

# Latching Relay TRW3

## MAIN FEATURES

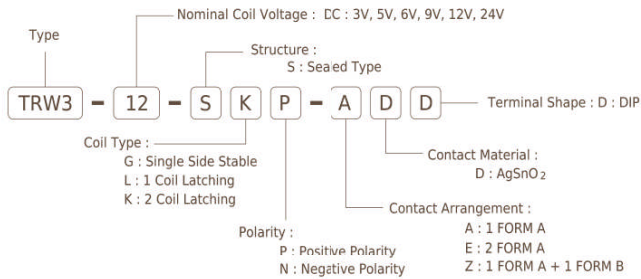
- High switching capacity  
1A : 8A 250VAC  
2A & (1A+1B) : 5A 250VAC
- Energy-Saving, Very Low Coil Power.
- Safety: No coil heating, Contacting is reliable.
- Contacts status not change when power failure.
- Outline Dimensions: 20.2 mm. x 11.0 mm. x 10.0 mm.



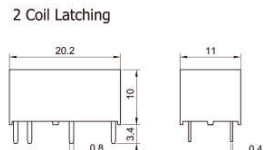
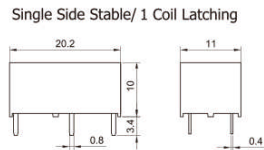
## APPLICATIONS

- Electricity Meter.
- Time Switches.
- Ripple Control receiver.
- Lighting Control.

## ORDERING INFORMATION

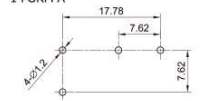


## DIMENSION(unit:mm)

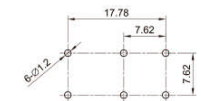


## DRILLING(unit:mm)

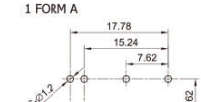
Single Side Stable/ 1 Coil Latching  
1 FORM A



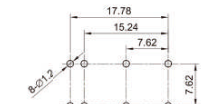
2 FORM A / 1 FORM A + 1 FORM B



2 Coil Latching  
1 FORM A

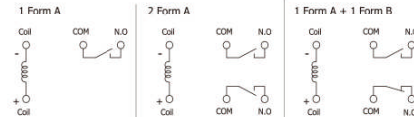


2 FORM A / 1 FORM A + 1 FORM B

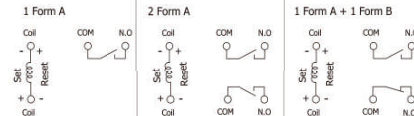


## WIRING DIAGRAM

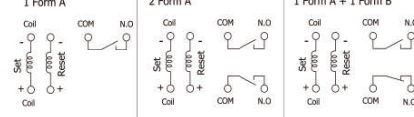
Single Side Stable/



1 Coil Latching



2 Coil Latching



(Reset Position)

## COIL DATA CHART(at 20°C )

TRW3	Coil Voltage (VDC)	Pick-up (SET) Voltage (VDC)	Drop-out (RESET) Voltage (VDC)	Coil Resistance (Ω) ± 10%	Coil Power (mW)
Single Side stable ( G Type )	3	2.4	0.3	30	300
	5	4.0	0.5	83	
	6	4.8	0.6	120	
	9	7.2	0.9	270	
	12	9.6	1.2	480	
1 Coil Latching ( L Type )	24	19.2	2.4	1920	150
	3	2.4	-2.4	60	
	5	4.0	-4.0	167	
	6	4.8	-4.8	240	
	9	7.2	-7.2	540	
2 Coil Latching ( K Type )	12	9.6	-9.6	960	300
	24	19.2	-19.2	3840	
	3	2.4	2.4	30 + 30	
	5	4.0	4.0	83 + 83	
	6	4.8	4.8	120 + 120	
	9	7.2	7.2	270 + 270	
	12	9.6	9.6	480 + 480	
	24	19.2	19.2	1920 + 1920	

## CONTACT RATING

Item	TRW3		
	1A ( 1 Form A )	2A ( 2 Form A )	1A+1B ( 1 Form A+1 Form B )
Contact Rating (Res. Load)	8A 250VAC 5A 30VDC	5A 250VAC 5A 30VDC	5A 250VAC 5A 30VDC
Max. Switching Voltage	250VAC / 30VDC		
Max. Switching Current	8A	5A	5A
Max. Switching Power	2000VA / 150W	1250VA / 150W	1250VA / 150W
Contact Material	Silver Alloy		

## PERFORMANCE(at initial value)

Item	TRW3
Contact resistance	100mΩ. (1A 6VDC)
Insulation resistance	1000MΩ. (at 500VDC)
Operation(SET) time(at nomi. volt.)	10msec Max. (Latching Type : 10mS Max.)
Release(RESET) time (at nomi. volt.)	5msec Max. (Latching Type : 10mS Max.)
Dielectric strength	Between coil & contacts 1000VAC (1 minute). Between open contacts 1000VAC (1 minute). Between contact sets 2000VAC (1 minute).
Shock resistance	Functional 196m/s <sup>2</sup> Destructive 980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz 2.0 D.A.
Humidity	5% to 85% RH.
Ambient temperature	-40°C to +70°C.
Life Expectancy	
Mechanically	1 x 10 <sup>7</sup> ops. (no load)
Electrically	1 x 10 <sup>5</sup> ops.
Weight	Abt. 4.7g.

## NOTICE

1. Relay is on the "reset" or "set" status when being released from stock, with the consideration of shock risen from transit and relay mounting, relay would be changed to "set" or "reset" status, therefore, when application ( connecting the power supply), please reset the relay to "set" or "reset" status on request.

2. In order to maintain "set" or "reset" status, energized voltage to coil should reach the rated voltage, impulse width should be 5 times more than "set" or "reset" time. Do not energize voltage to "set" coil and "reset" coil simultaneously. And also long energized time (more than 1 min) should be avoided.

3. In order to avoid changing operate voltage, products should not be kept in strong magnetic field during transportation, storage and application.

1.Tolerance ±0.5mm on all dimensions unless otherwise stated.  
2. Tolerance ±0.1mm on PCB DRILLING dimension unless otherwise stated.