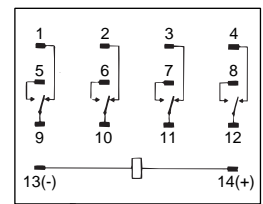
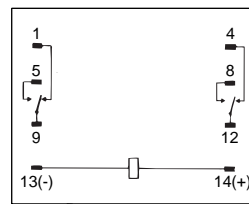
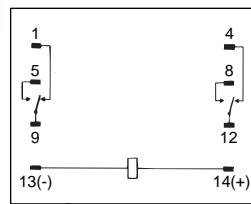


CR18L series relays

- Long lifespan
- Silver contact
- 2CO-5A & 10A contact and 2CO-3A contact
- Two poles changeover contacts and four poles changeover contacts
- Socket mounting
- AC coils and DC coils
- Environmental friendly product (RoHS compliant)



Contact specification

Contact configuration	2CO(DPDT)	2CO(DPDT)	4CO(4PDT)
Rated voltage	220VAC/24VDC	250VAC/30VDC	220VAC/24VDC
Rated current	5A	10A	3A
Rated load AC-1/DC-1	1100VA/120W	2500VA/300W	660VA/72W
Contact resistance	100mΩ	50mΩ	100mΩ
Standard contact material	Ag	Ag	Ag
Mechanical life	5×10^7	5×10^7	5×10^7
Electrical life	5×10^5	5×10^5	5×10^5

Coil specification

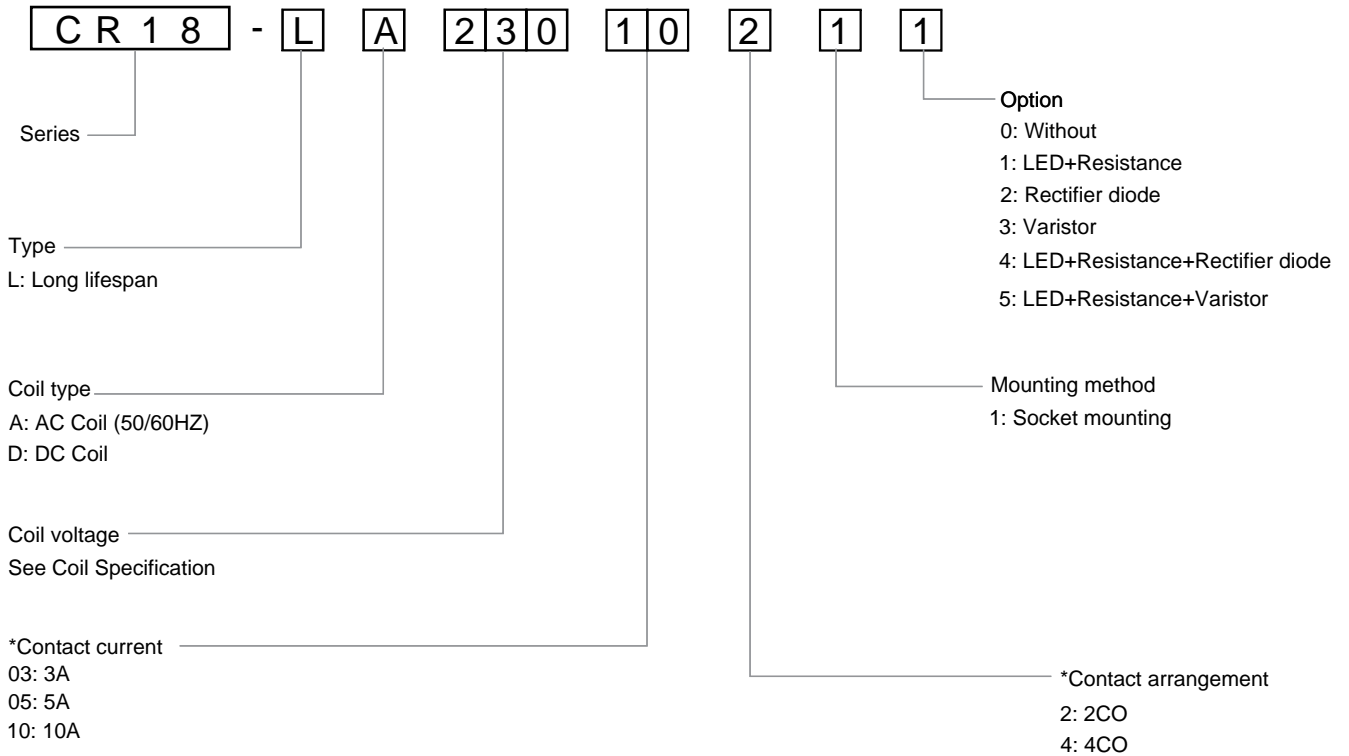
AC Rated voltage (Un) (50-60Hz)	6V - 12V - 24V - 36V - 48V - 110V - 230V - 240V		
DC Rated voltage (Un)	6V - 12V - 24V - 48V - 110V		
Rated power	AC: 1.1VA, DC: 900mW	AC: 1.1VA, DC: 900mW	AC: 1.1VA, DC: 900mW
Pick-up voltage (AC/DC)	0.8Un/0.8Un	0.8Un/0.8Un	0.8Un/0.8Un
Drop-out voltage (AC/DC)	0.05Un	0.05Un	0.05Un

