



RG25

industrial relays of small dimensions



- Power relays of general application • AC and DC coils
- High breaking capacity: AC1 - 10 kVA; AC3 - 6 kVA
- 35 mm rail mount acc. to PN-EN 60715 • High insulation dielectric strength
- Applications: control of electromagnets; systems of heating, cooling, ventilation, air conditioning; control with single-phase motors; catering industry machines and equipment; automation systems; photoelectric systems; etc.
- Recognitions, certifications, directives: RoHS,  

Contact data

| | | |
|--------------------------------|------|--------------------------------------|
| Number and type of contacts | | 2 NO |
| Contact material | | AgCdO |
| Rated / max. switching voltage | AC | 400 V / 440 V |
| Min. switching voltage | | 10 V |
| Rated load (capacity) | AC1 | 25 A / 400 V AC |
| | AC3 | 15 A / 400 V AC |
| | DC1 | 25 A / 24 V DC (see Fig. 3) |
| | DC13 | 0,30 A / 120 V 0,15 A / 250 V (R300) |
| Min. switching current | | 10 mA |
| Max. inrush current | | 40 A |
| Rated current | | 25 A |
| Max. breaking capacity | AC1 | 10 000 VA |
| | AC3 | 6 000 VA |
| Min. breaking capacity | | 1 W |
| Contact resistance | | ≤ 100 mΩ |
| Max. operating frequency | | |
| • at rated load | AC1 | 600 cycles/hour |
| | AC3 | 600 cycles/hour |
| • no load | | 3 600 cycles/hour |

Coil data

| | | |
|-----------------------------------|----------|----------------------|
| Rated voltage | 50 Hz AC | 12 ... 400 V |
| | DC | 12 ... 220 V |
| Must release voltage | | ≥ 0,1 U _n |
| Operating range of supply voltage | | see Tables 1, 2 |
| Rated power consumption | AC | 3,0 VA |
| | DC | 1,7 W |

Insulation according to PN-EN 60664-1

| | | |
|-----------------------------|--|---|
| Insulation rated voltage | | 400 V AC |
| Rated surge voltage | | 4 000 V 1,2 / 50 μs |
| Overvoltage category | | III |
| Insulation pollution degree | | 3 |
| Dielectric strength | | |
| • between coil and contacts | | 5 000 V AC type of insulation: reinforced |
| • contact clearance | | 1 500 V AC type of clearance: micro-disconnection |
| • pole - pole | | 5 000 V AC type of insulation: reinforced |
| Contact - coil distance | | |
| • clearance | | ≥ 6 mm |
| • creepage | | ≥ 8 mm |

General data

| | | |
|---|-------------|----------------------------------|
| Operating / release time (typical values) | | 20 ms / 20 ms |
| Electrical life | | |
| • resistive AC1 | | > 10 ⁵ 25 A, 400 V AC |
| • cosφ | | see Fig. 2 |
| Mechanical life (cycles) | | > 10 ⁶ |
| Dimensions (L x W x H) | | 26 x 49 x 72 mm |
| Weight | | 130 g |
| Ambient temperature | • storage | -25...+85 °C |
| | • operating | -25...+85 °C |
| Cover protection category | | IP 20 PN-EN 60529 |
| Shock resistance | | 10 g |
| Vibration resistance | | 5 g 10...150 Hz |

The data in bold type pertain to the standard versions of the relays.

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Coil data - DC voltage version

Table 1

| Coil code | Rated voltage V DC | Coil resistance at 20 °C Ω | Acceptable resistance | Coil operating range V DC | |
|-------------|-----------------------|----------------------------------|--------------------------|------------------------------|-----------------|
| | | | | min. (at 20 °C) | max. (at 55 °C) |
| 1012 | 12 | 85 | ± 10% | 9,6 | 13,2 |
| 1024 | 24 | 340 | ± 10% | 19,2 | 26,4 |
| 1048 | 48 | 1 350 | ± 10% | 38,4 | 52,8 |
| 1110 | 110 | 7 600 | ± 10% | 88,0 | 121,0 |
| 1220 | 220 | 30 000 | ± 10% | 176,0 | 242,0 |

The data in bold type pertain to the standard versions of the relays.

