

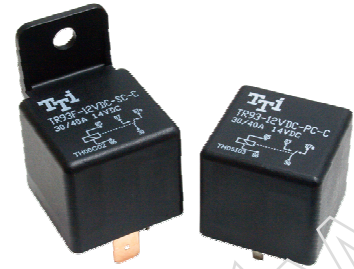
TR93

MAIN FEATURES

- Small size, heavy duty, capable of 40A.
- Low contacts voltage drop ($\leq 3mV/A$), reduce circuit consumption and contacts noise.
- Contact structure, performance reliable, with plug-in pins, bracket model available, handle with ease.

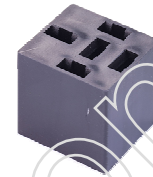
APPLICATIONS

- Car compressor, light, starter, horn. Automatic devices, communication equipment, control and switch circuit, etc.



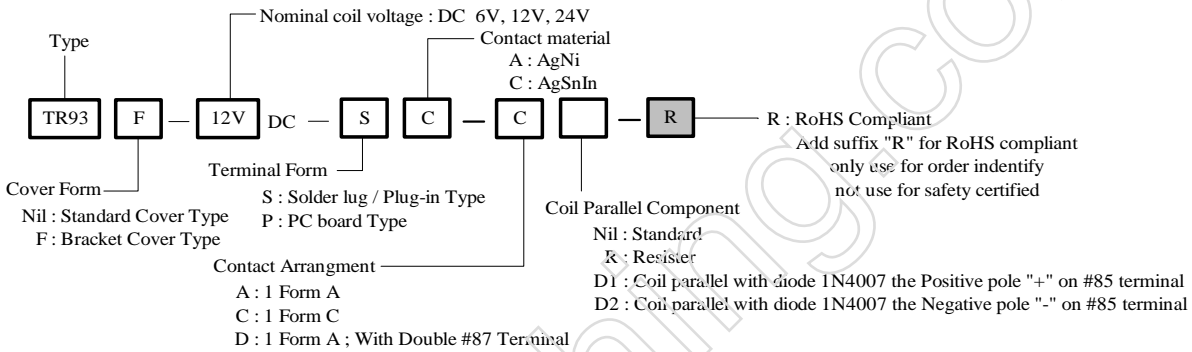
Option Socket :

Please refer appendix P103



- OD07-0011A
- OD07-0012A
- OD07-0013A
- OD07-0014A
- OD07-0022A

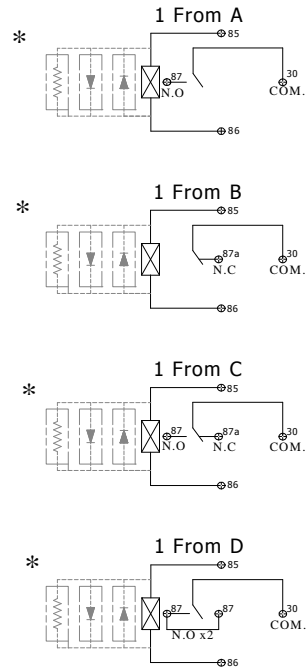
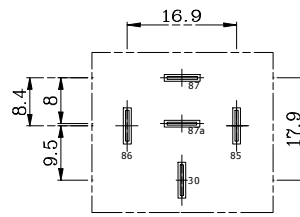
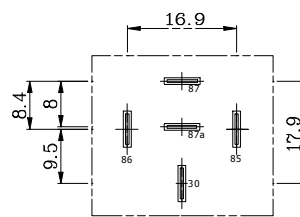
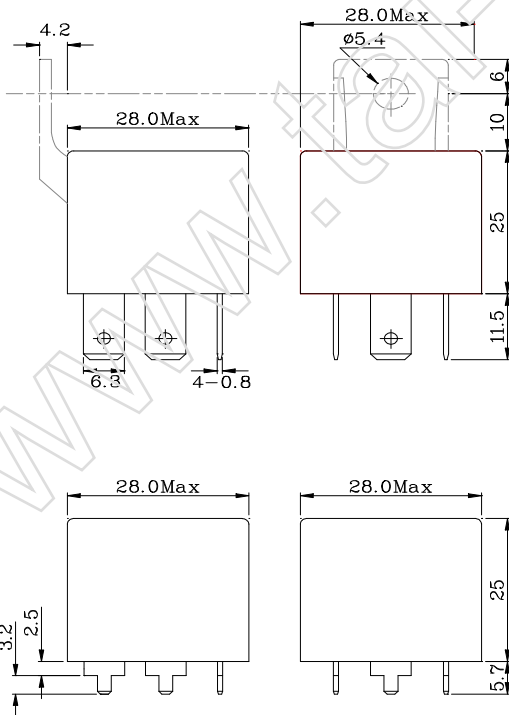
ORDERING INFORMATION



