



TR91

➤ MAIN FEATURES

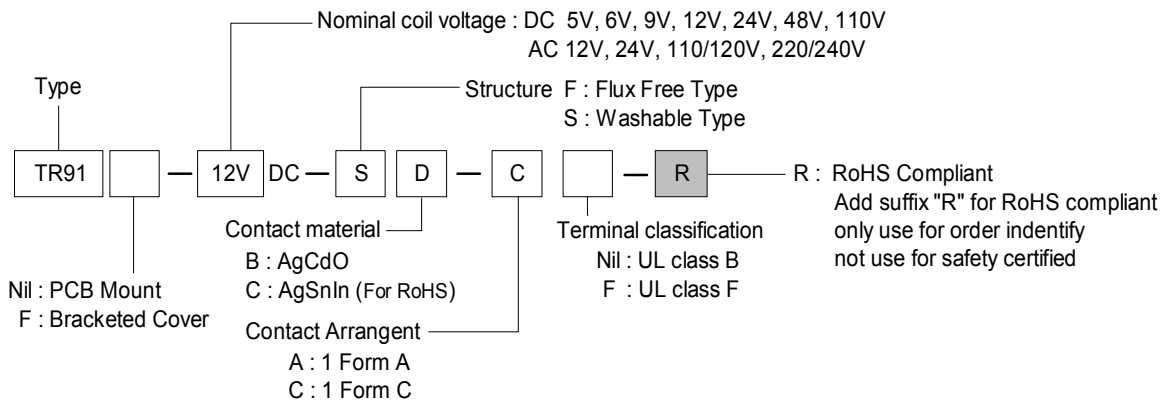
- Up to 30A switching in SPST and 20A switching in SPDT arrangements.
- Available as an open-frame relay, with a snap-on dust cover or with an immersion cleanable, plastic sealed case.
- Meets UL508 and UL873 spacing requirements.
- Available with UL class B & class F Insulation materials.
- UL & cUL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



➤ APPLICATIONS

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

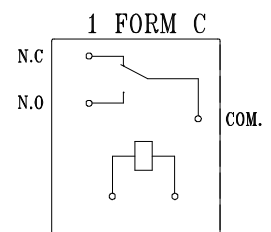
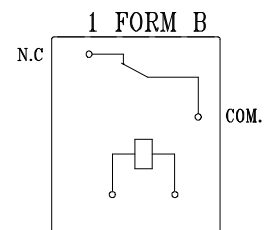
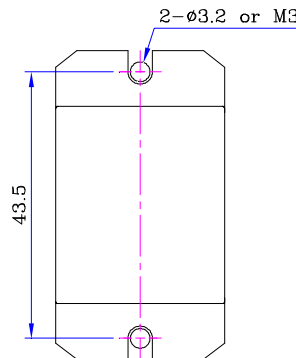
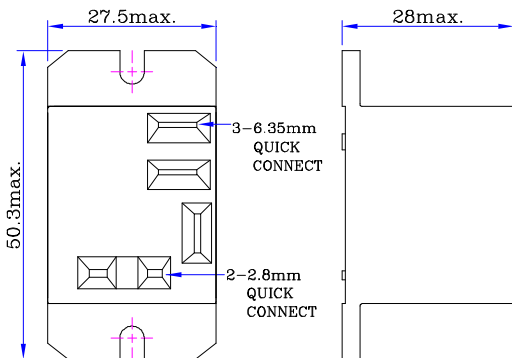
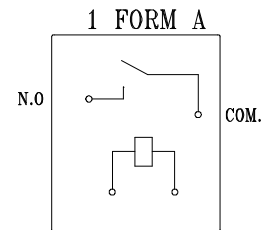
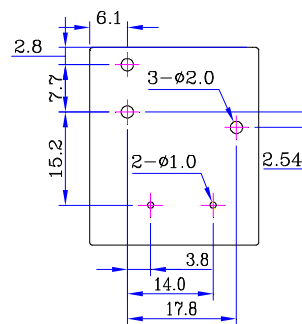
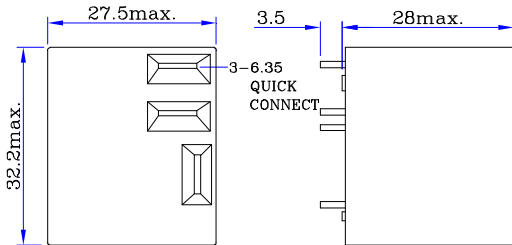
➤ ORDERING INFORMATION



■ DIMENSION (unit:mm)

■ DRILLING (unit:mm)

■ WIRING DIAGRAM



➤ **COIL DATA CHART**(at 20°C)

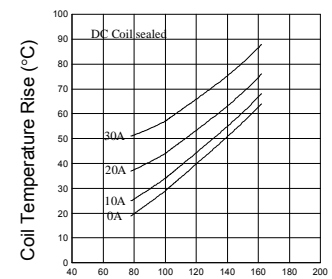
Coil Sensitivity	Coil Nominal Voltage	Nominal Current	Coil Resistance	Power Consumption	Pull-In Voltage	Drop-Out Voltage	Max-Allowable Voltage
TR91	DC Type	Vdc	mA	Ω ± 10%	W	Vdc	Vdc
		5	185	28			
		6	150	40			
		9	93	90			
		12	77	160			
		24	36	640			
		48	19	2560			
		110	8	13445			
	AC Type	Vac	mA	Ω ± 10%	VA	Vac	Vac
		12	167	27			
		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**

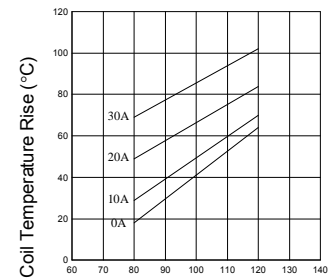
DC Coil Sealed



Coil Voltage (% of Nominal Voltage)

➤ **PERFORMANCE** (at initial value)

Item	Type	TR91
Contact Resistance		100mΩ 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 MΩ 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)