

# Subminiature PCB relays 6 A



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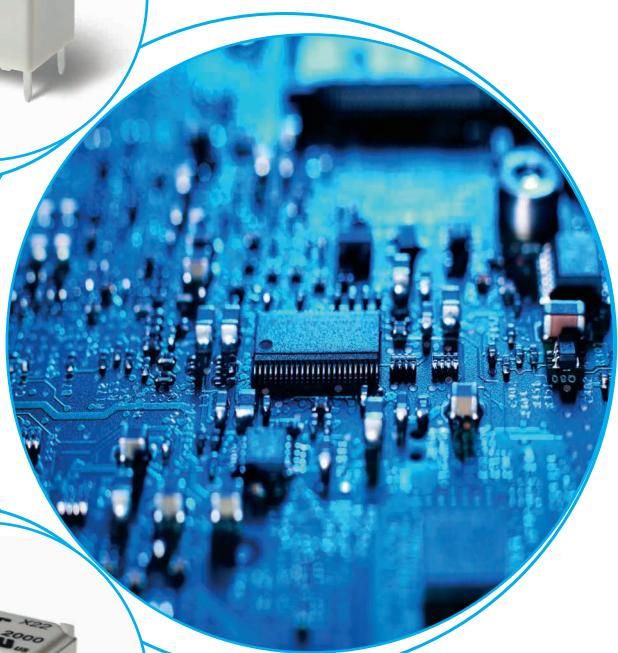
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**Printed circuit mount 6 A relay**

- 1 Pole changeover contacts or 1 Pole normally open contact
- Subminiature, low profile package
- Sensitive DC coil - 200 mW
- Wash tight: RT III
- Cadmium Free contacts

**32.21-4000**

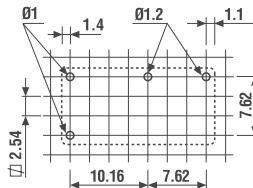
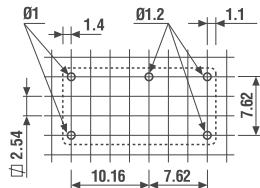
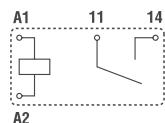
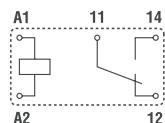


**32.21-4300**



- 1 CO (SPDT), 6 A
- Low coil power
- PCB mount

- 1 NO (SPST-NO), 6 A
- Low coil power
- PCB mount



For outline drawing see page 5

Copper side view

Copper side view

**Contact specification**

Contact configuration		1 CO (SPDT)	1 NO (SPST-NO)
Rated current/Maximum peak current	A	6/15	6/15
Rated voltage/ Maximum switching voltage	V AC	250/400	250/400
Rated load AC1	VA	1500	1500
Rated load AC15 (230 V AC)	VA	250	250
Single phase motor rating (230 V AC)	kW	0.185	0.185
Breaking capacity DC1: 24/110/220 V	A	3/0.35/0.2	3/0.35/0.2
Minimum switching load	mW (V/mA)	500 (10/5)	500 (10/5)
Standard contact material		AgSnO <sub>2</sub>	AgSnO <sub>2</sub>

**Coil specification**

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	—	—
	V DC	5 - 12 - 24 - 48	5 - 12 - 24 - 48
Rated power AC/DC	VA (50 Hz)/W	—/0.2	—/0.2
Operating range	AC	—	—
	DC	(0.78...1.5)U <sub>N</sub>	(0.78...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**

Mechanical life AC/DC	cycles	—/20 · 10 <sup>6</sup>	—/20 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	50 · 10 <sup>3</sup>	50 · 10 <sup>3</sup>
Operate/release time	ms	6/4	6/2
Insulation between coil and contacts (1.2/50 µs)	kV	5	5
Dielectric strength between open contacts	V AC	1000	1000
Ambient temperature range	°C	-40...+85	-40...+85
Environmental protection		RT III	RT III
Approvals (according to type)			

## Ordering information

Example: 32 series PCB, 1 NO (SPDT-NO) - 6 A contacts, 24 V sensitive DC coil.