DIMENSION (unit:mm)

DRILLING (unit:mm)

WIRING DIAGRAM



* Coil Parallel Component Option

COIL DATA CHART (AT20°C)

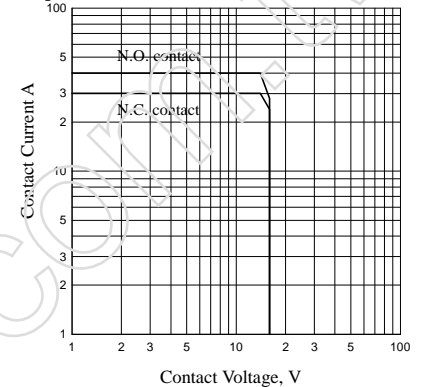
Coil Sensitivity	Coil Voltage Code	Nominal Voltage (VDC)	Nominal Current (mA)	Coil Resistance (Ω) $\pm 10\%$	Power Consumption (W)	Pull-In Voltage (VDC)	Drop-Out Voltage (VDC)	Max-Allowable Voltage (VDC)
TR93	6	6	267	22	abt. 1.6	65% Max.	10% Min.	150% but for short time carrying current
	12	12	134	90				
	24	24	67	360				

CONTACT RATING

Item	Type	1 Form A	1 Form D	1 Form B	1 Form C	
					N/C	N/O
Contact Capacity Resistive Load $\cos\phi=1$		40A 14VDC	2x20A 14VDC (N/O x 2)	20A 14VDC	30A 14VDC	40A 14VDC
Max. Carrying Current		30A			30A	30A
Max. Make Current		120A			45A	120A
Max. Break Current		40A			30A	30A
Initial Voltage Drop		200mV (at 40A)			250mV (at 10A)	200mV (at 10A)
Min. Load		0.1A, 12VDC				
Contact Material		Ag Alloy				

REFERENCE DATA

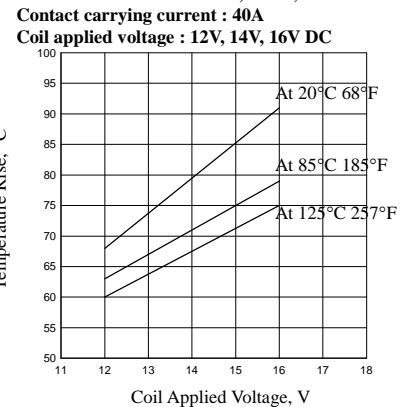
1. Maximum value for switching capacity No. of operations : 10^5



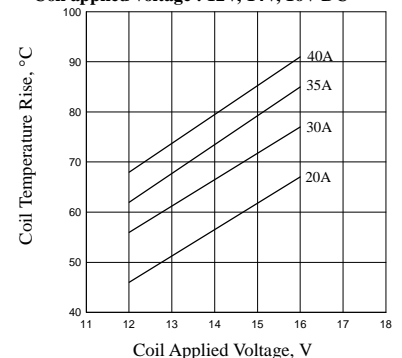
PERFORMANCE (at initial value)

Item	Type	TR93
Contact Resistance		100m Ω Max.
Operation Time		15msec Max.
Release Time		15msec Max. (type with diode inside : 20msec max.)
Dielectric Strength		Between coil & contact 500VAC 50/60Hz (1 minute) Between contacts 500VAC 50/60Hz (1 minute)
Insulation Resistance		100 M Ω Min. (500VDC)
Max. ON/OFF Switching		Mechanically 300 operation/min Electrically 30 operation/min
Operating Ambient Temperature		-40°C to +80°C (No water drop condensation)
Operating Humidity		45 to 85% RH
Coil Temperature Rise		60 deg. Max. (at rated coil voltage)
Vibration		Endurance 10 to 55Hz Double Amplitude 1.5mm Error Operation 10 to 55Hz Double Amplitude 1.5mm
Shock		Endurance 100G Min. Error Operation 10G Min
Life Expectancy		Mechanically 10×10^6 Electrically 1×10^5 for 1 Form A 30000 for 1 Form C
Weight		abt. 34grs.

2-(1). Coil temperature rise (resistive)
Ambient temperature : 20°C, 85°C, 125°C
68°F, 185°F, 257°F



2-(1). Coil temperature rise (resistive)
Ambient temperature : 20°C, 68°C
Contact carrying current : 20A, 30A, 35A, 40A
Coil applied voltage : 12V, 14V, 16V DC



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