



CQC 09002033822

UL US E173485

R50116167

## ■ Features

- 10A switching capability
- Sealed version available
- Transparent sealed available
- Class B/F available
- Conform to RoHS,ELV directive

## ■ Ordering Code

TRA1		D	— 12VDC	— S	— H	(2)
1	2	3	4	5	6	
1. Relay Model	2. Coil Power: D=0.72W, L=0.54W	3. Coil Nominal Voltage: 3, 5, 6, 9, 12, 24, 48VDC				
4. S: Sealed	5. Contact Form: Z: Form C, H: Form A					
6. Nil: Standard, (2): Transparent Cover						

## ■ Coil Data (at 20°C)

Nominal Voltage(VDC)	3	5	6	9	12	24	48	0.54W
Coil Resistance( $\Omega \pm 10\%$ )	17	46	67	150	270	1050	4250	
Rated Current(mA)	180	108	90	60	45	22.5	11.3	
Max Operate Voltage(VDC)	2.4	4	4.8	7.2	9.6	19.2	38.4	
Min Release Voltage(VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Nominal Voltage(VDC)	3	5	6	9	12	24	48	0.72W
Coil Resistance( $\Omega \pm 10\%$ )	13	35	50	110	200	800	3200	
Rated Current(mA)	240	144	120	80	60	30	15	
Max Operate Voltage(VDC)	2.4	4	4.8	7.2	9.6	19.2	38.4	
Min Release Voltage(VDC)	0.15	0.25	0.3	0.45	0.6	1.2	2.4	
Max Applicable Voltage	130% of nominal voltage at 70°C, 170% of nominal voltage at 23°C							

## ■ Contact Data

Contact Form	1H/1Z
Contact Material	Silver Alloy
Load	Resistive Load(COS $\phi$ =1)
Contact Ratings	10A 240VAC 10A 30VDC
Minimum Load	100mA 5VDC
Max Switching Voltage	250VAC/30VDC
Max Switching Current	12A
Max Switching Power	2500VA/300W
Contact Resistance	100m $\Omega$ Max at 6VDC 1A
Life Expectancy	Electrical: 100,000 Operations (at 30 Operations/minute)
	Mechanical: 10,000,000 Operations (at 300 Operations/minute)

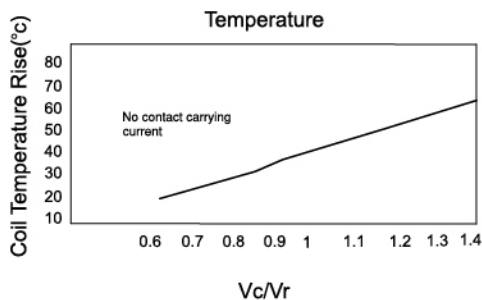
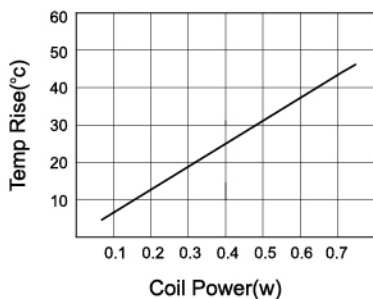
## ■ Characteristics Data

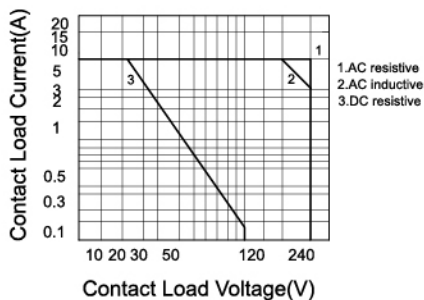
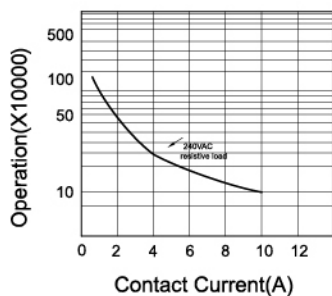
Insulation Resistance	100MΩMin at 500VDC
Dielectric Strength Between Open Contacts	1000VAC (for one minute)
Between Contacts and Coil	5000VAC (for one minute)
Operate Time	20ms
Release Time	10ms
Temperature Range	-40°C to +85°C
Shock Resistance	Operating Extremes: 10G 11ms Damage Limits: 100G 6ms
Vibration Resistance	10-55Hz, 1.5mm
Max. Switching Frequency	Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr
Humidity	40-85%
Weight	Approx: 14g
Safety Standard	UL cUL TÜV CQC

## ■ Approved Standards

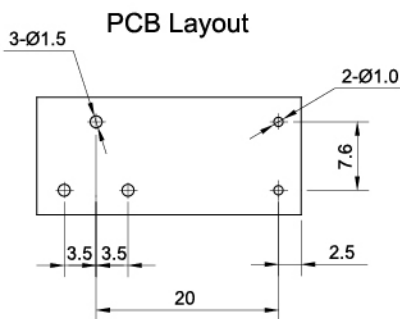
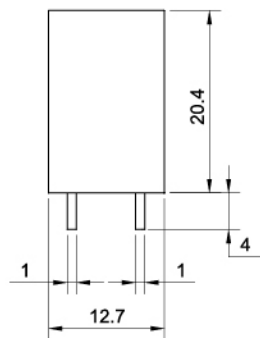
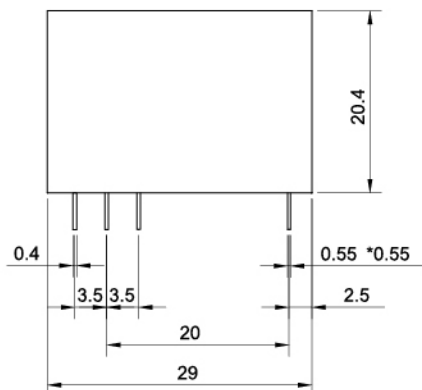
Model	Coil Rating	Safety Standard	Contact Rating
TRA1	3 to 48VDC	TÜV	10A 240VAC 10A 30VDC
		UL/cUL	10A 240VAC 10A 30VDC
		CQC	10A 240VAC

## ■ Engineering Data

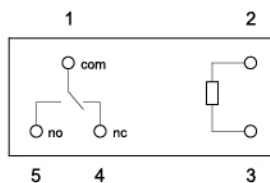




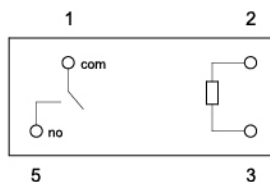
## Overall and Mounting Dimensions



## Wiring Diagram



Form C



Form A

### Remark:

- In case the tolerance is not shown in outline dimension, the tolerance should be  $\pm 0.2\text{mm}$  for outline dimension  $\leq 1\text{mm}$ ;  $\pm 0.3\text{mm}$  for outline dimension: 1~5mm and  $\pm 0.4\text{mm}$  for outline dimension  $> 5\text{mm}$ .
- The tolerance without indication is always  $\pm 0.1\text{mm}$  for the dimension of PCB layout.

### Disclaimer:

These specifications are just for customers' reference and subject to change without notice.