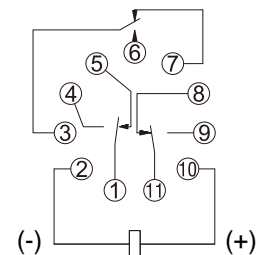
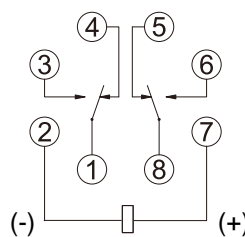




CR10 series relays

- Standard type
- 10A contact
- Two poles changeover contacts and three poles changeover contacts
- Pin type termination
- Sockets mounting
- AC coils and DC coils
- Environmental friendly product (RoHS compliant)



Contact specification

| | 2CO(DPDT) | 3CO(3PDT) |
|---------------------------|----------------------------|-------------------------------------|
| Contact configuration | 2CO(DPDT) | 3CO(3PDT) |
| Rated voltage | 250VAC/28VDC | 250VAC/28VDC |
| Rated current | 10A | 10A |
| Rated load AC-1/DC-1 | 2500VA/280W | (NO): 2500VA/280W (NC): 1250VA/140W |
| Contact resistance | 100mΩ | 100mΩ |
| Standard contact material | AgSnO ₂ , AgCdO | AgSnO ₂ , AgCdO |
| Mechanical life | 1x10 ⁷ | 1x10 ⁷ |
| Electrical life | 1x10 ⁵ | 1x10 ⁵ |

Coil specification

| | | |
|---------------------------------|---|---------------------|
| AC Rated voltage (Un) (50/60Hz) | 6V - 12V - 24V - 48V - 110V - 230V - 240V | |
| DC Rated voltage (Un) | 6V - 12V - 24V - 48V - 110V | |
| Rated power | AC: 2.4VA, DC: 1.5W | AC: 2.4VA, DC: 1.5W |
| Pick-up voltage (AC/DC) | 0.8Un/0.8Un | 0.8Un/0.8Un |
| Drop-out voltage (AC/DC) | 0.3Un/0.1Un | 0.3Un/0.1Un |

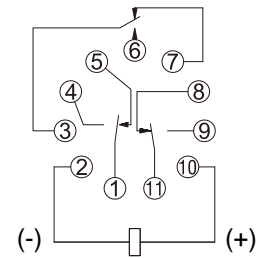
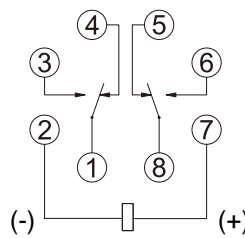
Characteristics

| | | |
|--|---------------------|---------------------|
| Insulation resistance | 500MΩ | 500MΩ |
| Dielectric Strength (Between coil and contact) | 1500VAC(1Min) | 1500VAC(1Min) |
| Dielectric Strength (Between open contacts) | 1000VAC(1Min) | 1000VAC(1Min) |
| Dielectric Strength (Between contact sets) | 1500VAC(1Min) | 1500VAC(1Min) |
| Operate time | Max.30ms | Max.30ms |
| Release time | Max.30ms | Max.30ms |
| Shock resistance functional | 98m/s ² | 98m/s ² |
| Shock resistance destructive | 980m/s ² | 980m/s ² |
| Vibration | 10-55HZ(1mm) | 10-55HZ(1mm) |
| Ambient temperature | -40°C to +55°C | -40°C to +55°C |
| Ambient humidity | 98%RH, +40°C | 98%RH, +40°C |
| Weight | approx.100g | approx.100g |



CR10T series relays

- With test button
- 10A contact
- Two poles changeover contacts and three poles changeover contacts
- Pin type termination
- Sockets mounting
- AC coils and DC coils
- Environmental friendly product (RoHS compliant)



