



TR90

MAIN FEATURES

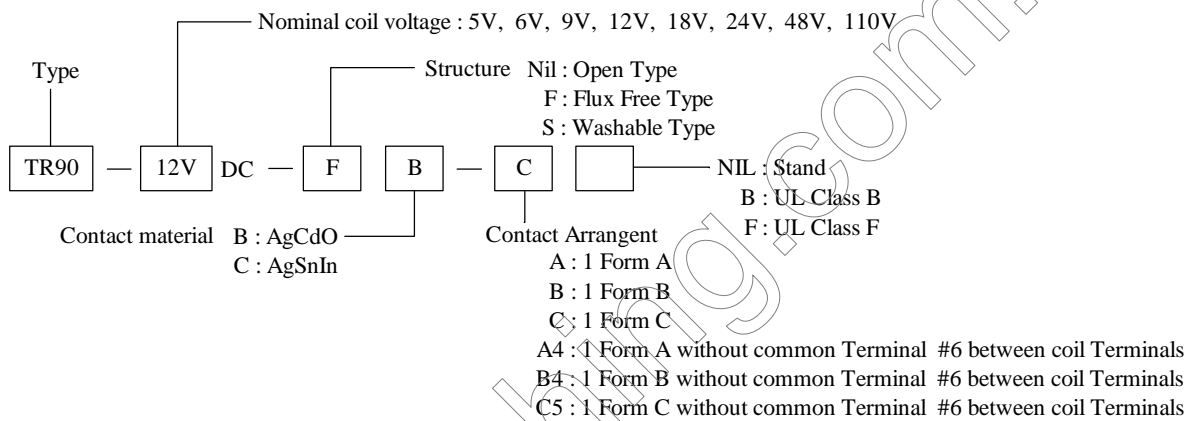
- ¹ Up to 30A switching in SPST and 20A switching in SPDT arrangements.
- ¹ Available as an open-frame relay, with an immersion cleanable, plastic sealed case.
- ¹ Meet UL F Insulation class.

APPLICATIONS

- ¹ Used for power switching, Electrical Heater, ventilator, Air conditioning, Refrigerating, Automobile and House-hold Appliance.



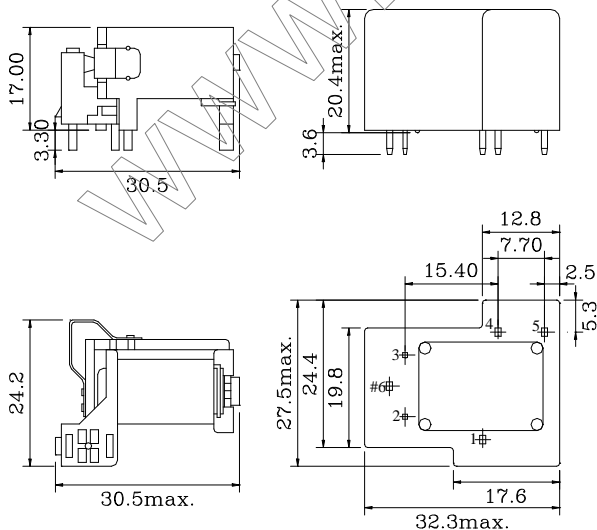
ORDERING INFORMATION



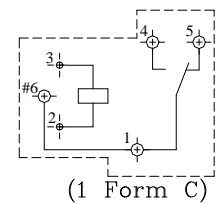
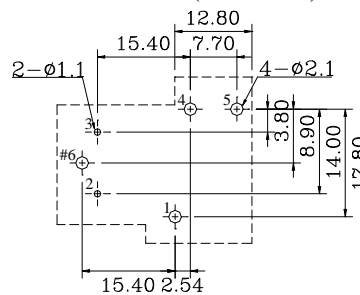
DIMENSION (unit:mm)

DRILLING (unit:mm)

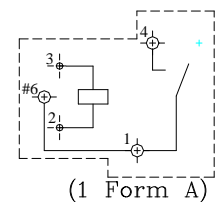
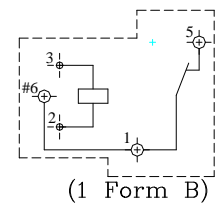
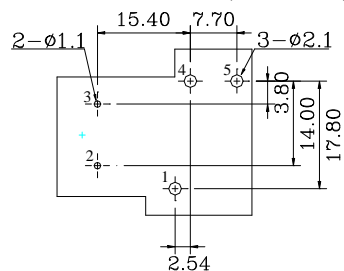
WIRING DIAGRAM



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



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



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

COIL DATA CHART (AT20¹/₄C)

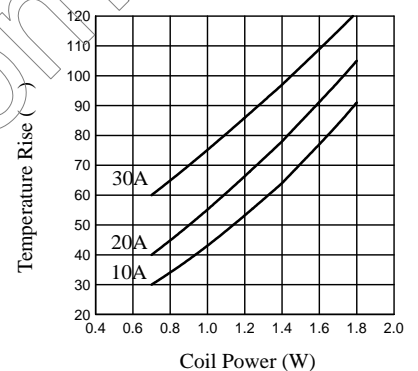
Coil Sensitivity	Coil Voltage Code	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) $\pm 10\%$	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
TR90	05	5	185	27	abt. 0.93	80% Max.	10% Max.	120% Max.
	06	6	150	40				
	09	9	93	97				
	12	12	77	155				
	18	18	47	380				
	24	24	36	660				
	48	48	19	2560				
	110	110	8	13450 $\pm 15\%$				

CONTACT RATING

Item	Type	TR90		
		FORM A	FORM C	
			N/O	N/C
Resistive Load (cos $\Phi=1$)		30A 240VAC 30A 14VDC	30A 240VAC 30A 14VDC	10A 240VAC 10A 14VDC
General Motor		240VAC 2HP 120VAC 1HP	240VAC 1HP 120VAC 0.5HP	240VAC 0.5HP 120VAC 0.25HP
Tungsten		TV-5	TV-5	TV-3
Ballast		10A 240VAC	10A 240VAC	3A 240VAC
LRA/FLA		240VAC 80/30	240VAC 50/20	240VAC 20/7

REFERENCE DATA

OPEN-STYLE RELAY, NO DUST COVER



PERFORMANCE (at initial value)

Item	Type	TR90	
		UL508	UL873
Contact Resistance		100m Ω Max.	
Operation Time		15msec Max.	
Release Time		10msec Max.	
Dielectric Strength		1500VAC 50/60HZ (1 minute)	2500VAC
Between coil & contact		1500VAC	
Between contacts			
Insulation Resistance		10 M Ω Min. (500VDC)	
Max. ON/OFF Switching		300 operation/min	
Mechanically		30 operation/min	
Electrically			
Operating Ambient Temperature		-55° to +85°C (operating)	
		-55° to +155°C (storage)	
Operating Humidity		45 to 85% RH	
Coil Temperature Rise		60 deg. Max.	
Vibration			
Endurance		10 to 55Hz Double Amplitude 1.5mm	
Error Operation		10 to 55Hz Double Amplitude 1.5mm	
Shock			
Endurance		100 m/sec ² (abt. 100g's)	
Error Operation		10 m/sec ² (abt. 10g's)	
Life Expectancy			
Mechanically		10 \times 10 ⁶	
Electrically		10 \times 10 ⁴	
Weight		abt. 22grs, 28grs(SEALED)	
UL File No.		E156406	
CSA File No.		LR700159	

SEALED RELAY

