

Power PCB Relay 409

1 pole 10 A, 2 pole 8 A



F0249-A

Features

- 1 C/O or 1 N/O contact, 10 / 16 A
- Pinning 3,5 or 5 mm
- 2 C/O contacts (409 03)
- 4 kV / 8 mm coil-contact (409 07)

Applications

Power supplies, domestic appliances, heating controls



(409 07 only)

Technical data of approved types on request

Contact data

| Configuration | 1 C/O | 1 N/O | 2 C/O |
|---|-------------------|----------------|---------|
| Type of contact | single contact | | |
| Rated current pinning 3.5/5 mm | 10/16 A | 10/16 A | -/8 A |
| Rated voltage / max.breaking voltage AC | 250 Vac / 400 Vac | | |
| Max. breaking voltage DC | 250 Vdc | | |
| Maximum breaking capacity AC | 4000 VA | 4000 / 2500 VA | 2000 VA |
| Make current (max. 4 s at duty cycle 10%) | 20 A | 20 / 12 A | 10 A |
| peak inrush current 20 ms | 20 A | 20 / 16 A | 16 A |
| Contact material | AgCdO | | |

Contact ratings

| Type | Load | Operations |
|--------|--------------------------|-------------------|
| 409 03 | 8 A, 250 Vac, resistive | 2x10 ⁵ |
| 409 04 | 10 A, 250 Vac, resistive | 2x10 ⁵ |
| 409 06 | 16 A, 250 Vac, resistive | 2x10 ⁵ |
| 409 07 | 16 A, 250 Vac, resistive | 2x10 ⁵ |

Coil data

| | | |
|--------------------|---------|---------------|
| Nominal voltage | DC coil | 2.5...110 Vdc |
| Nominal coil power | DC coil | 0.6...0.8 W |
| Operate category | c | |

Coil versions DC-coil

| Coil code | Nominal voltage Vdc | Pull-in voltage Vdc | Release voltage Vdc | Maximum voltage Vdc | Coil resistance Ω | Coil current mA |
|-----------|---------------------|---------------------|---------------------|---------------------|-------------------|-----------------|
| 034 | 6 | 3.9 | 0.45 | 7.4 | 43±10% | 140.0 |
| 030 | 12 | 9.6 | 0.9 | 19.1 | 285±10% | 42.0 |
| 028 | 24 | 16.3 | 1.8 | 31.0 | 720±10% | 33.0 |
| 027 | 24 | 18.0 | 1.8 | 34.0 | 880±15% | 27.0 |
| 024 | 48 | 34.5 | 3.6 | 60.6 | 2700±15% | 18.0 |
| 023 | 60 | 41.0 | 4.5 | 77.8 | 4400±15% | 14.0 |
| 021 | 100 | 64.0 | 7.5 | 117.7 | 10400±15% | 9.6 |

All figures are given for coil without preenergization, at ambient temperature +20°C

Other coil voltages on request

Power PCB Relay 409

1 pole 10 A, 2 pole 8

Insulation

| | | | |
|---|----------------------|-----------------------|----------------------------------|
| Dielectric strength | coil-contacts | 2500 V _{rms} | 4000 V _{rms} (40904/07) |
| | open contact circuit | 1000 V _{rms} | |
| Clearance / creepage | | 4 mm | 8 / 8 mm (40904/07) |
| Insulation to VDE 0110b (2/79) | | | |
| Insulation category / reference voltage | | C / 250 | |
| Tracking resistance of relay base | | PTI 250 | |

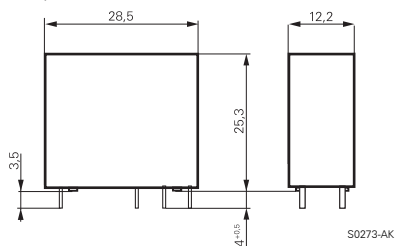
Other data

| | |
|--|---|
| Flammability class according to UL 94 | V-0 |
| Coil insulation system according to UL 1446 | F |
| Ambient temperature DC-coil | -20...+70 °C |
| Mechanical life DC-coil | 30x10 ⁶ operations |
| Max. switching rate at rated- / minimum load | 15 min ⁻¹ / 1200 min ⁻¹ |
| Operate- / release time | typ. 10 / 3 ms |
| Bounce time | typ. 3 ms |
| Vibration resistance | 20 g (30...300 Hz) |
| Shock resistance (destruction) | 100 g |
| Category of protection (IEC 61810) | RT II - flux proof |
| Relay weight | 15 g |
| Packaging unit | 25 / 250 pcs. |

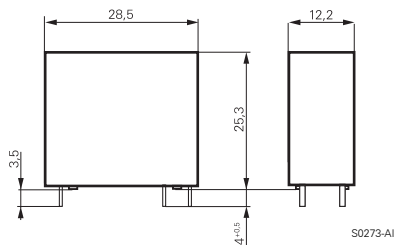
Dimensions

View on solder pins
Dimensions in mm

1 C/O, 2 C/O contacts

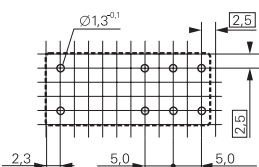


1 N/O contact



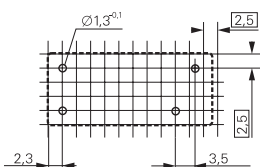
PCB layout / terminal assignment

1 C/O / N/O contact, 5 mm



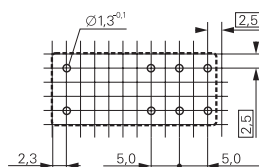
S0468-AH

1 N/O contact, 3.5 mm



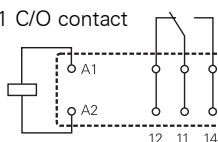
S0468-AT

2 C/O contacts, 5 mm

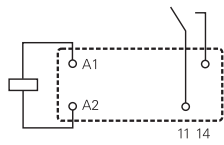


S0468-AH

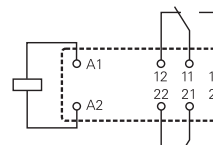
1 C/O contact



S0468-AC

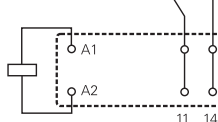


S0468-AS



S0468-AJ

1 N/O contact



S0468-AA

Product key

0 4 0 9 0

Type

Version

- 03** 2 C/O contacts
- 04** 1 N/O contact, pinning 3.5mm
- 06** 1 C/O or 1 N/O contact, pinning 5mm
- 07** 1 N/O contact, version 4kV/8mm

Coil

Coil code: Please refer to coil versions table, preferred types in bold print

Contact configuration

- 001** 1 N/O contact
- 003** 1 C/O contact
- 053** 2 C/O contacts

Other types on request