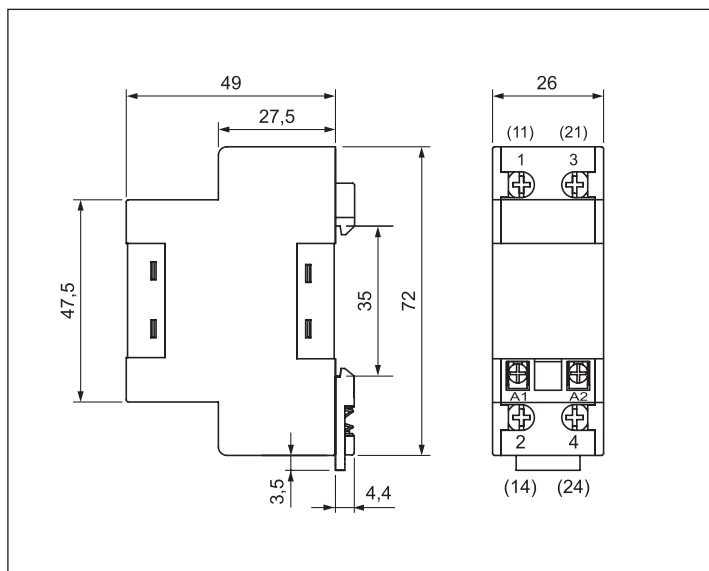
Coil data - AC 50 Hz voltage version

Table 2

| Coil code | Rated voltage V AC | Coil resistance at 20 °C Ω | Acceptable resistance | Coil operating range V AC | |
|-------------|-----------------------|----------------------------------|--------------------------|------------------------------|-----------------|
| | | | | min. (at 20 °C) | max. (at 55 °C) |
| 3012 | 12 | 17 | ± 10% | 8,4 | 13,2 |
| 3024 | 24 | 76 | ± 10% | 16,8 | 26,4 |
| 3110 | 110 | 1 600 | ± 10% | 77,0 | 121,0 |
| 3230 | 230 | 6 800 | ± 10% | 161,0 | 253,0 |
| 3400 | 400 | 18 600 | ± 10% | 280,0 | 440,0 |

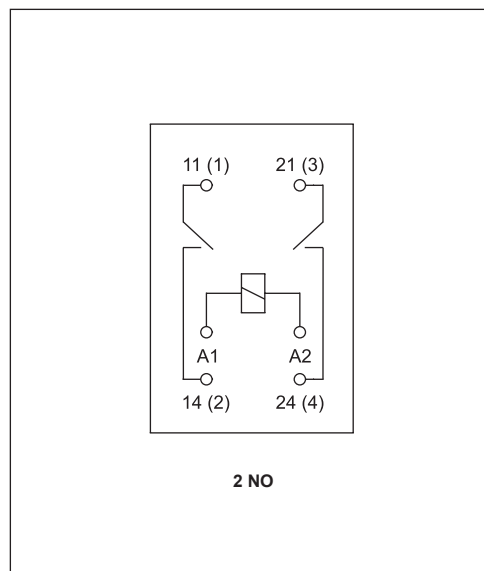
The data in bold type pertain to the standard versions of the relays.

Dimensions

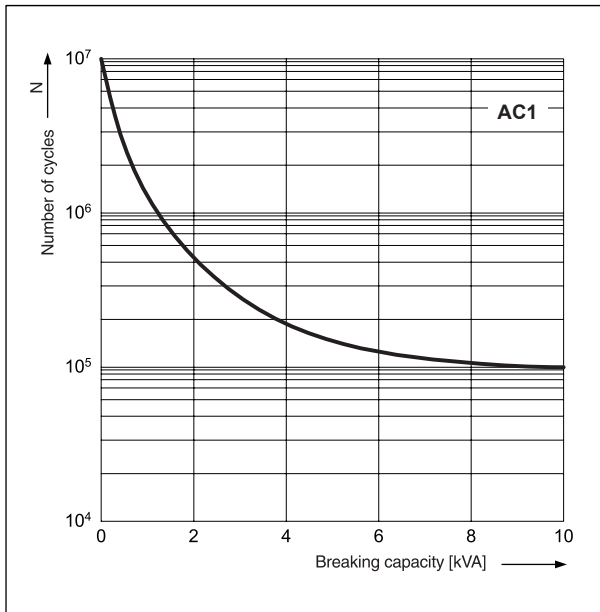


Connection diagram

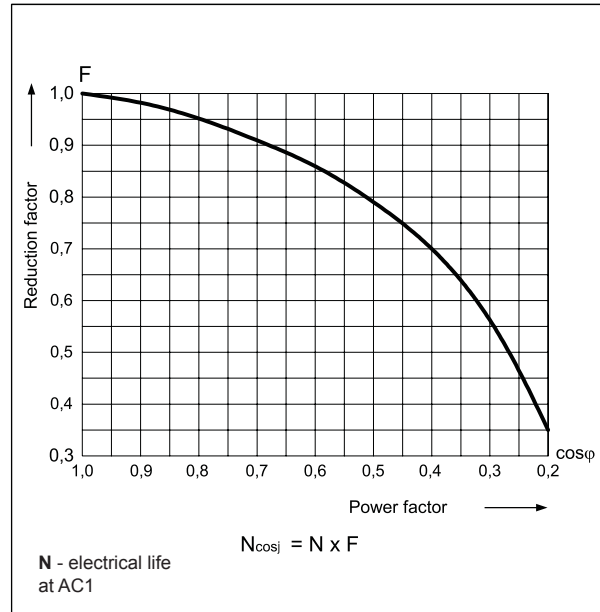
(screw terminals side view)