Characteristics

Insulation resistance	100MΩ (500VDC)	100MΩ (500VDC)	100MΩ (500VDC)
Dielectric Strength (Between coil and contact)	2000VAC 1Min	2000VAC 1Min	2000VAC 1Min
Dielectric Strength (Between open contacts)	2000VAC 1Min	2000VAC 1Min	2000VAC 1Min
Dielectric Strength (Between contact sets)	1000VAC 1Min	1000VAC 1Min	1000VAC 1Min
Operate time	20ms	20ms	20ms
Release time	20ms	20ms	20ms
Shock resistance functional	200m/s ²	200m/s ²	200m/s ²
Shock resistance destructive	1000m/s ²	1000m/s ²	1000m/s ²
Vibration	10-55HZ/1mm	10-55HZ/1mm	10-55HZ/1mm
Ambient temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Ambient humidity	85%RH, +40°C	85%RH, +40°C	85%RH, +40°C
Weight	approx.35g	approx.35g	approx.35g



Ordering information

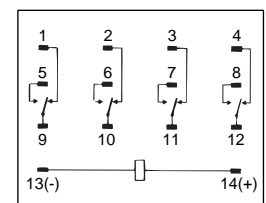
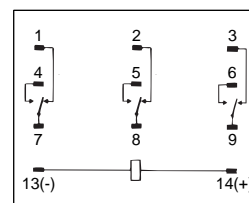
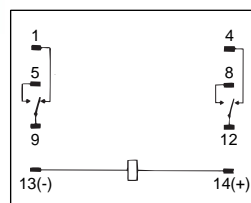


The choice of special functions and options can be chosen only in combination with the same

Contact arrangement	Contact current
2	05, 10
4	03

CR18 series relays

- Standard type
- 2CO-6.6A contact
3CO-6.6A contact
4CO-5A contact
- Two poles changeover contacts and three poles changeover contacts and four poles changeover contacts
- Many kinds of mounting
- AC coils and DC coils
- Environmental friendly product (RoHS compliant)



Contact specification

Contact configuration	2CO(DPDT)	3CO(3PDT)	4CO(4PDT)
Rated voltage	250VAC/30VDC	250VAC/30VDC	250VAC/30VDC
Rated current	6.6A	6.6A	5A
Rated load AC-1/DC-1	1650VA/198W	1650VA/198W	1250VA/150W
Contact resistance	100mΩ	50mΩ	100mΩ
Standard contact material	AgSnO ₂ , AgCdO	AgSnO ₂ , AgCdO	AgSnO ₂ , AgCdO
Mechanical life	2x10 ⁷	2x10 ⁷	2x10 ⁷
Electrical life	1x10 ⁵	1x10 ⁵	1x10 ⁵

Coil specification

AC Rated voltage (Un) (50-60Hz)	6V - 12V - 24V - 36V - 48V - 110V - 230V - 240V		
DC Rated voltage (Un)	6V - 12V - 24V - 48V - 110V		
Rated power	AC: 1.2VA, DC: 900mW	AC: 1.2VA, DC: 900mW	AC: 1.2VA, DC: 900mW
Pick-up voltage (AC/DC)	0.8Un/0.8Un	0.8Un/0.8Un	0.8Un/0.8Un
Drop-out voltage (AC/DC)	0.3Un/0.1Un	0.3Un/0.1Un	0.3Un/0.1Un

