

# Latching Relay TRWA

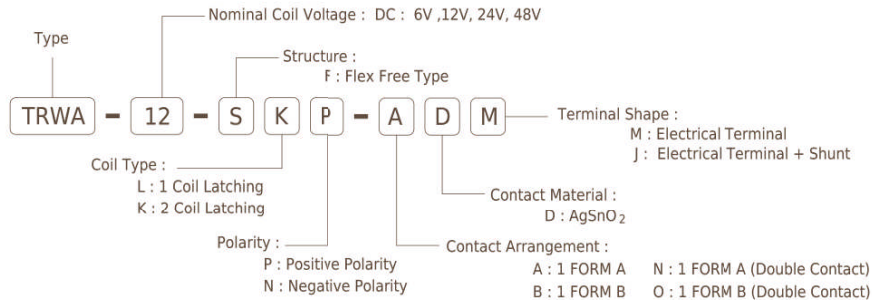
## MAIN FEATURES

- Latching Relays.  
120A Switching Capabilities.
- 4 KV dielectric strength between coil and contacts.
- Environmental friendly product (RoHS compliant).
- According to IEC62055-31:U C3.
- Strong resistance ability to short circuit current at 6000A.

## APPLICATIONS

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

## ORDERING INFORMATION



## COIL DATA CHART(at 20°C )

TRWA	Coil voltage (VDC)	Coil resistance (Ω) ±10%	Set voltage (VDC)	Reset voltage (VDC)	Coil power (W)
L type 1 coil latching	6	13	4.8	-4.8	3.0
	12	50	9.6	-9.6	
	24	210	19.2	-19.2	
	48	860	38.4	-38.4	
K type 2 coil latching	6	6.5 + 6.5	4.8	4.8	6.0
	12	25 + 25	9.6	9.6	
	24	105 + 105	19.2	19.2	
	48	430 + 430	38.4	38.4	

## CONTACT RATING

Item	TRWA
Contact rating (Res. Load)	120A 277VAC 120A 28VDC
Max. switching voltage	440VAC
Max. switching current	120A
Max. switching power	33240VA / 3360W
Contact material	Silver Alloy

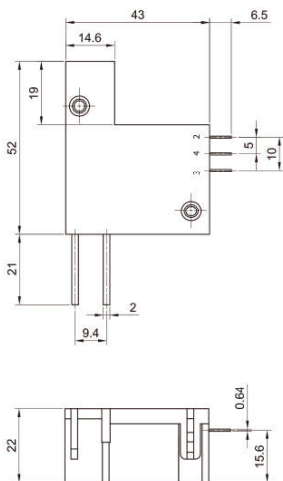
## PERFORMANCE(at initial value)

Item	TRWA
Insulation resistance	1000MΩ (at 500VDC)
Dielectric strength Between coil & contacts Between open contacts	4000VAC (1 minute). 2000VAC (1 minute).
Creepage distance	8mm
Operation time (at nomi. volt.)	20m sec Max.
Release time (at nomi. volt.)	20m sec Max.
Shock resistance Functional Destructive	98m/s <sup>2</sup> 980m/s <sup>2</sup>
Vibration resistance	10Hz to 55Hz D.A. : 1.5mm
Humidity	98% RH, 40°C
Temperature	-40°C to +85°C
Life expectancy Mechanically Electrically	1 × 10 <sup>5</sup> ops.(No load) 5000 ops. (rating load)
Weight	Abt. 85g.

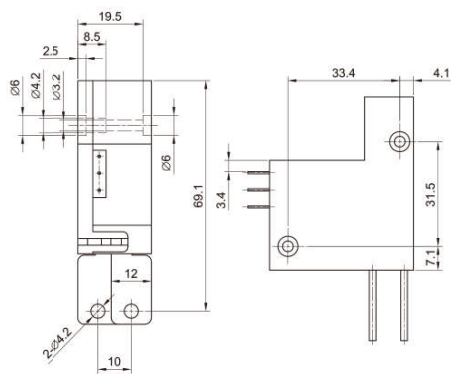
## NOTICE

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.

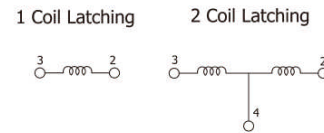
## DIMENSION(unit:mm)



## DRILLING(unit:mm)



## WIRING DIAGRAM



Polarity	Type	Terminal No.	
		3	4 2
Positive	1 Coil Latching	Set	- +
		Reset	+ -
	2 Coil Latching	Set	- - +
		Reset	+ - -
Negative	1 Coil Latching	Set	+ -
		Reset	- +
	2 Coil Latching	Set	+ - +
		Reset	- - +

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