Contact specification

| Contact configuration | 2CO(DPDT) | 3CO(3PDT) |
|---------------------------|----------------------------|-------------------------------------|
| Rated voltage | 250VAC/28VDC | 250VAC/28VDC |
| Rated current | 10A | 10A |
| Rated load AC-1/DC-1 | 2500VA/280W | (NO): 2500VA/280W (NC): 1250VA/140W |
| Contact resistance | 100mΩ | 100mΩ |
| Standard contact material | AgSnO ₂ , AgCdO | AgSnO ₂ , AgCdO |
| Mechanical life | 1x10 ⁷ | 1x10 ⁷ |
| Electrical life | 1x10 ⁵ | 1x10 ⁵ |

Coil specification

| | | |
|---------------------------------|---|---------------------|
| AC Rated voltage (Un) (50/60Hz) | 6V - 12V - 24V - 48V - 110V - 230V - 240V | |
| DC Rated voltage (Un) | 6V - 12V - 24V - 48V - 110V | |
| Rated power | AC: 2.4VA, DC: 1.5W | AC: 2.4VA, DC: 1.5W |
| Pick-up voltage (AC/DC) | 0.8Un/0.8Un | 0.8Un/0.8Un |
| Drop-out voltage (AC/DC) | 0.3Un/0.1Un | 0.3Un/0.1Un |

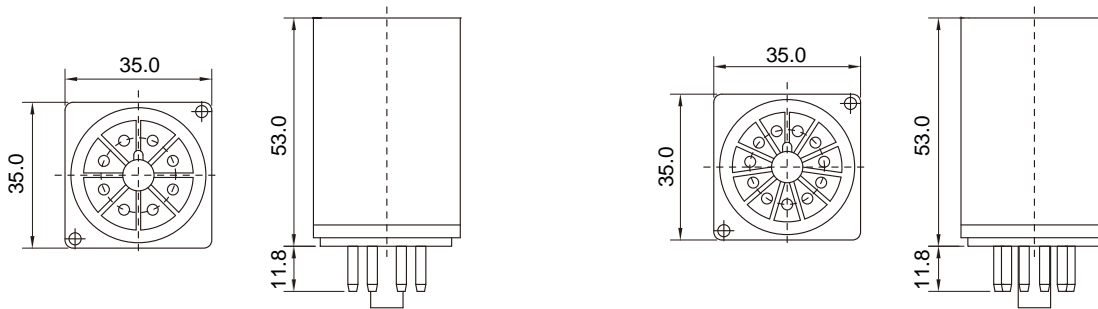
Characteristics

| | | |
|--|---------------------|---------------------|
| Insulation resistance | 500MΩ | 500MΩ |
| Dielectric Strength (Between coil and contact) | 1500VAC(1Min) | 1500VAC(1Min) |
| Dielectric Strength (Between open contacts) | 1000VAC(1Min) | 1000VAC(1Min) |
| Dielectric Strength (Between contact sets) | 1500VAC(1Min) | 1500VAC(1Min) |
| Operate time | Max.30ms | Max.30ms |
| Release time | Max.30ms | Max.30ms |
| Shock resistance functional | 98m/s ² | 98m/s ² |
| Shock resistance destructive | 980m/s ² | 980m/s ² |
| Vibration | 10-55HZ(1mm) | 10-55HZ(1mm) |
| Ambient temperature | -40°C to +55°C | -40°C to +55°C |
| Ambient humidity | 98%RH, +40°C | 98%RH, +40°C |
| Weight | approx.100g | approx.100g |

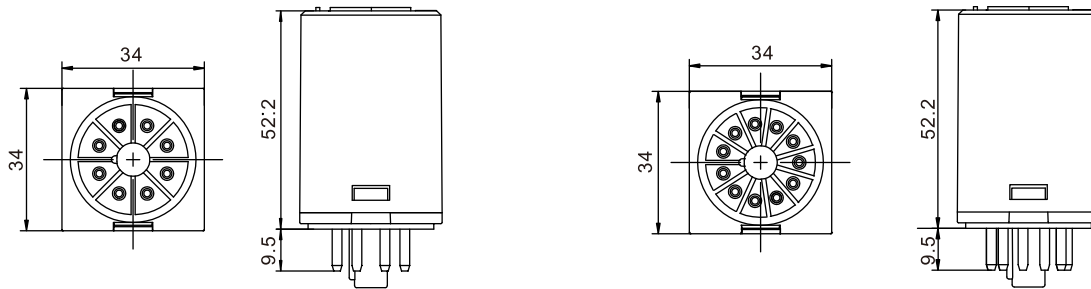
Characteristics of relays

Dimension(mm)

