



TR91

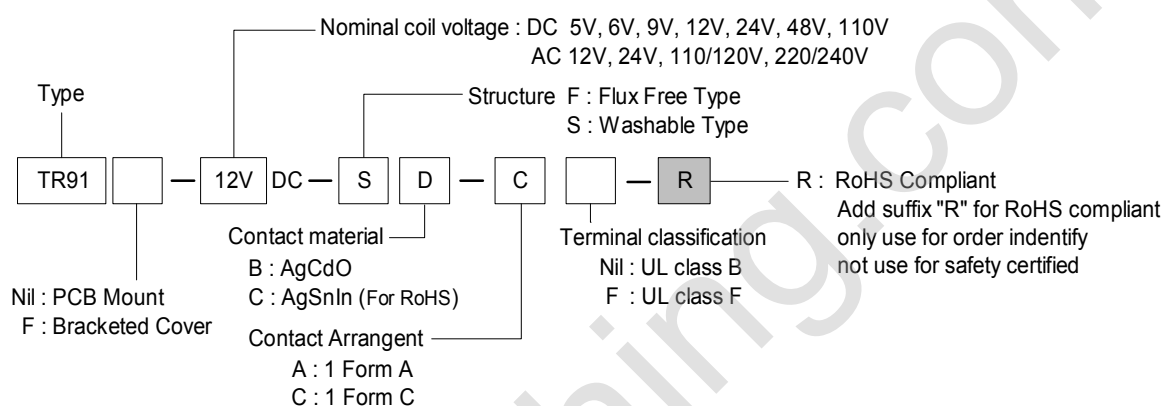
➤ MAIN FEATURES

- Up to 30A switching in SPST and 20A switching in SPDT arrangements.
- Available as an open-frame relay, with a snap-on dust cover or with an immersion cleanable, plastic sealed case.
- Meets UL508 and UL873 spacing requirements.
- Available with UL class B & class F Insulation materials.
- UL & cUL recognized.

