



finder[®]
SWITCH TO THE FUTURE

32
SERIES

Subminiature PCB relays 6 A



Copiers



Hi-Fi systems



Washing
machines



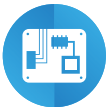
Control
systems



Electronic kits



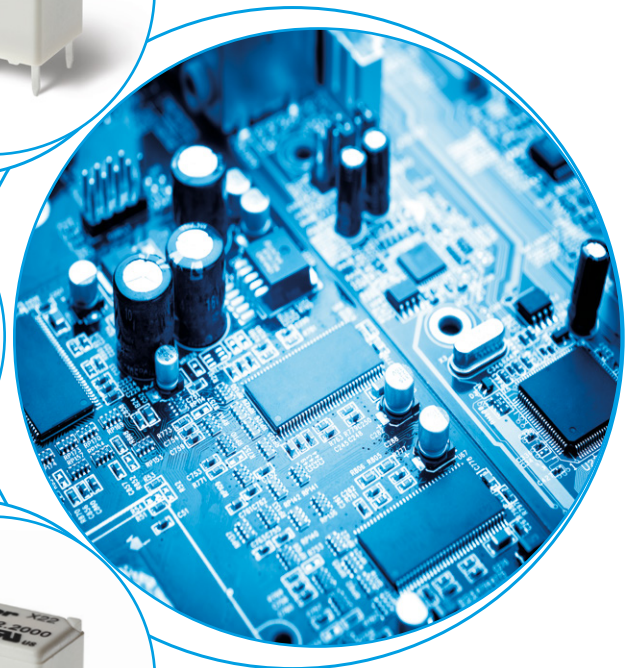
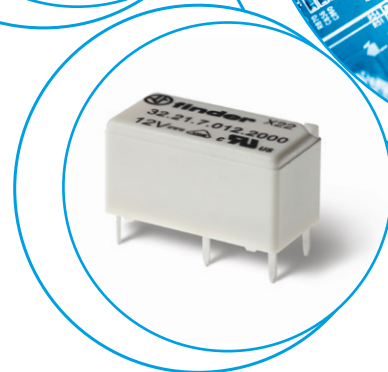
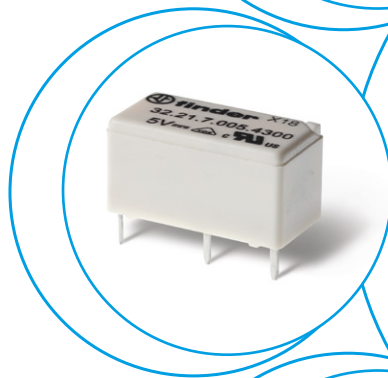
Medical and
dentistry



Electronic
circuit boards



Programmable
controllers



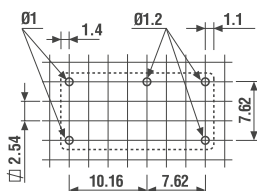
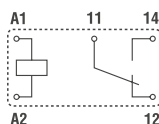
Printed circuit mount 6 A relay

- 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



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

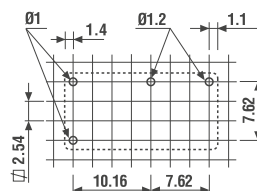
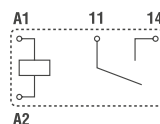


Copper side view

32.21-4300



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



Copper side view

For outline drawing see page 5

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: 30/110/220 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 ₂ | AgSnO ₂ |

Coil specification

| | | | |
|-----------------------------------|-----------------|----------------------------|----------------------------|
| Nominal voltage (U _N) | 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 _N | (0.78...1.5)U _N |
| Holding voltage | AC/DC | —/0.4 U _N | —/0.4 U _N |
| Must drop-out voltage | AC/DC | —/0.1 U _N | —/0.1 U _N |

Technical data

| | | | |
|--|--------|------------------------|------------------------|
| Mechanical life AC/DC | cycles | —/20 · 10 ⁶ | —/20 · 10 ⁶ |
| Electrical life at rated load AC1 | cycles | 50 · 10 ³ | 50 · 10 ³ |
| 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 |