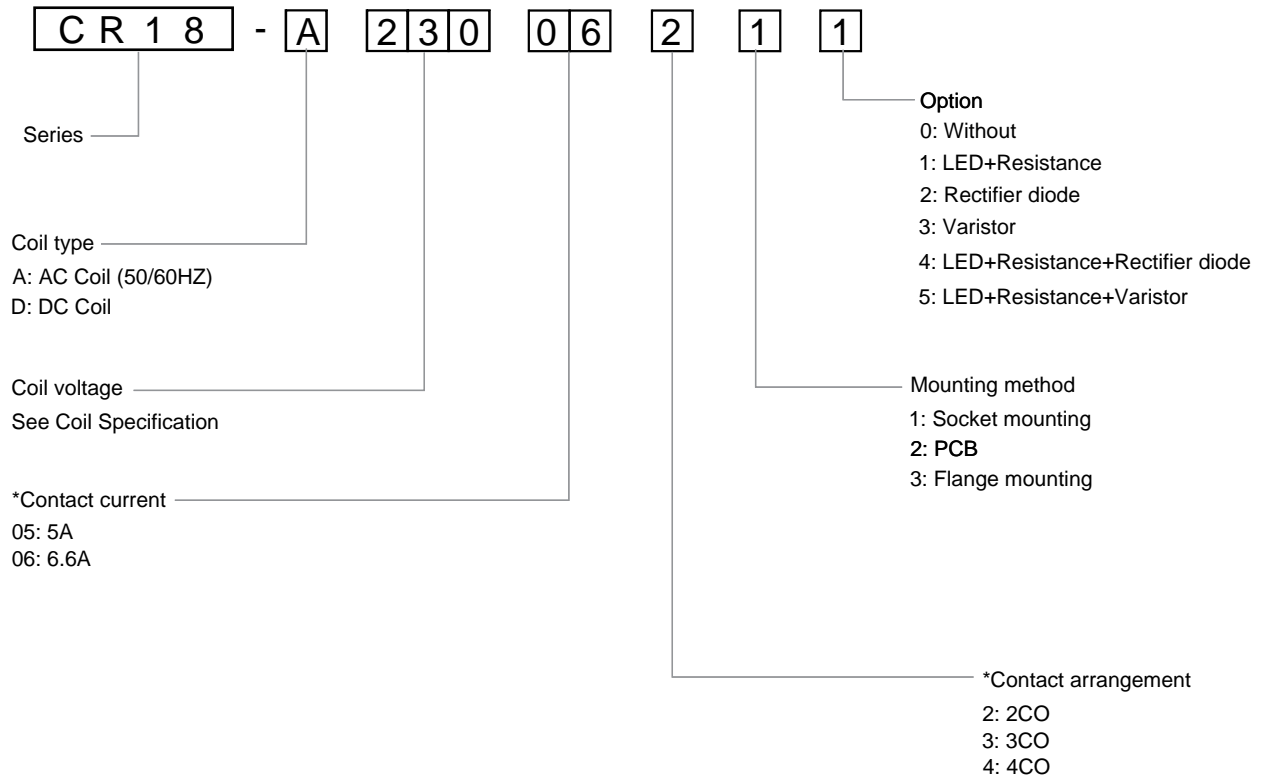
Characteristics

Insulation resistance	100MΩ (500VDC)	100MΩ (500VDC)	100MΩ (500VDC)
Dielectric Strength (Between coil and contact)	1500VAC 1Min	1500VAC 1Min	1500VAC 1Min
Dielectric Strength (Between open contacts)	1000VAC 1Min	1000VAC 1Min	1000VAC 1Min
Dielectric Strength (Between contact sets)	1500VAC 1Min	1500VAC 1Min	1500VAC 1Min
Operate time	25ms	25ms	25ms
Release time	25ms	25ms	25ms
Shock resistance functional	100m/s ²	100m/s ²	100m/s ²
Shock resistance destructive	1000m/s ²	1000m/s ²	1000m/s ²
Vibration	10-55HZ/1mm	10-55HZ/1mm	10-55HZ/1mm
Ambient temperature	-55°C to +70°C	-55°C to +70°C	-55°C to +70°C
Ambient humidity	95%RH, +40°C	95%RH, +40°C	95%RH, +40°C
Weight	approx.37g	approx.37g	approx.37g



Ordering information

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.