A

**3 2 . 2 1 . 7 0 2 4 . 4 3 . 0 0**

**Series**

**Type**  
2 = PCB mount

**No. of poles**  
1 = 1 pole, 6 A

**Coil version**  
7 = Sensitive DC

**Coil voltage**  
See coil specifications

**A: Contact material**

4 = Standard AgSnO<sub>2</sub>

**B: Contact circuit**

0 = CO (SPDT)

3 = NO (SPST)

**D: Special versions**

0 = Wash tight (RT III)

**C: Options**

0 = None

### 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
32.21	sens. DC	<b>4</b>	<b>0 - 3</b>	<b>0</b>	<b>0</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	III
Rated impulse voltage	kV (1.2/50 µs)
Dielectric strength	V AC

### Insulation between open contacts

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

### Insulation between coil terminals

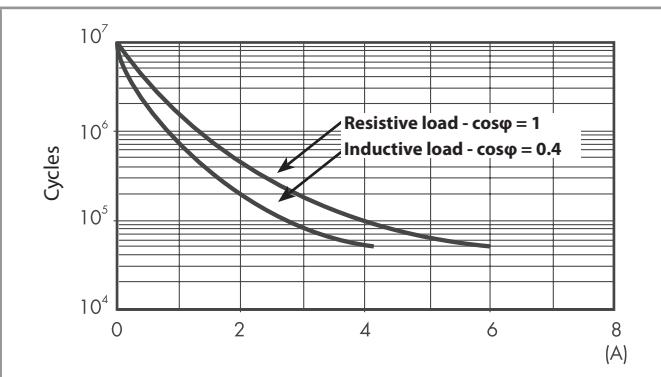
Rated impulse voltage (surge) differential mode (according to EN 61000-4-5)	kV (1.2/50 µs)	2
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### Other data

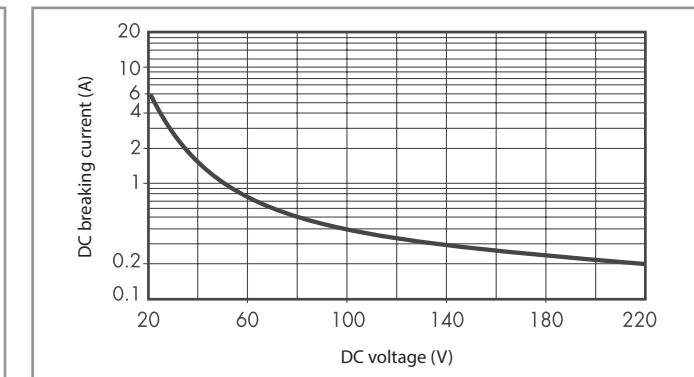
Bounce time: NO/NC	ms	2/10 (changeover)	2/— (normally open)
Vibration resistance (5...55)Hz: NO/NC	g	10/10 (changeover)	10/— (normally open)
Shock resistance	g	20	
Power lost to the environment	without contact current	W	0.2
	with rated current	W	0.5
Recommended distance between relays mounted on PCB		mm	≥ 5

## Contact specification

F 32 - Electrical life (AC) v contact current



H 32 - Maximum DC1 breaking capacity



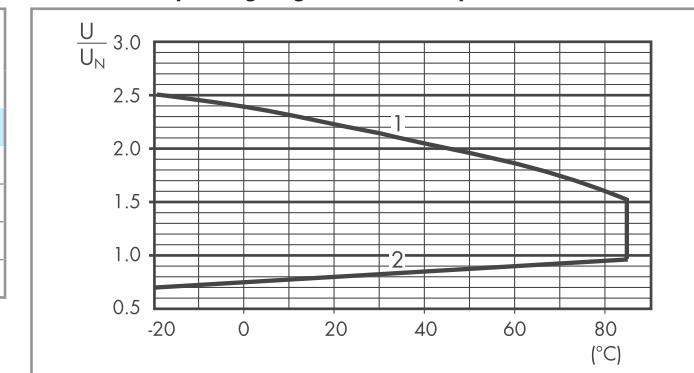
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of  $\geq 50 \cdot 10^3$  can be expected.
  - In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
- Note: the release time for the load will be increased.

## Coil specifications

DC coil data - 0.2 W sensitive

Nominal voltage $U_N$	Coil code	Operating range	Resistance R	Rated coil consumption I at $U_N$	
V	V	$U_{min}$ V	$U_{max}$ V	$\Omega$	mA
5	7.005	3.9	7.5	125	40
12	7.012	9.4	18	720	16
24	7.024	18.7	36	2880	8.3
48	7.048	37.4	72	11520	4

R 32 - DC coil operating range v ambient temperature



1 - Max. permitted coil voltage.

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

## Outline drawing

Types 32.21-4000/4300

