



## Features

- Sealed type and open type available.
- Contact form: Form A, Form B or Form C.
- Miniature relay with high switching capability:40A.
- 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)	100mΩ 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 18,000ps.h)	10,000,000 times
	Electrical(at 600ps.h)	100,000 times
Ambient temperature	-40℃ ~ + 85℃( no condensation)	
Unit weight	Open type: Approx.20.0g	Sealed type: Approx.24.0g

## Coil Data(at 20℃)

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				

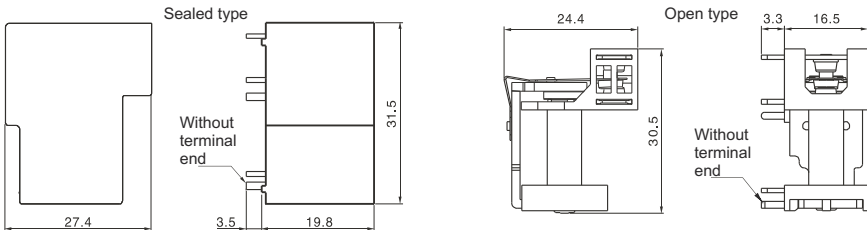
Safety Approval Ratings

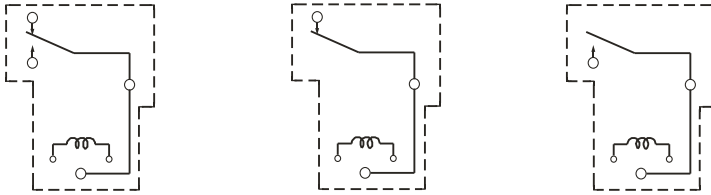
Approval	CQC	TUV	UL
Approval ratings	NO: 20A 277/250VAC 30A 277/250VAC 40A 277/250VAC 2HP 277/250VAC  NC: 10A 277/250VAC 20A 277/250VAC 30A 277/250VAC	Form A: 30A 240VAC  Form C 24A/10A 240VAC	Form A: 30A 277VAC 40A 277VAC TV-8 120VAC  Form C 20A 277VAC

Ordering Information

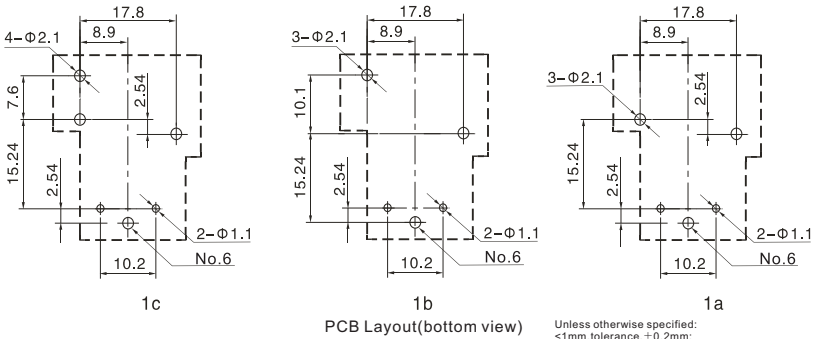
Y90	-SS	-1	12	D	M	F	-6	XX	Special Parameter: Nil-Standard type Letter or number-Special requirement
									Terminal Type: Nil-Without6#terminal,6-Standard type
									Load type: Nil-Standard type F-High load
									Contact Form: M-Form A B-Form B, Nil-Form C
									Coil Power: D-0.9W
									Coil Voltage: 03,05,06,09,12,24, 48
									Number of Pole: 1-1 Pole
									Protective Construction: Nil-Open type, SS-Flux proofed SH-Sealed type washable
									Type Designation: Y90

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





Wiring Diagram(bottom view)



PCB Layout(bottom view)

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

### Typical Applications

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

### Characteristic Curves