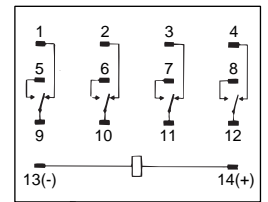
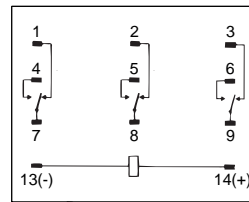
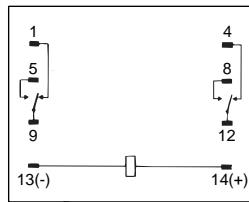
The choice of special functions and options can be chosen only in combination with the same

Contact arrangement	Contact current
2	06
3	06
4	05



CR18T series relays

- With test button
- 2CO-10A contact
3CO-10A contact
4CO-5A contact
- Two poles changeover contacts and three poles changeover contacts and four poles changeover contacts
- Many kinds of mounting
- AC coils and DC coils
- Environmental friendly product (RoHS compliant)



Contact specification

Contact configuration	2CO(DPDT)	3CO(3PDT)	4CO(4PDT)
Rated voltage	250VAC/30VDC	250VAC/30VDC	250VAC/30VDC
Rated current	10A	10A	5A
Rated load AC-1/DC-1	2500VA/300W	2500VA/300W	1250VA/150W
Contact resistance	50mΩ	50mΩ	50mΩ
Standard contact material	AgSnO ₂ , AgCdO	AgSnO ₂ , AgCdO	AgSnO ₂ , AgCdO
Mechanical life	1x10 ⁷	1x10 ⁷	1x10 ⁷
Electrical life	1x10 ⁵	1x10 ⁵	1x10 ⁵

Coil specification

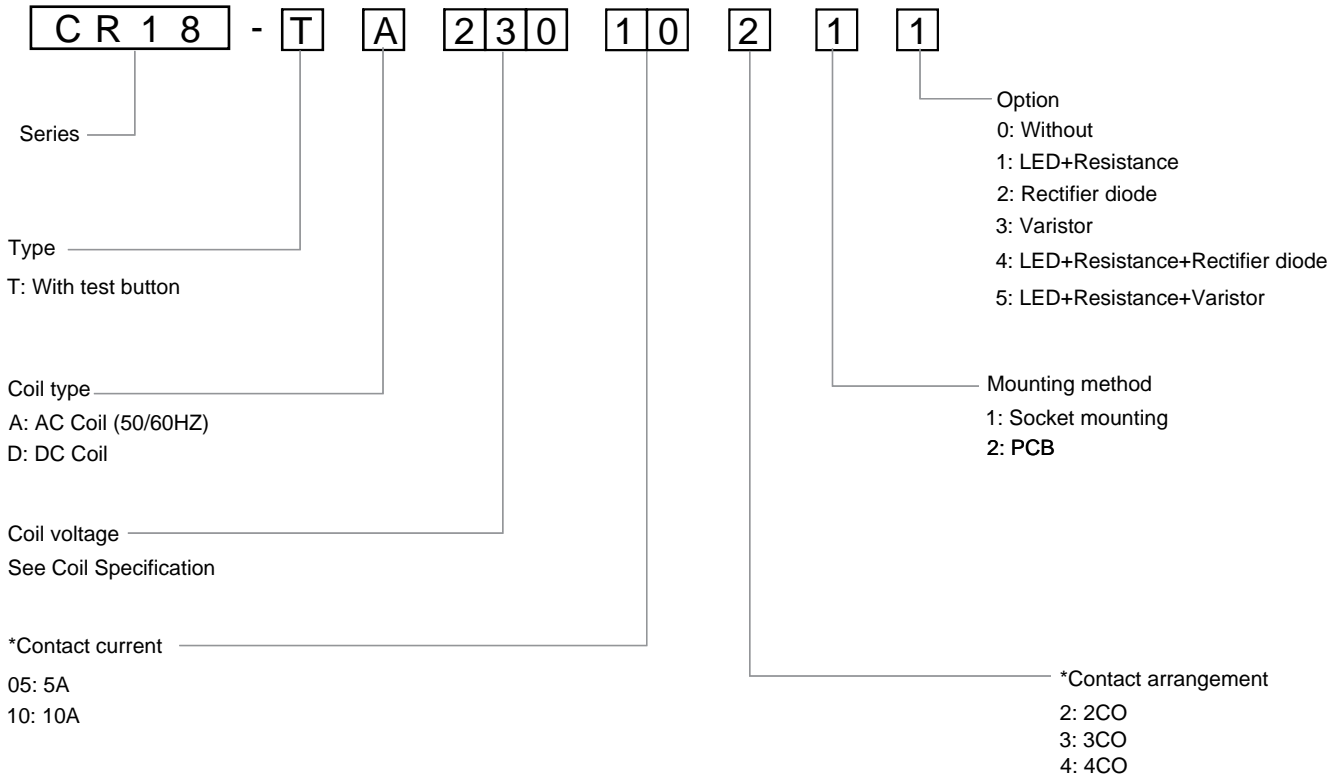
AC Rated voltage (Un) (50-60Hz)	6V - 12V - 24V - 36V - 48V - 110V - 230V - 240V		
DC Rated voltage (Un)	6V - 12V - 24V - 48V - 110V		
Rated power	AC: 1.2VA, DC: 900mW	AC: 1.2VA, DC: 900mW	AC: 1.2VA, DC: 900mW
Pick-up voltage (AC/DC)	0.8Un/0.8Un	0.8Un/0.8Un	0.8Un/0.8Un
Drop-out voltage (AC/DC)	0.3Un/0.1Un	0.3Un/0.1Un	0.3Un/0.1Un