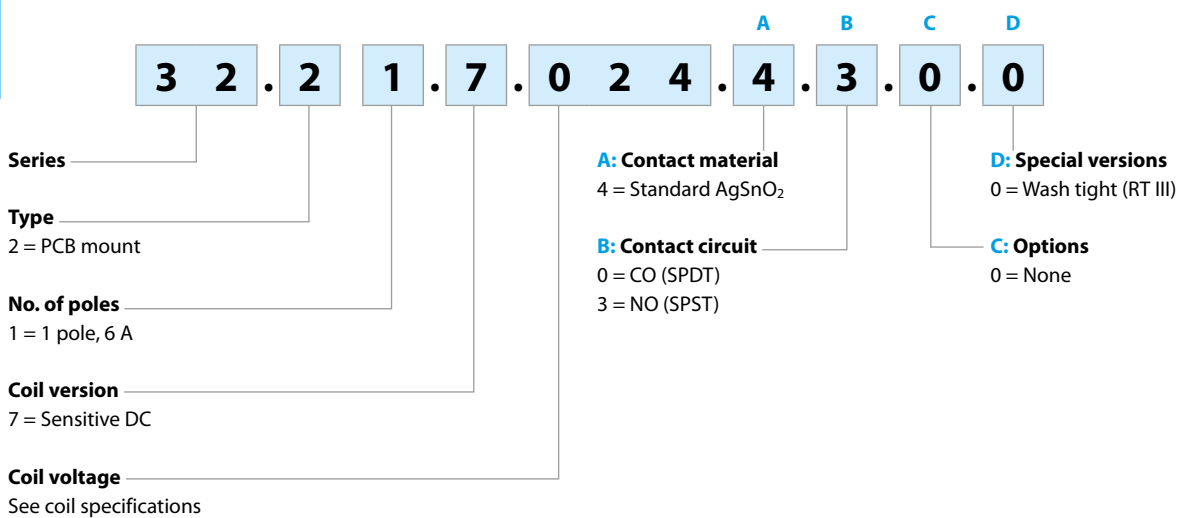
Approvals (according to type)



Ordering information

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

A



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 | 4 | 0 - 3 | 0 | 0 |

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) | 5 |
| Dielectric strength | V AC | 4000 |

Insulation between open contacts

| | | |
|-----------------------|---------------------|---------------------|
| Type of disconnection | | Micro-disconnection |
| Dielectric strength | V AC/kV (1.2/50 µs) | 1000/1.5 |

Insulation between coil terminals

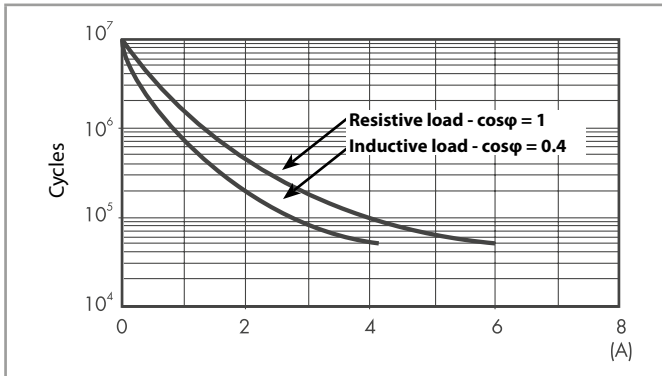
| | | |
|---|----------------|---|
| Rated impulse voltage (surge) differential mode (according to EN 61000-4-5) | kV (1.2/50 µs) | 2 |
|---|----------------|---|

Other data

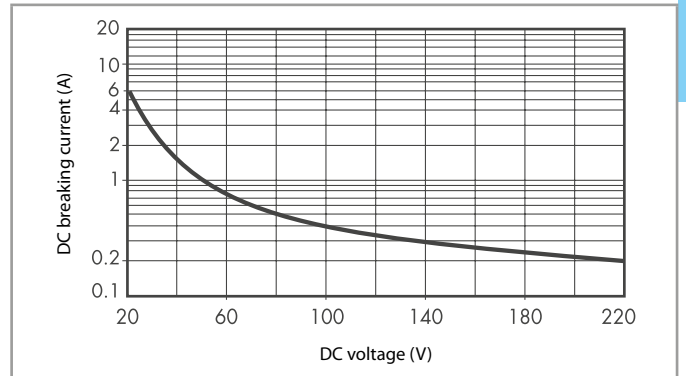
| | | | |
|--|-------------------------|--------------------|----------------------|
| Bounce time: NO/NC | ms | 2/10 (changeover) | 2/— (normally open) |
| Vibration resistance (5...55)Hz: NO/NC | g | 10/10 (changeover) | 10/— (normally open) |
| Shock resistance | g | 20 | |
| Power lost to the environment | 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



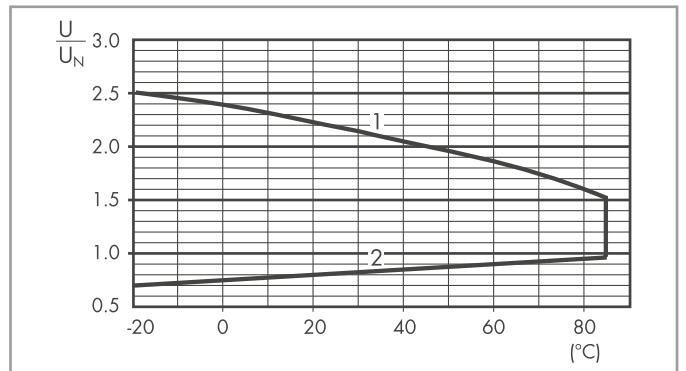
- When switching a resistive load (DC1) having voltage and current values under the curve, an electrical life of $\geq 50 \cdot 10^3$ can be expected.
 - In the case of DC13 loads, the connection of a diode in parallel with the load will permit a similar electrical life as for a DC1 load.
- Note: the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