CR10



CR10T



Characteristics of relays

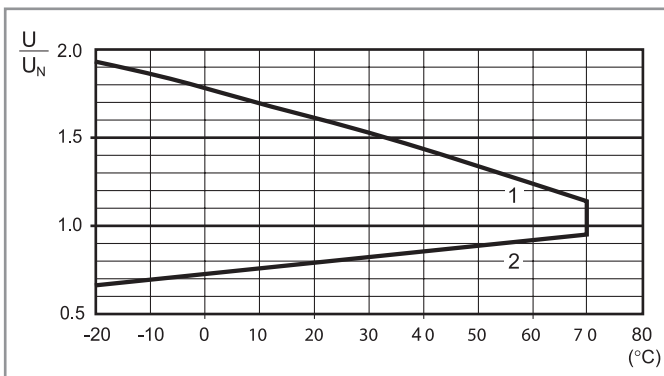
Coil Information (20°C)

| Rated voltage (VDC) | Pick-up voltage (VDC) | Permitted coil voltage (VDC) | Drop-out voltage (VDC) | Coil resistance (Ω) |
|---------------------|-----------------------|------------------------------|------------------------|------------------------------|
| 6 | 4.8 | 6.6 | 0.6 | 23.5 \pm 10% |
| 12 | 9.6 | 13.2 | 1.2 | 95.0 \pm 10% |
| 24 | 19.2 | 26.4 | 2.4 | 430.0 \pm 10% |
| 48 | 38.4 | 52.8 | 4.8 | 1630.0 \pm 10% |
| 110 | 88.0 | 121.0 | 11.0 | 7300.0 \pm 10% |

| Rated voltage (VAC) | Pick-up voltage (VAC) | Permitted coil voltage (VAC) | Drop-out voltage (VAC) | Coil resistance (Ω) |
|---------------------|-----------------------|------------------------------|------------------------|------------------------------|
| 6 | 4.8 | 6.6 | 1.8 | 3.9 \pm 10% |
| 12 | 9.6 | 13.2 | 3.6 | 16.9 \pm 10% |
| 24 | 19.2 | 26.4 | 7.2 | 70.0 \pm 10% |
| 48 | 38.4 | 52.8 | 14.4 | 315.0 \pm 10% |
| 110 | 88.0 | 121.0 | 33.0 | 1500.0 \pm 10% |
| 230 | 184.0 | 253.0 | 69.0 | 6200.0 \pm 10% |
| 240 | 192.0 | 264.0 | 72.0 | 7100.0 \pm 10% |

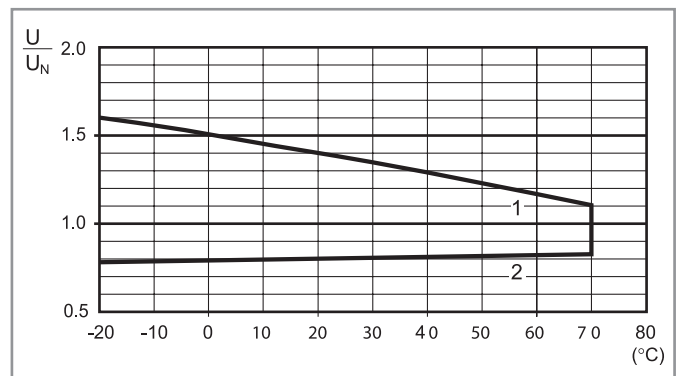
- AC coil and DC coil are most suitable for working at rated voltage.

DC coil operating range contrast ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.