Characteristics

Insulation resistance	100MΩ (500VDC)	100MΩ (500VDC)	100MΩ (500VDC)
Dielectric Strength (Between coil and contact)	1500VAC 1Min	1500VAC 1Min	1500VAC 1Min
Dielectric Strength (Between open contacts)	1000VAC 1Min	1000VAC 1Min	1000VAC 1Min
Dielectric Strength (Between contact sets)	1500VAC 1Min	1500VAC 1Min	1500VAC 1Min
Operate time	25ms	25ms	25ms
Release time	25ms	25ms	25ms
Shock resistance functional	100m/s ²	100m/s ²	100m/s ²
Shock resistance destructive	1000m/s ²	1000m/s ²	1000m/s ²
Vibration	10-55HZ/1mm	10-55HZ/1mm	10-55HZ/1mm
Ambient temperature	-40°C to +70°C	-40°C to +70°C	-40°C to +70°C
Ambient humidity	98%RH, +40°C	98%RH, +40°C	98%RH, +40°C
Weight	approx.37g	approx.37g	approx.37g



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.

The choice of special functions and options can be chosen only in combination with the same

Contact arrangement	Contact current
2	10
3	10
4	05



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.

Characteristics of relays

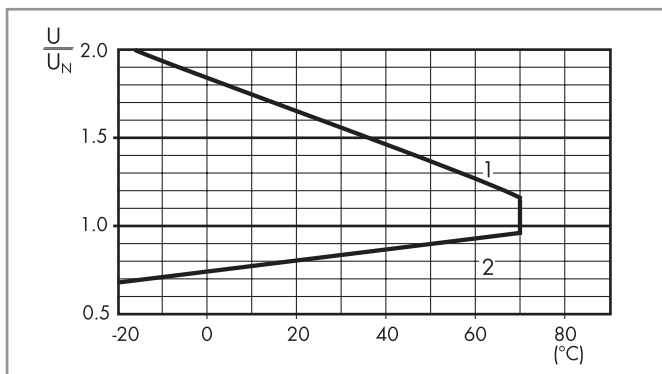
Coil Information (20°C)

