC	(0.75...1.3)U <sub>N</sub>
Holding voltage	AC/DC	—/0.5 U <sub>N</sub>
Must drop-out voltage	AC/DC	—/0.1 U <sub>N</sub>

**Technical data**

Mechanical life AC/DC	cycles	—/10 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	50 · 10 <sup>3</sup>
Operate/release time	ms	10/5
Insulation between coil and contacts (1.2/50 μs)	kV	4
Dielectric strength between open contacts	V AC	750
Ambient temperature range	°C	-40...+85
Environmental protection		RT III

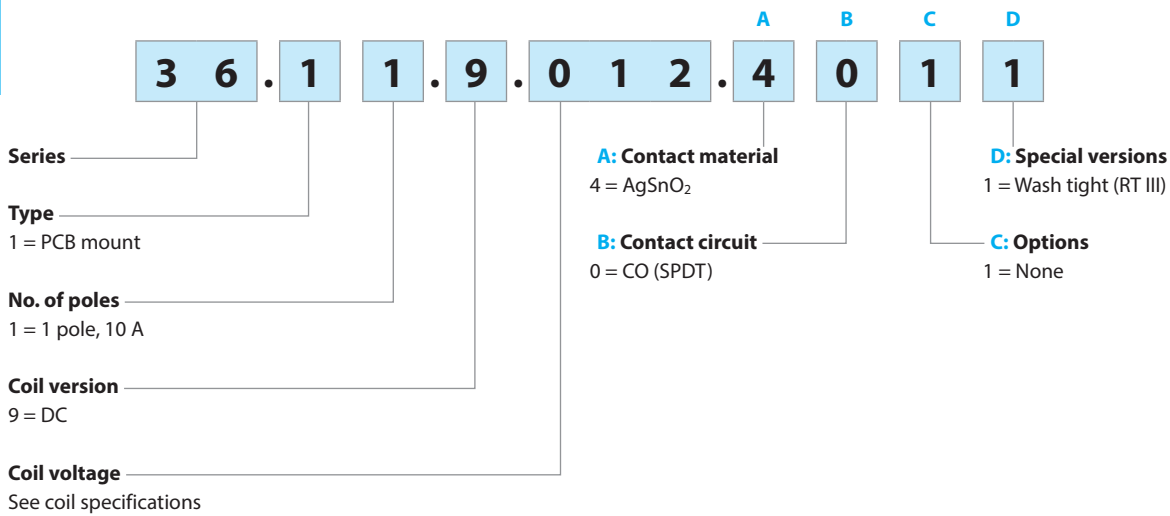
**Approvals** (according to type)



## Ordering information

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

A



**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>	<b>1</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)	4
Dielectric strength	V AC	2500

### Insulation between open contacts

Type of disconnection		Micro-disconnection
Dielectric strength	V AC/kV (1.2/50 μs)	750/1.5

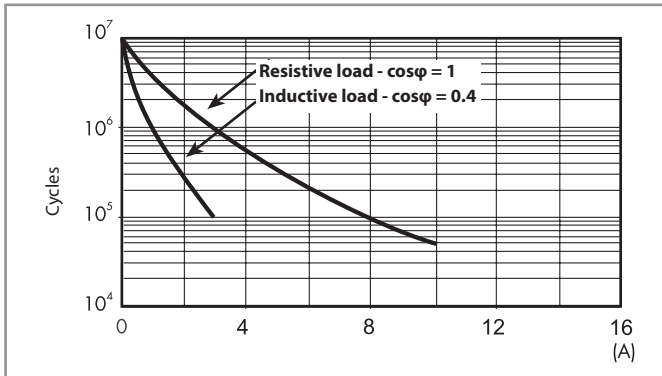
### Other data

Shock resistance	g	10
Bounce time: NO/NC	ms	1/6
Vibration resistance (5...55 Hz): NO/NC	g	14/8
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

A

## Contact specification

F 36 - Electrical life (AC) v contact current

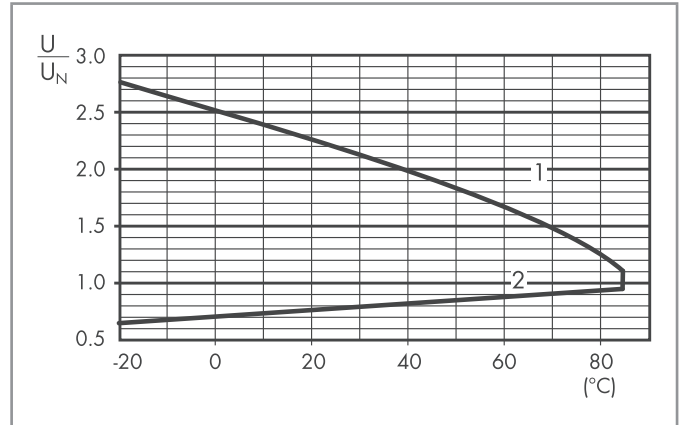


## Coil specifications

DC coil data

Nominal voltage $U_N$ V	Coil code	Operating range		Resistance R $\Omega$	Rated coil consumption I at $U_N$ mA
		$U_{min}$ V	$U_{max}$ V		
3	9.003	2.2	3.9	25	120
5	9.005	3.7	6.5	70	72
6	9.006	4.5	7.8	100	60
9	9.009	6.7	11.7	225	40
12	9.012	9	15.6	400	30
18	9.018	13.5	23.4	900	20
24	9.024	18	31.2	1600	15
48	9.048	36	62.4	6400	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.

## Outline drawing

Type 36.11-4011

