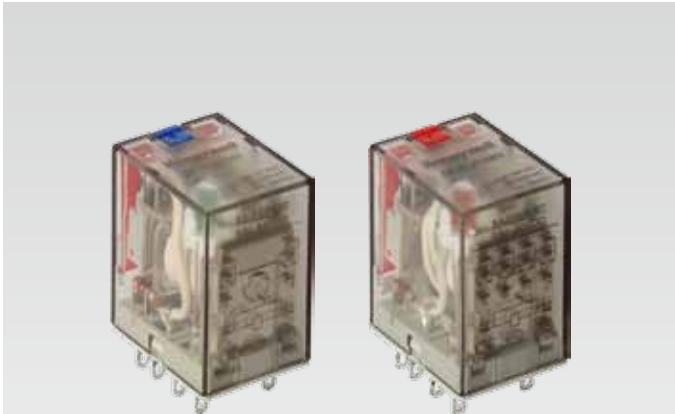


GR Series Small Intermediate Relay



Features

- Small size and high rated capacity.
- Standard test button and mechanical indicator window.
- Standard LED status indicator.
- A variety of sockets and accessories to choose.
- Comply with CE and CQC certification.

Application Range

GR Series is suitable for the expansion, amplification, isolation and conversion of signals in various mechanical equipment and process control systems in the industrial field.

| Contact characteristics | | |
|-------------------------|-----------------|-----|
| Contact form | 2CO | 4CO |
| Rated load (resistance) | 5A 250VAC/30VDC | |
| Max. switching capacity | 1250VA/150W | |

| Technical Parameters | | |
|------------------------------|---------------------------------|-------------------------|
| Contact material | Silver alloy | |
| Contact resistance | ≤ 50mΩ (1A 6VDC) | |
| Action time | 20ms | |
| Release time | 20ms | |
| Insulation resistance | 1000MΩ (500VDC) | |
| Dielectric Withstand Voltage | Same Poles : 1000VAC 1min | |
| | Different poles : 1000VAC 1min | |
| | Contact and Coil : 2000VAC 1min | |
| Vibration | 10Hz-55Hz, 1mm | |
| Shock | Stable work | 98m/s ² |
| | Damage limit | 980m/s ² |
| Life | Mechanical | 1×10 ⁷ Times |
| | Electric | 4×10 ⁵ Times |
| Working Temperature | -55 °C ~ 70 °C | |
| Humidity | 30% ~ 85% RH | |
| Installation Method | Plug-in | |
| Weight | Approx. 35g | |
| Certifications | CE, CQC, RoHS | |

Relay Selection

| Contact form | Voltage | Current | LED | Mechanical Indicator | Test button | Model Number | | | | |
|--------------|-----------|-----------|-----|----------------------|--------------|--------------|--------------|--------------|-----|-------------|
| 2CO | DC | 12 | 5A | YES | YES | YES | GR-2C-DC12V | | | |
| | | 24 | 5A | YES | YES | YES | GR-2C-DC24V | | | |
| | | 48 | 5A | YES | YES | YES | GR-2C-DC48V | | | |
| | | 110 | 5A | YES | YES | YES | GR-2C-DC110V | | | |
| | | 220 | 5A | YES | YES | YES | GR-2C-DC220V | | | |
| | AC | ~ 50/60Hz | 12 | 5A | YES | YES | YES | GR-2C-AC12V | | |
| | | | 24 | 5A | YES | YES | YES | GR-2C-AC24V | | |
| | | | 48 | 5A | YES | YES | YES | GR-2C-AC48V | | |
| | | | 110 | 5A | YES | YES | YES | GR-2C-AC110V | | |
| | | | 230 | 5A | YES | YES | YES | GR-2C-AC230V | | |
| | | | 380 | 5A | YES | YES | YES | GR-2C-AC380V | | |
| | | | 4CO | DC | 12 | 5A | YES | YES | YES | GR-4C-DC12V |
| | | | | | 24 | 5A | YES | YES | YES | GR-4C-DC24V |
| | | | | | 48 | 5A | YES | YES | YES | GR-4C-DC48V |
| 110 | 5A | YES | | | YES | YES | GR-4C-DC110V | | | |
| 220 | 5A | YES | | | YES | YES | GR-4C-DC220V | | | |
| AC | ~ 50/60Hz | 12 | | 5A | YES | YES | YES | GR-4C-AC12V | | |
| | | 24 | | 5A | YES | YES | YES | GR-4C-AC24V | | |
| | | 48 | | 5A | YES | YES | YES | GR-4C-AC48V | | |
| | | 110 | | 5A | YES | YES | YES | GR-4C-AC110V | | |
| | | 230 | | 5A | YES | YES | YES | GR-4C-AC230V | | |
| 380 | 5A | YES | YES | YES | GR-4C-AC380V | | | | | |