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	40.0 \pm 10%
12	9.6	13.2	1.2	160.0 \pm 10%
24	19.2	26.4	2.4	650.0 \pm 10%
48	38.4	52.8	4.8	2600.0 \pm 10%
110	88.0	121.0	11.0	11000.0 \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	12.0 \pm 10%
12	9.6	13.2	3.6	46.0 \pm 10%
24	19.2	26.4	7.2	180.0 \pm 10%
36	28.8	39.6	10.8	450.0 \pm 10%
48	38.4	52.8	14.4	780.0 \pm 10%
110	88.0	121.0	30.0	3750.0 \pm 10%
230	184.0	253.0	69.0	12950.0 \pm 10%
240	192.0	264.0	72.0	18790.0 \pm 10%

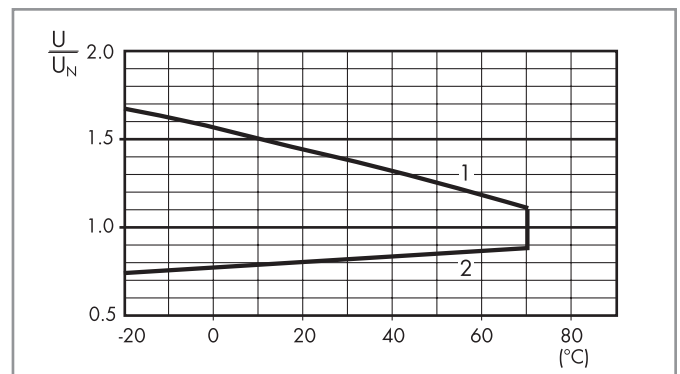
- AC & DC coil are most suitable for working at rated voltage.

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



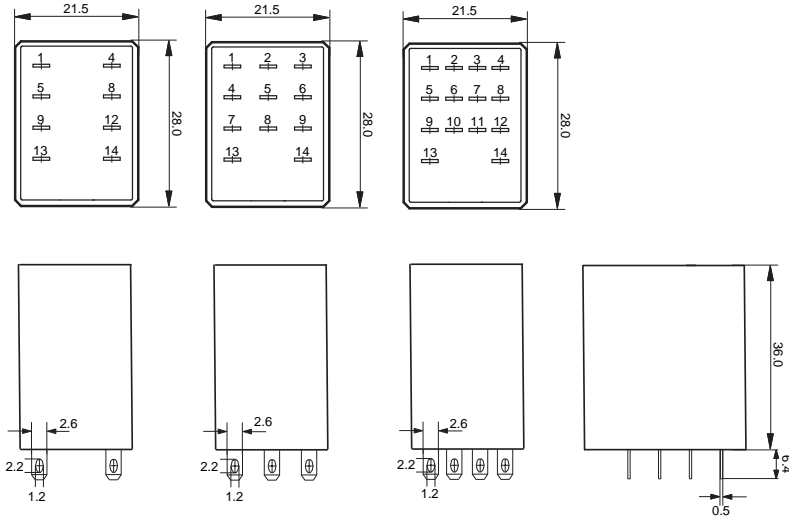
- 1 - Max. permitted coil voltage.
- 2 - Min. pick-up voltage with coil at ambient temperature.



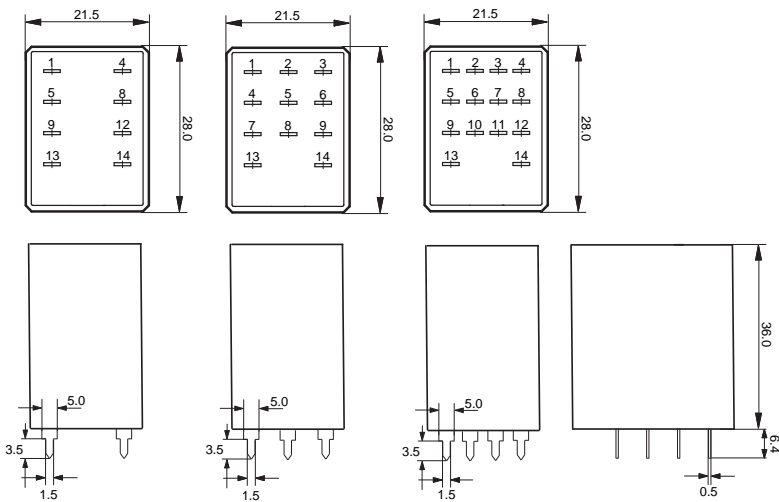
Characteristics of relays

Dimension(mm)

Socket mounting



PCB



Flange mounting