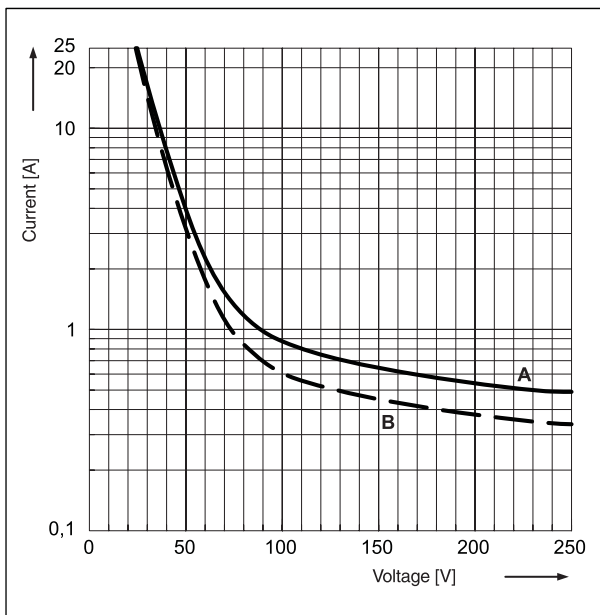
Electrical life at AC resistive load.
Switching frequency: 600 cycles/hour Fig. 1



Electrical life reduction factor at AC inductive load Fig. 2



Max. DC breaking capacity
A - resistive load DC1
B - inductive load L/R = 40 ms Fig. 3



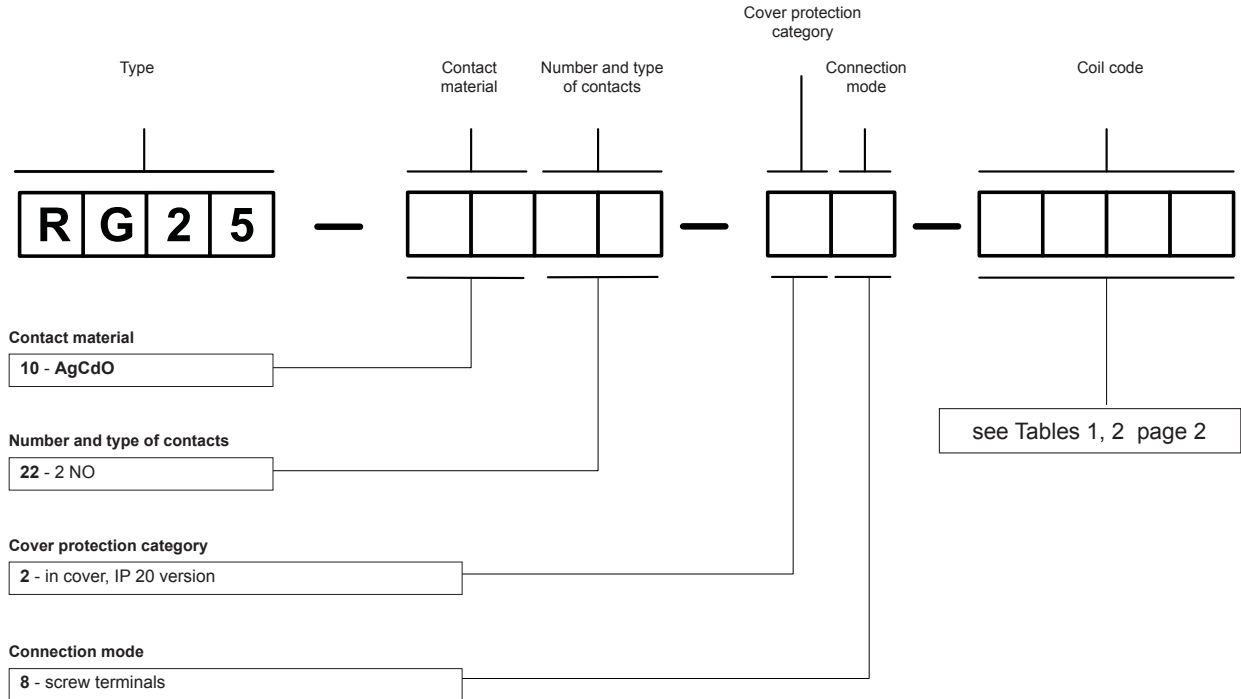
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Mounting

Relays **RG25** are designed for direct mounting on 35 mm rail mount acc. to PN-EN 60715. Operational position - screw terminals of coil downwards. **Connections:** max. cross section of the cables: 2 x 2,5 mm² (2 x 14 AWG), length of the cable deinsulation: 9 mm, max. tightening moment for the terminal: 0,7 Nm.

Ordering codes



Example of ordering code:

RG25-1022-28-3230

relay **RG25**, screw terminals, two normally open contacts, contact material AgCdO, coil voltage 230 V AC 50 Hz, in cover IP 20

PRECAUTIONS:

1. Ensure that the parameters of the product described in its specification provide a safety margin for the appropriate operation of the device or system and never use the product in circumstances which exceed the parameters of the product. 2. Never touch any live parts of the device. 3. Ensure that the product has been connected correctly. An incorrect connection may cause malfunction, excessive heating or risk of fire. 4. In case of any risk of any serious material loss or death or injuries of humans or animals, the devices or systems shall be designed so to equip them with double safety system to guarantee their reliable operation.