



Features

- Sealed type and open type available.
- Contact form: Form A, Form B or Form C.
- Miniature relay with high switching capability:30A.
- Special type of 4000VAC dielectric strength and 6000V surge voltage(1.2/50 us)between coil and contact available.

Safety Approval

UL, TUV, CQC

Contact Capacity

| Model | Y90-DM | Y90-DB | Y90-D |
|----------------------------|------------|------------|------------|
| Nominal Switching Capacity | 30A 277VAC | 30A 250VAC | 20A 277VAC |
| Max.swithing current | 30A | 30A | 20A |
| Max.swithing voltage | 277VAC | 277VAC | 277VAC |
| Max.swithing power | 7,500VA | 7,500VA | 5,000VA |

Characteristic Data

| | | |
|---------------------------------------|--|---------------------------------------|
| Contact material | Silver alloy | |
| Initial contact resistance(at6VDC 1A) | 50mΩ Max. | |
| Operate time(at nominal volt) | 15msec. Max. | |
| Release time(at nominal volt) | 10msec. Max. | |
| Initial insulation resistance | 1,000MΩ Min.(DC500V) | |
| Initial dielectric strength | Between open contacts: AC1,500V,50/60HZ 1Min. | |
| | Between coil and contacts: AC2,500V,50/60HZ 1Min.(AC 4,000 VAC is available) | |
| Vibration resistance | Functional | 10-55 HZ at double amplitude of 1.5mm |
| | Destructive | 10-55 HZ at double amplitude of 1.5mm |
| Shock resistance | Functional | 10G Min. |
| | Destructive | 100G Min. |
| Endurance(operations) | Mechanical(at 10,800ps.h) | 10,000,000 times |
| | Electrical(at 10,800ps.h) | 100,000 times |
| Ambient temperature | -40°C ~ + 85°C(no condensation) | |
| Unit weight | Open type: Approx.20.0g | Sealed type: Approx.24.0g |

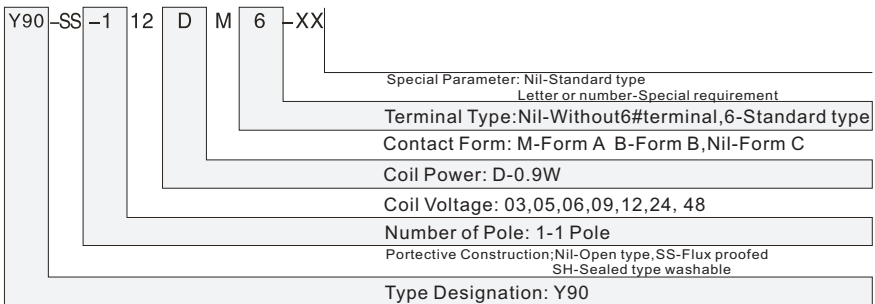
Coil Data(at 20°C)

| Nominal voltage (VDC) | Nominal operating current ± 10% (mA) | Coil resistance ± 10% (Ω) | Allowable voltage (Max.) | Pick-up voltage (Max.) | Drop-out voltage (Min.) | Nominal operating power |
|-----------------------|--------------------------------------|---------------------------|--------------------------|------------------------|-------------------------|-------------------------|
| 5 | 180.00 | 27 | 110%of nominal voltage | 80%of nominal voltage | 5%of nominal voltage | 0.90W |
| 6 | 150.00 | 40 | | | | |
| 9 | 100.00 | 90 | | | | |
| 12 | 75.00 | 160 | | | | |
| 15 | 60.00 | 250 | | | | |
| 18 | 50.00 | 360 | | | | |
| 24 | 37.50 | 640 | | | | |
| 48 | 18.75 | 2,560 | | | | |
| 110 | 8.20 | 13,400 | | | | |

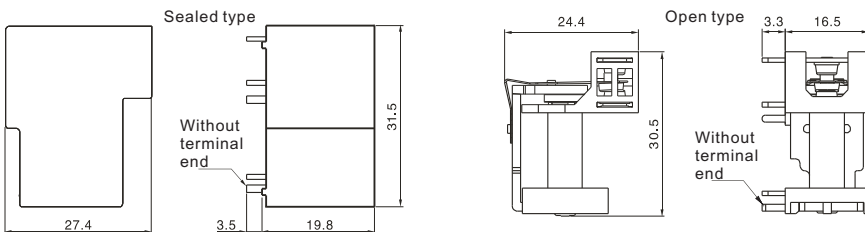
Safety Approval Ratings

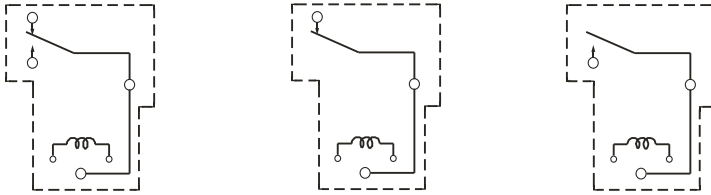
| Approval | CQC | TUV | UL |
|------------------|---|---|--|
| Approval ratings | Form A: 30A 250VAC Form B: 30A 250VAC Form C: 20A/10A 250VAC | Form A: 30A 240VAC Form B: 30A 240VAC Form C: 20A/10A 240VAC | N0: 30A 277VAC NO/NC: 20A 277VAC 240VAC |

Ordering Information

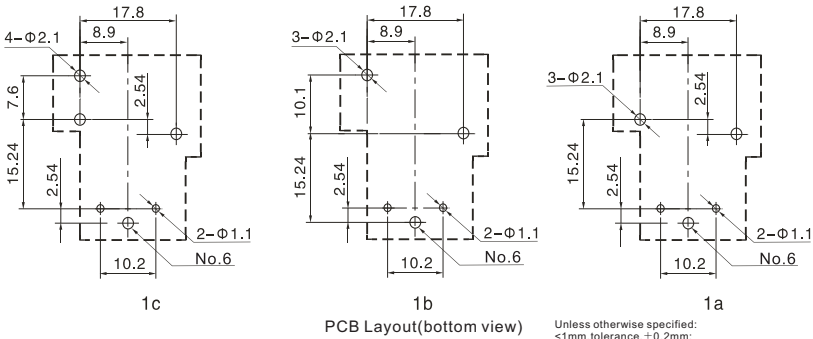


Outline Dimensions, Wiring Diagram, P.C Board Layout (Unit: mm)





Wiring Diagram(bottom view)



PCB Layout(bottom view)

Unless otherwise specified:
 <1mm, tolerance, ±0.2mm;
 1-5mm, tolerance, ±0.3mm;
 >5mm, tolerance, ±0.4mm;
 Note: 1. Extended terminal dimension is dimension before soldering.
 2. Tolerance of PCB layout: ±0.1mm

Typical Applications

- Car, magnetic control, heater and ventilation equipment
- Home appliances, air conditioner, microwave oven, etc.

Characteristic Curves

