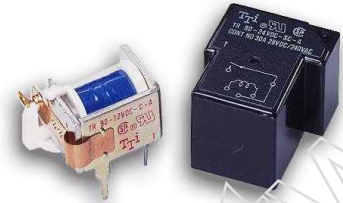




TR90

MAIN FEATURES

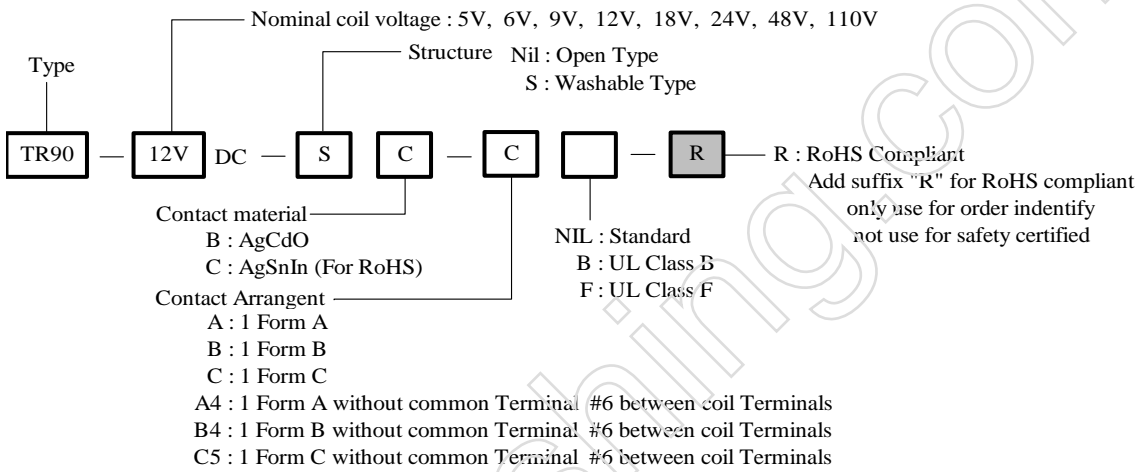
- Up to 30A switching in SPST and 20A switching in SPDT arrangements.
- Available as an open-frame relay, with an immersion cleanable, plastic sealed case.
- Meet UL F Insulation class.
- UL、cUL and TUV recognized.



APPLICATIONS

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

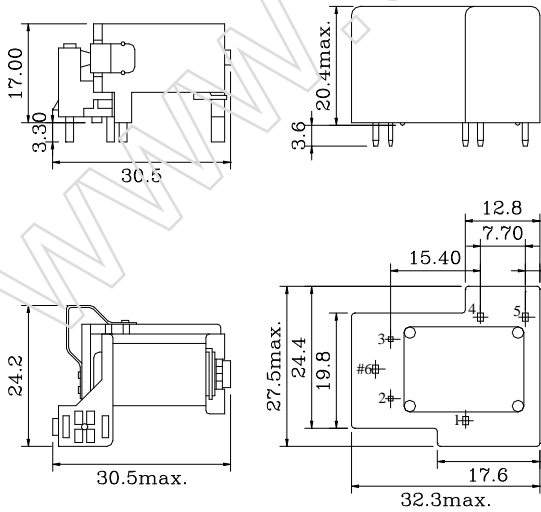
ORDERING INFORMATION



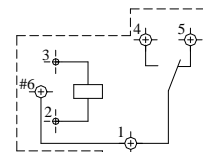
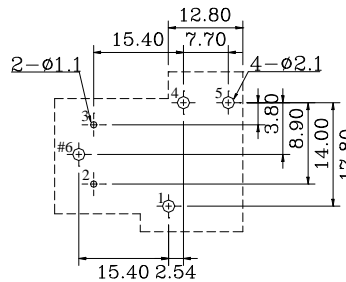
DIMENSION (unit:mm)

DRILLING (unit:mm)

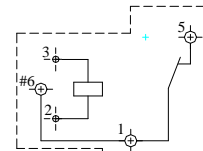
WIRING DIAGRAM



TR90-A & -B & -C (For UL 508)

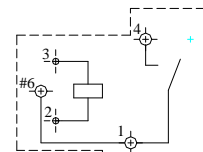
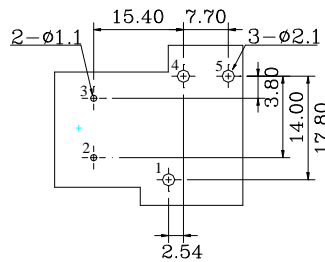


(1 Form C)



(1 Form B)

TR90-A4 & -B4 & -C5 (For UL 873)



(1 Form A)

NOTE : "#6" This Terminal not present for A4 & B4 & C5 Type (MEET UL873 Spacing)

COIL DATA CHART (AT20°C)

Coil Sensitivity	Nominal Coil Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) $\pm 10\%$	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 $\pm 15\%$				

CONTACT RATING

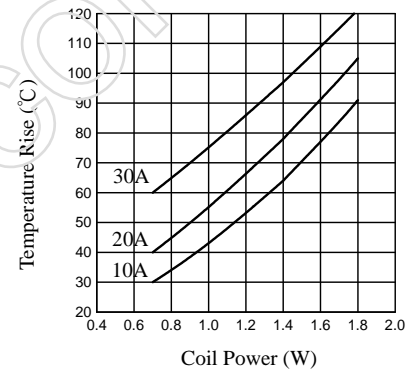
Item \ Type	TR90		
	FORM A /A4	FORM C/C5	
		N/O	N/C
Resistive Load (cos Φ =1) General	UL : 40A 240VAC 30A 277VAC	UL : 40A 240VAC 30A 277VAC	UL : 30A 240VAC 20A 277VAC
	TUV : (B:AgCdO) 40A/240VAC 14VDC	TUV : (B:AgCdO) 40A/240VAC 14VDC	TUV : (B:AgCdO) 30A/240VAC 14VDC
Motor	2HP 250VAC	2HP 250VAC	1.5HP 250VAC
Tungsten	TV-5	TV-5	-

PERFORMANCE (at initial value)

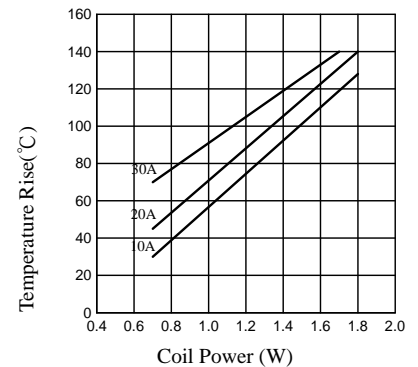
Item \ Type	TR90	
	UL508	UL873
Contact Resistance	100m Ω Max.	
Operation Time	15msec Max.	
Release Time	10msec Max.	
Dielectric Strength Between coil & contact Between contacts	1500VAC 50/60HZ (1 minute) 1500VAC	2500VAC
Insulation Resistance	10 M Ω Min. (500VDC)	
Max. ON/OFF Switching Mechanically Electrically	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	10 \times 10 ⁶ 10 \times 10 ⁴	
Weight	abt. 22grs, 28grs(SEALED)	
UL & CUL	E156406	
TUV	R50036670	

REFERENCE DATA

OPEN-STYLE RELAY, NO DUST COVER



SEALED RELAY



This datasheet for reference and subject to change without notice. Please double check final specification with Tai-Shing.