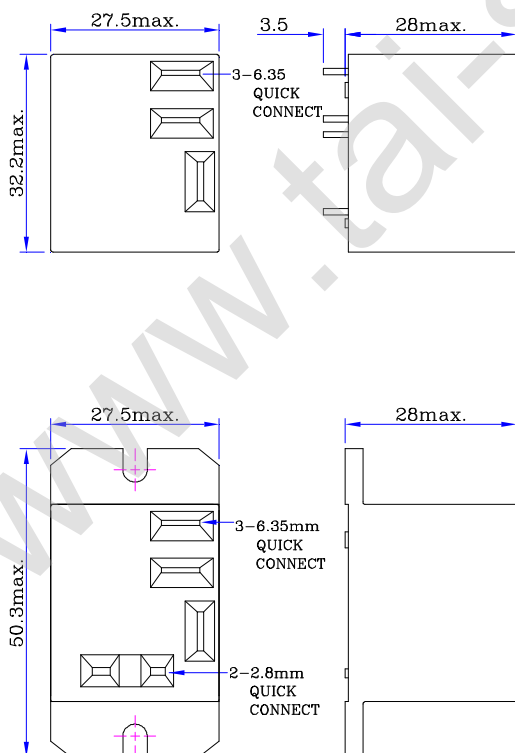
➤ APPLICATIONS

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

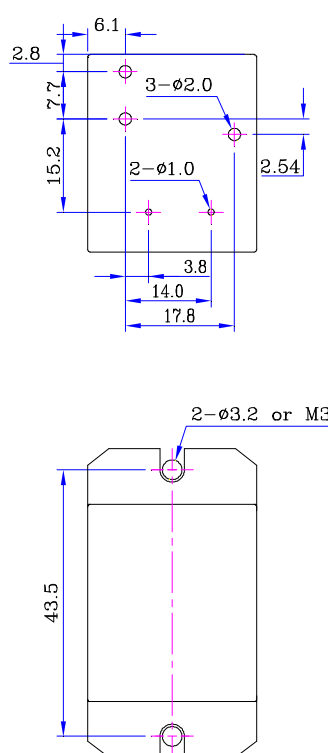
➤ ORDERING INFORMATION



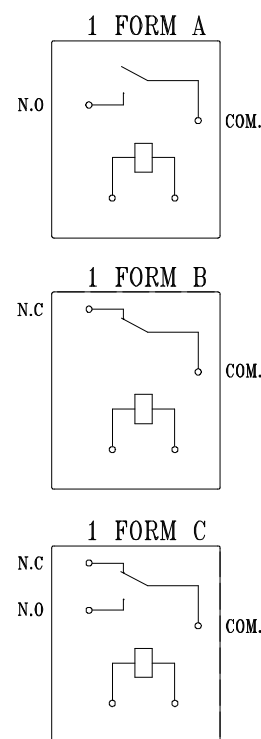
■ DIMENSION (unit:mm)



■ DRILLING (unit:mm)



■ WIRING DIAGRAM



➤ COIL DATA CHART(at 20 °C)

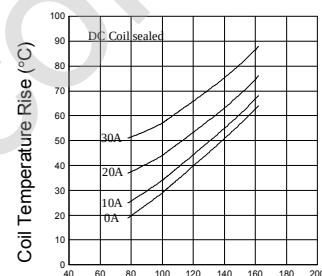
Coil Sensitivity	Coil Nominal Voltage	Nominal Current	Coil Resistance	Power Consumption	Pull-In Voltage	Drop-Out Voltage	Max-Allowable Voltage
TR91	DC Type	Vdc	mA	$\Omega \pm 10\%$	W	Vdc	Vdc
		5	185	28	abt. 0.9	75% Max.	10% Max.
		6	150	40			
		9	93	90			
		12	77	160			
		24	36	640			
		48	19	2560			
		110	8	13445			
	AC Type	Vac	mA	$\Omega \pm 10\%$	VA	Vac	Vac
		12	167	27	abt. 2.0	75% Max.	30% Max.
		24	83	120			
		110	19	2360			
		120	17	3040			
		220	9.5	13490			

➤ CONTACT RATING

Item	Type	TR91		
		1 Form A	1 Form C	
			N/O	N/C
UL/CUR		40A 240VAC 2HP 250/277VAC	40A 240VAC 2HP 250/277VAC	30A 240VAC 30A 30VDC 1.5HP 250VAC
Switching Voltage (Max.)		250VAC / 30VDC		
Switching Voltage (Max.)		40A	40A	30A
Switching Power (Max.)		7200VA / 1100W	4800VA / 720W	2400VA / 360W

➤ USEFUL CURVES

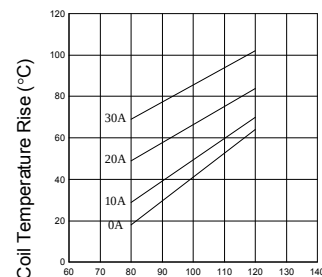
DC Coil Sealed



Coil Voltage (% of Nominal Voltage)

➤ PERFORMANCE (at initial value)

Item	Type	TR91
Contact Resistance		100m Ω Max.
Operation Time		DC : 15msec Max. / AC : 20msec Max.
Release Time		DC : 10msec Max. / AC : 15msec Max.
Dielectric Strength		
Between coil & contact		1500VAC 50/60Hz (1 minute)
Between contacts		1500VAC
Insulation Resistance		1000 M Ω Min. (500VDC)
Max. ON/OFF Switching		
Mechanically		300 operation/min
Electrically		30 operation/min
Operating Ambient Temperature		-55°C to +85°C (operating) -55°C to +155°C (storage)
Operating Humidity		45% to 80% 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		1000 m/sec (abt. 100g's)
Error Operation		100 m/sec (abt. 10g's)
Life Expectancy		
Mechanically		1×10^7
Electrically		1×10^5
Weight		abt. 33grs.
UL & cUL		E156406



Coil Voltage (% of Nominal Voltage)

This datasheet for reference and subject to change without notice. Please double check final specification with Tai-Shing.
(0944AA08VOL01)