

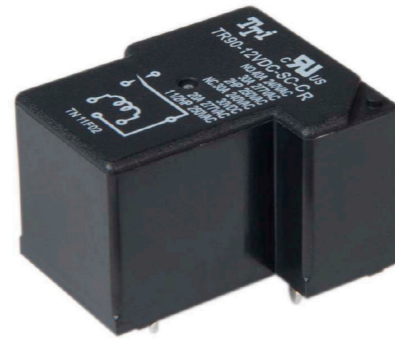
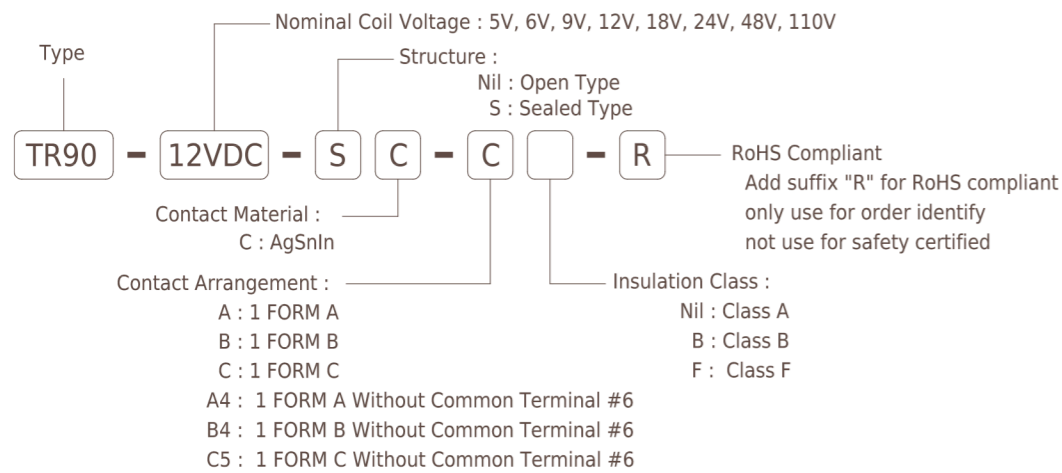
MAIN FEATURES

- Up to 30A switching in SPST and 20A switching in SPDT arrangements
- Available as an open-frame relay, with an immersion cleanable, plastic sealed case.
- Meet UL F Insulation class.
- UL , cUL and TUV recognized.

APPLICATIONS

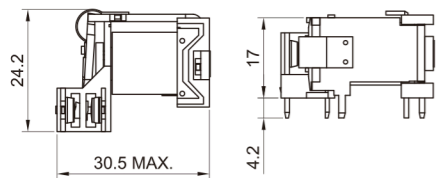
- Used for power switching, Electrical Heater, ventilator, Air conditioning, Refrigerating, Automobile and House-hold Appliance.

ORDERING INFORMATION

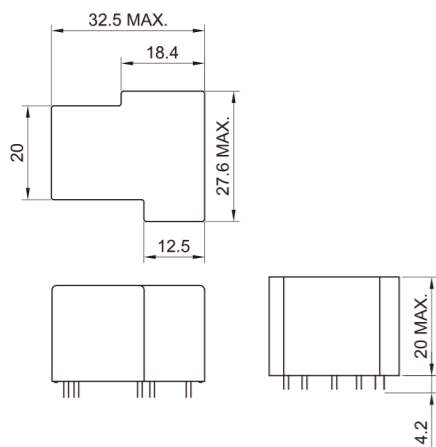


DIMENSION(unit:mm)

Open Type

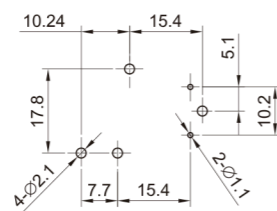


Sealed Type

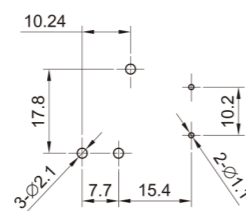


DRILLING(unit:mm)

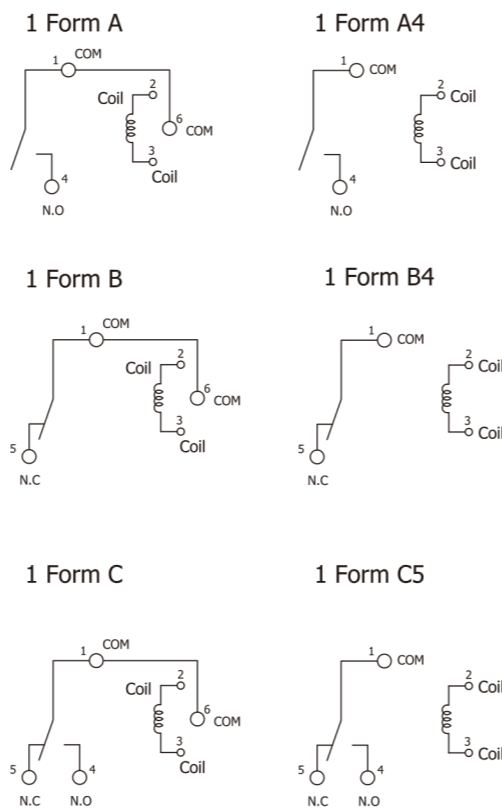
A / B / C Type



A4 / B4 / C5 Type



WIRING DIAGRAM



(De-energized Position)

COIL DATA CHART(at 20°C)

Coil Sensitivity	Nominal Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) ±10%	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
TR90	5	185	27	abt. 0.93	80% Max.	10% Max.	120% Max.
	6	150	40				
	9	93	97				
	12	77	155				
	18	47	380				
	24	36	660				
	48	19	2560				
110	8	13450 ±15%					

CONTACT RATING

Item	TR90			
	- A / - A4	- C / - C5		
		N/O	N/C	
Resistive Load (cosΦ=1) General	UL	40A 240VAC 30A 277VAC	40A 240VAC 30A 277VAC	30A 240VAC/30VDC 20A 277VAC
		TUV	(*B:AgCdO) 40A 240VAC/14VDC	(*B:AgCdO) 40A 240VAC/14VDC
Motor		2HP 250VAC	2HP 250VAC	1.5HP 250VAC
Contact material		Silver Alloy		

PERFORMANCE(at initial value)

Item	TR90	
	UL508	UL873
Contact Resistance	100mΩ Max.	
Operation Time	15msec Max.	
Release Time	10msec Max.	
Dielectric Strength Between coil & contact Between contacts	1500VAC 50/60Hz (1 minute) 1500VAC	2500VAC
Insulation Resistance	10 MΩ Min. (at 500VDC)	
Max. ON/OFF Switching Mechanically Electrically	300 operation/min 30 operation/min	
Operating Ambient Temperature	-55°C to +85°C (operating) -55°C to +155°C (storage)	
Operating Humidity	45% to 85% RH	
Coil Temperature Rise	60 deg. Max.	
Vibration Endurance Error Operation	10 to 55Hz Double Amplitude 1.5mm 10 to 55Hz Double Amplitude 1.5mm	
Shock Endurance Error Operation	100 m/sec ² (abt. 100g's) 10 m/sec ² (abt. 10g's)	
Life Expectancy Mechanically Electrically	1 × 10 ⁷ 1 × 10 ⁵	
Weight	abt. 22g. , 28g.(SEALED)	
UL & CUL	E156406	

1. Tolerance ±0.5mm on all dimensions unless otherwise stated.
2. Tolerance ±0.1mm on PCB DRILLING dimension unless otherwise stated.