Coil resistance

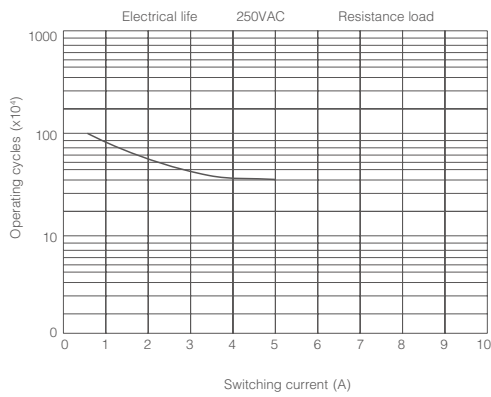
| DC | |
|-------------------|--|
| Rated voltage (V) | Coil resistance (Ω) $\pm 10\%$ at 23 °C |
| 12 | 160 |
| 24 | 630 |
| 48 | 2,600 |
| 110 | 11,000 |
| 220 | 42,000 |

Coil characteristics

| | |
|--------------------------|------|
| Max. sust. Voltage 23 °C | 110% |
| Pull-in voltage 23 °C | 75% |
| Release voltage 23 °C | 10% |
| Rated Power | 0.9W |

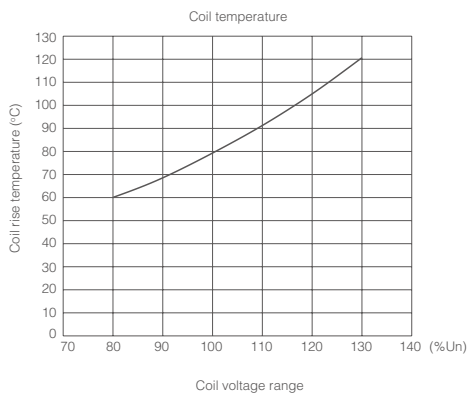
Performance curve

2CO Electrical life curve



Performance curve

2CO coil temperature graph



Coil resistance

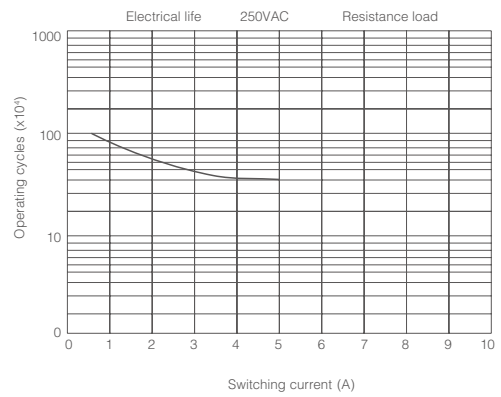
| AC | |
|-------------------|--|
| Rated voltage (V) | Coil resistance (Ω) $\pm 10\%$ at 23 °C |
| 12 | 40 |
| 24 | 160 |
| 48 | 600 |
| 110 | 3,750 |
| 230 | 15,000 |
| 380 | 42,000 |

Coil characteristics

| | |
|--------------------------|-------|
| Max. sust. Voltage 23 °C | 110% |
| Pull-in voltage 23 °C | 80% |
| Release voltage 23 °C | 30% |
| Rated Power | 1.2VA |

