

TR94

80 Amp. High Current Automotive Relay

MAIN FEATURES

- Plug-in terminals, easy to handle worldwide changeable, with ISO socket.
- Optional mounting bracket.
- Small size, high capacity, rated load 80A.
- Usage of relay in car
- Compressor Light Starter Horn

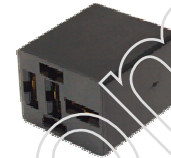
APPLICATIONS

- For direct connection with Cell Motors, Transmission, etc. and Anti-Locking Brake System.

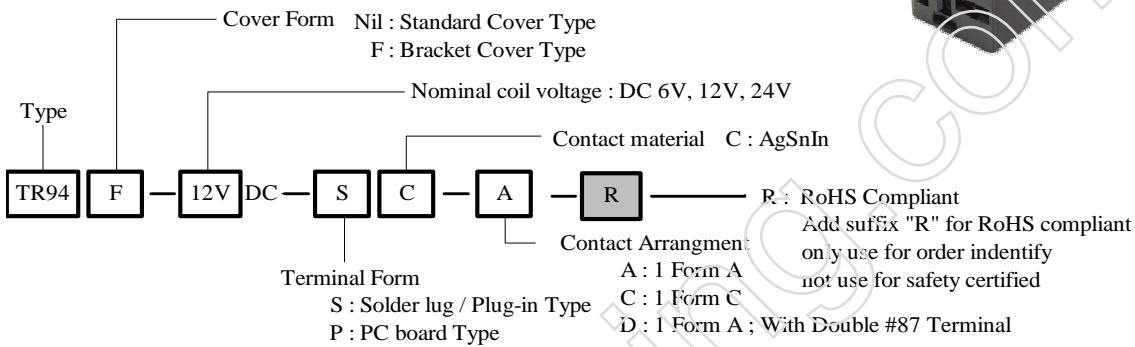
ORDERING INFORMATION



Option Socket :
Please refer appendix P103



- OD07-0015A
- OD07-0016A

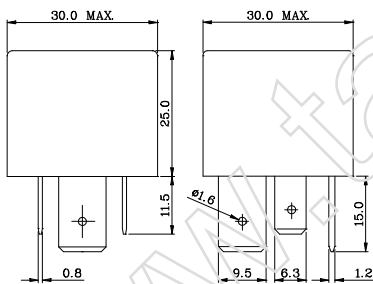


DIMENSION (unit:mm)

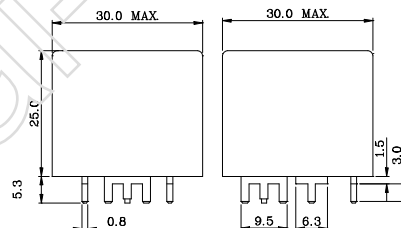
DRILLING (unit:mm)

WIRING DIAGRAM

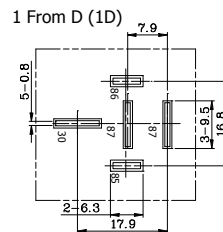
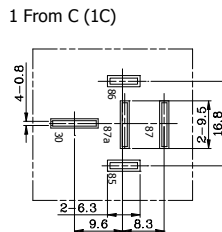
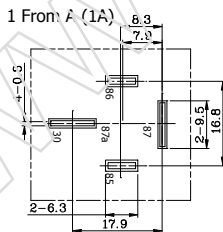
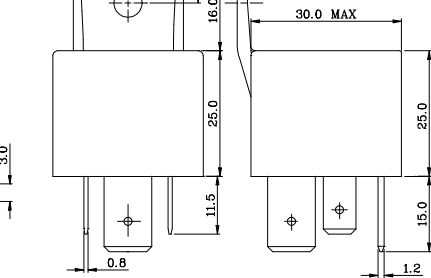
Standard cover Type



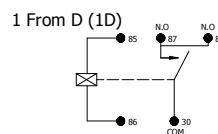
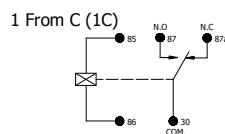
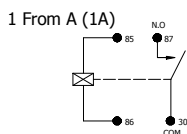
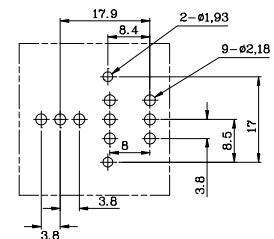
P.C.B Terminal Type



Bracketed cover Type



Suggest PC Board Layout (Bottom View)



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)
TR94	6	6	300	20	abt. 1.8	75% Max.	5% Min.	130% but for short time carrying current
	12	12	150	80				
	24	24	75	320				

CONTACT RATING

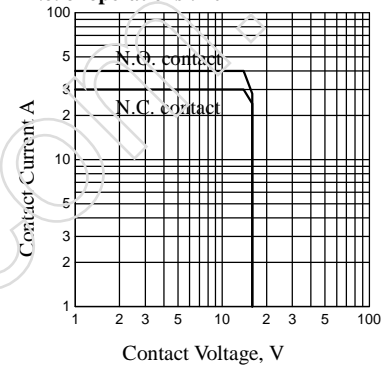
Contact Form	1 Form A	1 Form C
Contact Rating	80A 14VDC	NO. 80A 14VDC NC. 60A 14VDC
Max. Carrying Current	80A	
Max. Make Current	120A	
Max. Break Current	80A	
Max. Switching Voltage	75VDC	
Max. Switching Power	70-500Watts DC	
Contact Material	Ag Alloy	

PERFORMANCE (at initial value)

Item	Type	TR94
Contact Resistance		100m Ω Max.
Operation Time		10msec Max.
Release Time		10msec 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		-30°C to +80°C (No water drop condensation)
Operating Humidity		80% (at 40°C) 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 ops.
	Electrically	10×10^4 ops.
Weight		abt. 45grs.

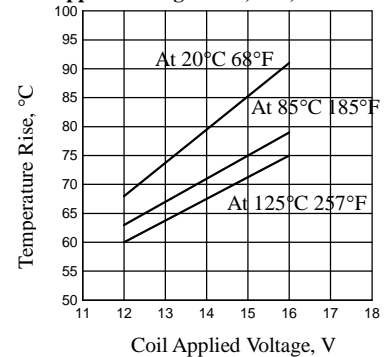
REFERENCE DATA

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



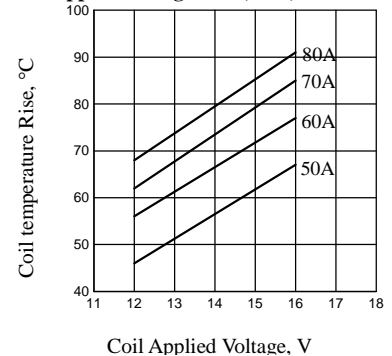
2-(1). Coil temperature rise (resistive)
Ambient temperature: 20°C, 85°C,
125°C; 68°F, 185°F, 257°F

Contact carrying current : 80A
Coil applied voltage : 12V, 14V, 16V DC



2-(1). Coil temperature rise (resistive)
Ambient temperature : 20°C, 68°C
Contact carrying current :

50A, 60A, 70A, 80A
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.