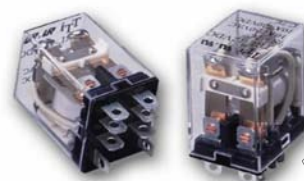




TRL

MAIN FEATURES

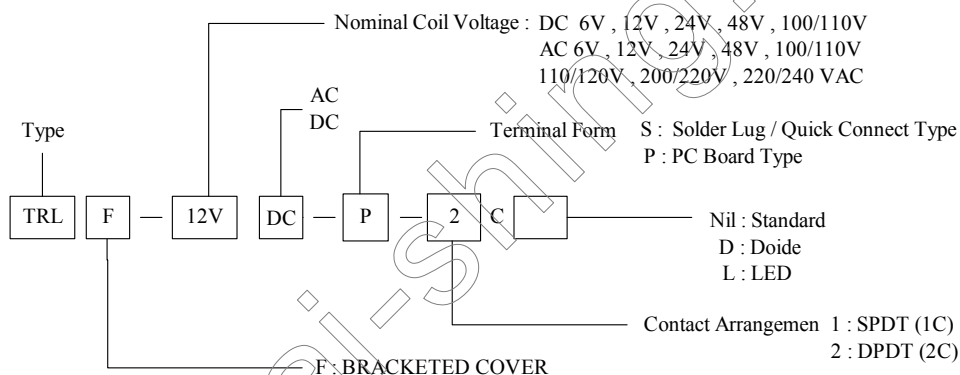
- Long life and high reliability
- Strong construction for vibration and shock
- Approximately thousands for kinds are available depending on the combination of terminals, covers, contact ratings, coil etc.
- Plastic-sealed type is available
- Molded material : All UL 94V-0
- UL recognized



APPLICATIONS

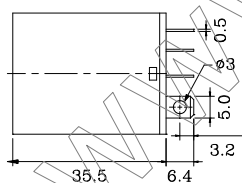
- Coil operated machines
- Vending machines
- Refrigerators
- Transportations
- Power station control equipment
- Office machines
- Building control equipment
- Medical equipment
- Amusement devices, etc.

ORDERING INFORMATION

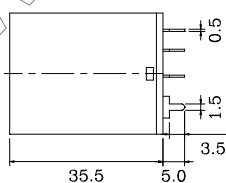


DIMENSION (unit:mm)

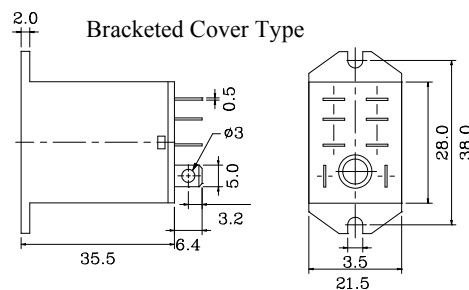
Standard Cover Type



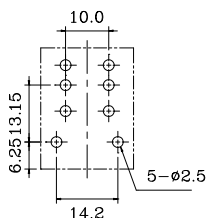
P.C.B Terminal Type



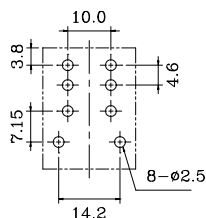
Bracketed Cover Type



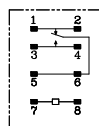
SPDT (1C)



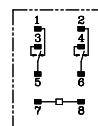
DPDT (2C)



SPDT (1C)



DPDT (2C)



■ COIL DATA CHART (AT20°C)

Nominal voltage	Pick-Up voltage	Drop-out voltage	Nominal current	Coil resistance	Power consumption	Max. allowable voltage
AC Type (at 20°C)						
VAC	VAC(Max.)	VAC(Min.)	mA(+15%,-20%)	Ω (±10%)		(VAC)
6	4.8	1.8	183	11.5	Approx.1.0-1.2VA	110% of nominal voltage
12	9.6	3.6	91	46		
24	19.2	7.2	46	184		
48	40	15	22	735		
120	96	36	9.6	4550±15%	Approx.0.9-1.1VA	
220/240	176	66	5.0	14400±15%		
DC Type (at 20°C)						
VDC	VDC(Max.)	VDC(Min.)	mA(±10%)	Ω (±10%)		(VDC)
6	4.8	0.6	150	40	Approx.0.9W	110% of nominal voltage
12	9.6	1.2	75	160		
24	19.2	2.4	36.9	650		
48	38.4	4.8	18.5	2600±15%		
110	88	11	10	11000±15%		

■ CONTACT RATING

Item \ Arrangement	TRL-1C SPDT(1C)		TRL-2C DPDT(2C)	
	Resistive load ($\cos\Phi=1$)	Inductive load ($\cos\Phi=0.4$)	Resistive load ($\cos\Phi=1$)	Inductive load ($\cos\Phi=0.4$)
Rated load	15A 250VAC 15A 30VDC	10A 250VAC 7A 30VDC	10A 250VAC 10A 30VDC	7.5A 250VAC 5A 24VDC
Carrying current	15A		10A	
Max. switching voltage	250VAC, 125VDC		250VAC, 125VDC	
Max. switching current	15A		10A	
Max. switching power	3750VA, 450W	2500VA, 210W	2500VA, 300W	425VA, 120W
Min. permissible load	5VDC 100mA			
Contact material	Ag alloy			

■ PERFORMANCE (at initial value)

Contact Resistance	Max. 100m Ω
Operation time (at nominal voltage)	Max. 20msec
Release time (at nominal voltage)	Max. 20msec
Operating frequency	20ops/minute
Insulation resistance	Min. 100M Ω (at 500VDC)
Vibration resistance	Functional : 6G 10 to 55 Hz, at double amplitude of 1mm Destructive : 12G 10 to 55 Hz, at double amplitude of 2mm
Shock resistance	Functional : Min, 20G Destructive : Min, 100G
Dielectric strength	1500VAC. for 1minute between coil and contact. 750VAC. for 1minute between contact sets. 750VAC. for 1minute between open contacts.
Ambient temperature	-40 to +70°C
Humidity	40 to 85% RH
Life expectancy	Mechanical : 1×10^7 operations Electrical : 2×10^5 operations (at rated load)
Weight	abt 35grs.
UL File NO	E156521