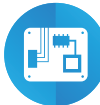


# Subminiature DIL relays 2 A



Electronic  
circuit boards



Hi-Fi systems



Printers



Toys



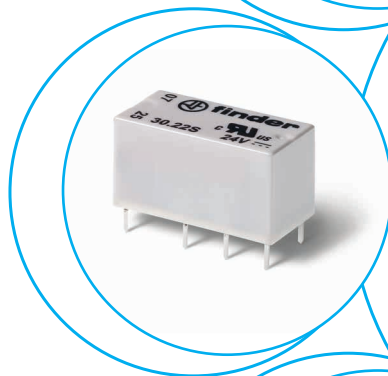
Medical and  
dentistry



Hoists and  
cranes



Door and  
gate openers





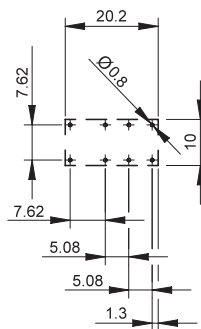
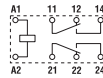
**Printed circuit mount  
2 A signal relay**

- 2 Pole changeover contacts Low level switching capability
- Subminiature - industry standard DIL package
- Sensitive DC coil - 200 mW
- Wash tight: RT III
- Cadmium Free contact material

**30.22**



- Low coil power
- Au clad contacts
- PCB mount



Copper side view

For outline drawing see page 5

**Contact specification**

Contact configuration		2 CO (DPDT)
Rated current/Maximum peak current	A	2/3
Rated voltage/ Maximum switching voltage	V AC	125/250
Rated load AC1	VA	125
Rated load AC15 (230 V AC)	VA	25
Single phase motor rating (230 V AC)	kW	—
Breaking capacity DC1: 24/110/220 V	A	2/0.3/—
Minimum switching load	mW (V/mA)	10 (0.1/1)
Standard contact material		AgNi + Au

**Coil specification**

Nominal voltage (U <sub>N</sub> )	V AC (50/60 Hz)	—
	V DC	5 - 6 - 9 - 12 - 24 - 48
Rated power AC/DC	VA (50 Hz)/W	—/0.2
Operating range	AC	—
	DC	See table page 5
Holding voltage	AC/DC	—/0.35 U <sub>N</sub>
Must drop-out voltage	AC/DC	—/0.05 U <sub>N</sub>

**Technical data**

Mechanical life AC/DC	cycles	—/10 · 10 <sup>6</sup>
Electrical life at rated load AC1	cycles	100 · 10 <sup>3</sup>
Operate/release time	ms	6/2
Insulation between coil and contacts (1.2/50 μs)	kV	1.5
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: 30 series PCB relay, 2 CO (DPDT) - 2 A contacts, 12 V sensitive DC coil.

A

3 0 . 2 2 . 7 . 0 1 2 . 0 . 0 . 1 . 0

A      B      C      D

**Series** —————

**Type** —————  
2 = PCB mount

**No. of poles** —————  
2 = 2 pole, 2 A

**Coil version** —————  
7 = Sensitive DC

**Coil voltage** —————  
See coil specifications

**A: Contact material**  
0 = Standard  
AgNi + Au

**B: Contact circuit**  
0 = CO (DPDT)

**D: Special versions**  
0 = Wash tight (RT III)

**C: Options**  
1 = None

## Technical data

### Insulation according to EN 61810-1

Nominal voltage of supply system	V AC	230/400	120...240 single phase
Rated insulation voltage	V AC	250	125
Pollution degrees		1	2

### Insulation between coil and contact set

Type of insulation		Basic	Basic
Overvoltage category		I	II
Rated impulse voltage	kV (1.2/50 µs)	1.5	1.5
Dielectric strength	V AC	1000	1000

### Insulation between adjacent contacts

Type of insulation		Basic	Basic
Overvoltage category		I	II
Rated impulse voltage	kV (1.2/50 µs)	1.5	1.5
Dielectric strength	V AC	1500	1500

### Insulation between open contacts

Type of disconnection		Micro-disconnection	Micro-disconnection
Dielectric strength	V AC/kV (1.2/50 µs)	750/1	750/1

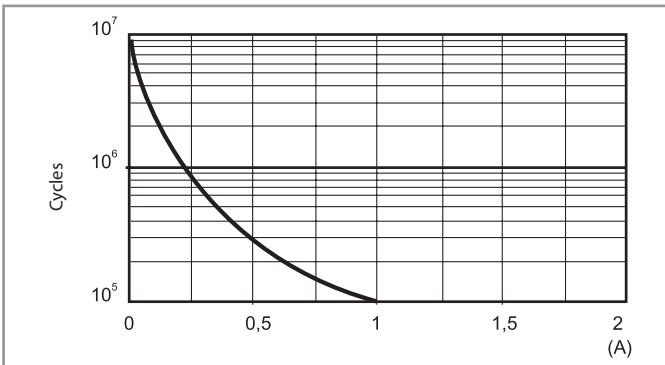
### Other data

Bounce time: NO/NC	ms	1/3
Vibration resistance (5...55)Hz: NO/NC	g	15/15
Shock resistance	g	16
Power lost to the environment	without contact current W	0.2
	with rated current W	0.4
Recommended distance between relays mounted on PCB	mm	≥ 5

A

### Contact specification

F 30 - Electrical life (AC1) v contact current (125 V)



Note:  
The rated current of 2 A corresponds to the limiting continuous current.

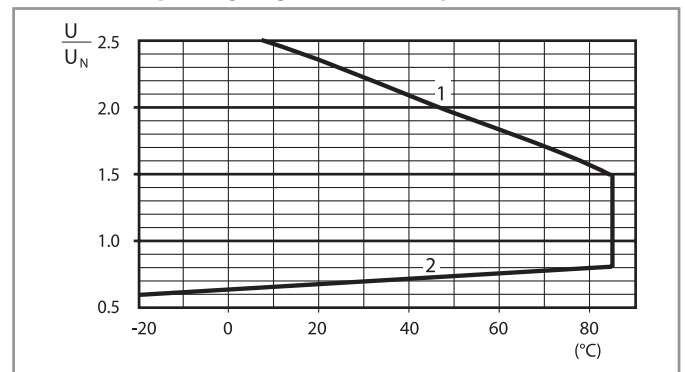
### Coil specifications

DC coil data - 0.2 W sensitive

Nominal voltage $U_N$	Coil code	Operating range		Resistance $R$	Rated coil consumption $I$ at $U_N$
		$U_{min}$	$U_{max}$		
V		V	V	$\Omega$	mA
5	7.005	3.7	7.5	125	40
6	7.006	4.5	9	180	33
9	7.009	6.7	13.5	405	22
12	7.012	8.4	18	720	16
24	7.024	16.8	36	2880	8.3
48*	7.048	36	72	10000	4.8

\* Rated power: 0.23 W

R 30 - 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 30.22