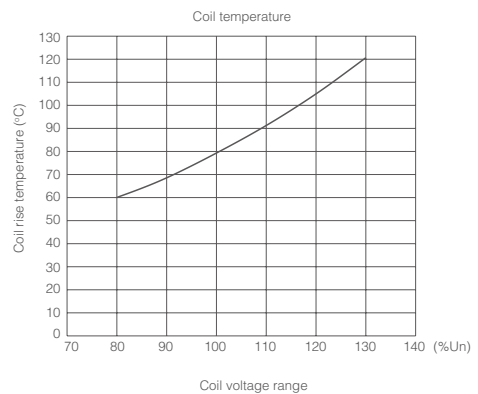
Performance curve

2CO Electrical life curve



Performance curve

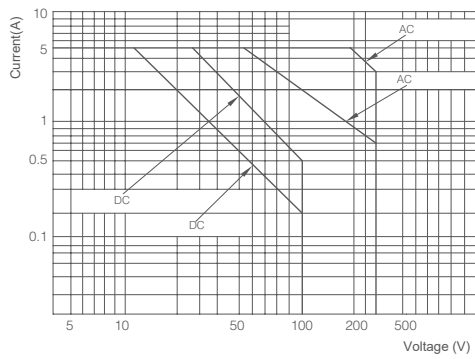
4CO coil temperature graph



GR Series Small Intermediate Relays

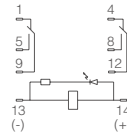
Performance curve

Maximum power switching diagram

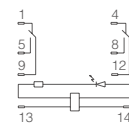


Wiring diagram

2CO

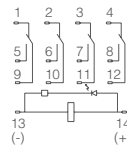


Direct LED

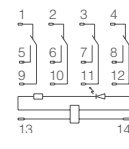


Indirect LED

4CO



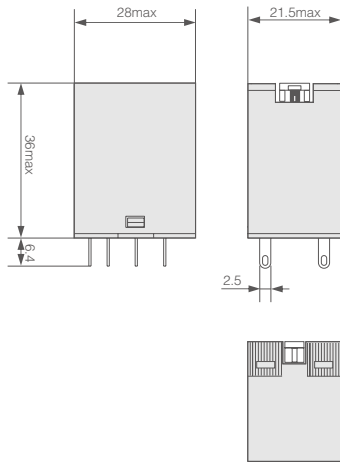
Direct LED



Indirect LED

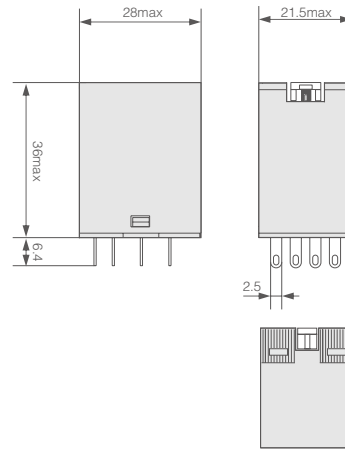
Dimensions

2CO



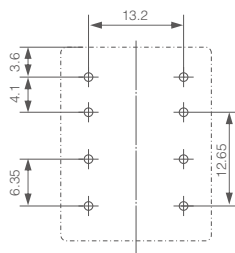
Dimensions

4CO



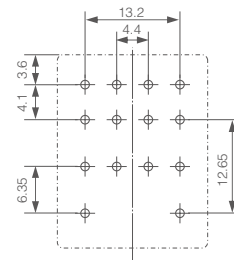
Mounting hole size chart

2CO



Mounting hole size chart

4CO



Remarks:

(1) The dimensions of the product part are not dimensioned. When the dimension is 1mm, the tolerance is $\pm 0.2\text{mm}$; when the dimension is between (1~5)mm, the tolerance is $\pm 0.3\text{mm}$; when the dimension is $>5\text{mm}$, The tolerance is $\pm 0.4\text{mm}$.

(2) The dimension tolerance of the mounting hole size is $\pm 0.1\text{mm}$.