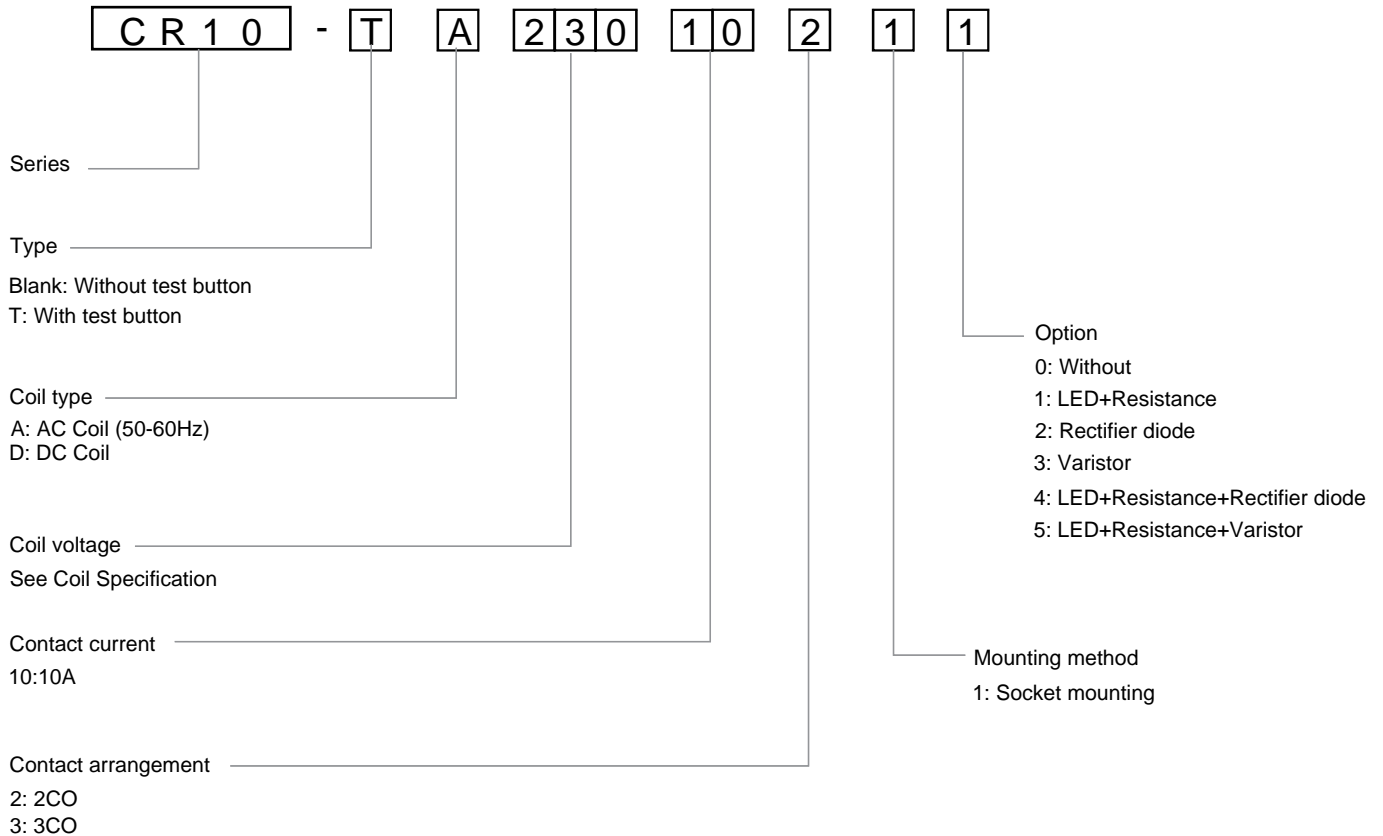
AC coil operating range contrast ambient temperature



- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.



Ordering information



■ The default contact material of the relay is AgSnO₂. If you need the contact made of AgCdO material, please indicate it clearly at the end of the order.



1. The plastic nutlike parts (directly under the test button) are intact. In this case, the contact will work when the test button is pressed. When the test button is released, the contact will return to its previous state. Fracture of plastic nutlike parts (using appropriate cutting tools).

2. In this case (in addition to the above functions), when the test button is pressed and rotated, the contact will be fixed in the working state and remain in that state until the test button is turned back to its previous position. In both cases, it is necessary to ensure that the action of the test button is fast and decisive.