



TR99

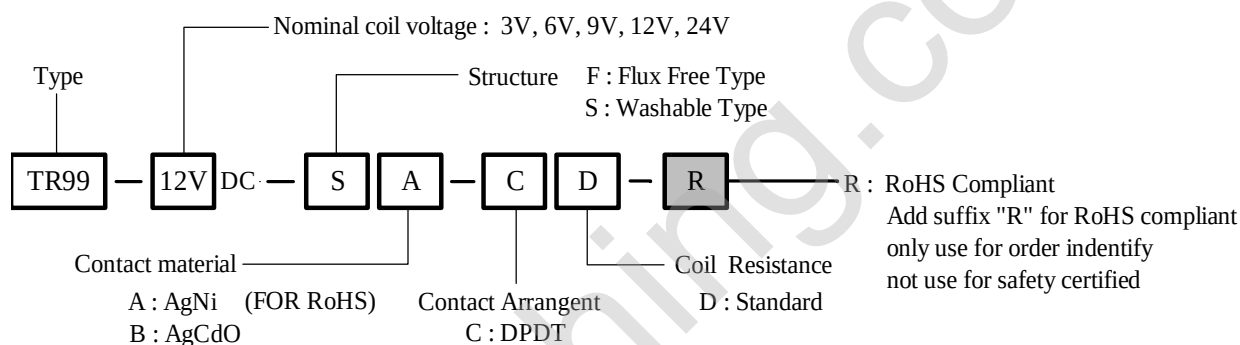
➤ MAIN FEATURES

- Small size and sensitive operation.
- Low coil power consumption.
- PCB mounting.
- Switching capacity from 1A to 5A.
- Sealed type available.

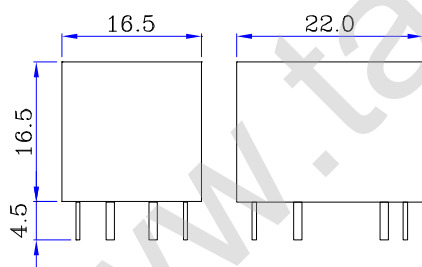
➤ APPLICATIONS

- Audio equipment.
- Communication equipment.
- Remote control.
- Acoustic controlled toys.

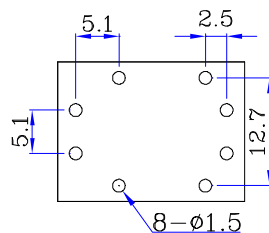
➤ ORDERING INFORMATION



■ DIMENSION (unit:mm)

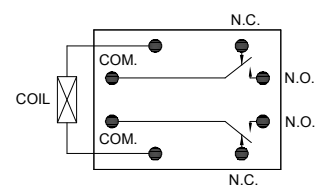


■ DRILLING (unit:mm)



■ WIRING DIAGRAM

(Bottom View)



Remark: 1. In case of no tolerance shown in dimension: $\pm 0.5\text{mm}$.
2. The tolerance without indicating for DRILLING is always $\pm 0.1\text{mm}$.

➤ COIL DATA CHART(at 20°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)
TR99 (Standard)	03	3	150	20	abt. 0.45W	75% Max.	10% Min.	110%
	06	6	75	80				
	09	9	50	180				
	12	12	37.5	320				
	24	24	18.7	1280				

➤ CONTACT RATING

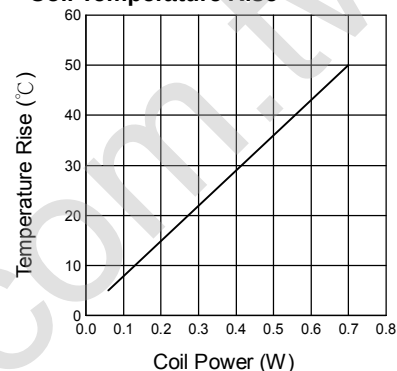
Item	Type	TR99
Contact Capacity		5A 277VAC
Resistive Load ($\cos\Phi=1$)		5A 28VDC
Inductive Load ($\cos\Phi=0.4$ L/R=7msec)		2A 110VAC 2A 28VDC
Rated Carrying Current		5A
Max. Allowable Voltage		110VAC 28VDC
Max. Allowable Current		5A
Max. Allowable Power Force		550VA 140W
Referenced Min. Applicable Load		5VDC 110mA
Contact Material		Ag Alloy

➤ PERFORMANCE (at initial value)

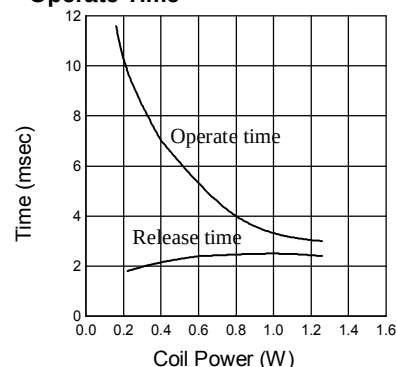
Item	Type	TR99
Contact Resistance		100m Ω Max.
Operation Time		15msec Max.
Release Time		5msec Max.
Dielectric Strength		1000VAC 50/60HZ (1 minute) 750VAC 50/60HZ (1 minute)
Surge Resistiveness		1500V (between coil & contact 1x40 usec)
Insulation Resistance		100 M Ω Min. (500VDC)
Max. ON/OFF Switching		300 operation/min 30 operation/min
Operating Ambient Temperature		-30°C to +60°C (No water condensation and no water drop)
Operating Humidity		45% to 85%RH
Coil Temperature Rise		35 deg. Max. (at rated coil voltage)
Vibration		10 to 55Hz Double Amplitude 1.5mm
Endurance		10 to 55Hz Double Amplitude 1.5mm
Error Operation		
Shock		980m/s ² .
Endurance		98m/s ² .
Error Operation		
Life Expectancy		1 $\times$ 10 ⁷ ops. Min. (no load) 1 $\times$ 10 ⁵ ops. Min. (at rated coil voltage)
Mechanically		
Electrically		
Weight		abt. 12grs.

➤ REFERENCE DATA

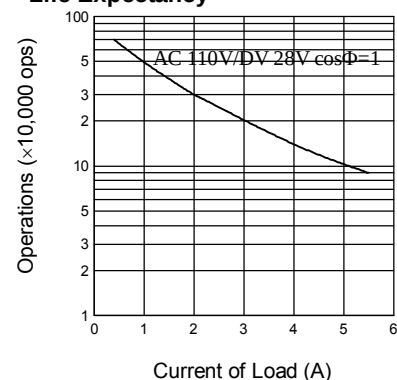
Coil Temperature Rise



Operate Time



Life Expectancy



This datasheet for reference and subject to change without notice. Please double check final specification with Tai-Shing.
(0939AA08VOL01)