



CQC 10002043903

UL E173485

R50116168

■ Features

- 16A switching capability
- 5KV dielectric strength between coil and contacts
- Transparent sealed available
- Class B/F available
- Conform to RoHS,ELV directive

■ Ordering Code

| TRA2 | | D | — 12VDC | — S | — Z (2) |
|---|--|---|--|-----|---------|
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Relay Model | 2. Coil Power: D=0.72W, L=0.54W, M=0.24W | | | | |
| 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 | 0.24W |
|--------------------------------------|--|------|-----|------|-----|------|------|-------|
| Coil Resistance($\Omega \pm 10\%$) | 38 | 104 | 150 | 338 | 600 | 2400 | 9600 | |
| Rated Current(mA) | 80 | 48 | 40 | 26.7 | 20 | 10 | 5 | |
| 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 | |
| Coil Resistance($\Omega \pm 10\%$) | 17 | 46 | 67 | 150 | 270 | 1050 | 4250 | 0.54W |
| 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 | |
| Coil Resistance($\Omega \pm 10\%$) | 13 | 35 | 50 | 110 | 200 | 800 | 3200 | 0.72W |
| 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 ϕ =1) |
| Contact Ratings | 16A 240VAC 16A 30VDC |
| Minimum Load | 100mA 5VDC |
| Max Switching Voltage | 250VAC/30VDC |
| Max Switching Current | 20A |
| Max Switching Power | 4800VA/480W |
| Contact Resistance | 100m Ω Max at 6VDC 1A |
| Life Expectancy | Electrical: 100,000 Operations (at 30 Operations/minute) |
| | Mechanical: 10,000,000 Operations (at 300 Operations/minute) |

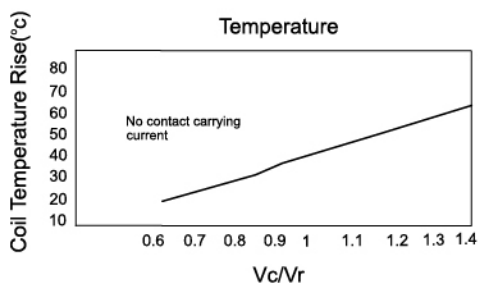
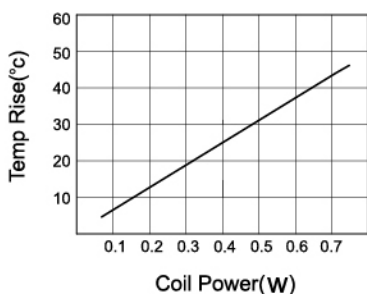
■ Characteristics Data

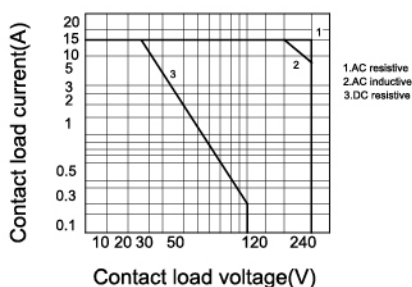
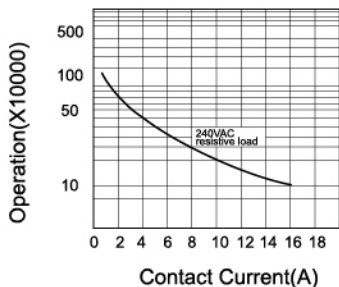
| | |
|---|---|
| Insulation Resistance | 100MΩMin at 500VDC |
| Dielectric Strength Between Open Contacts | 1000VAC (for one minute) |
| Between Contacts and Coil | 5000VAC (for one minute) |
| Operate Time | 20ms |
| Release Time | 10ms |
| Temperature Range | -40°C to +85°C |
| Shock Resistance | Operating Extremes: 10G Damage Limits: 100G |
| 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

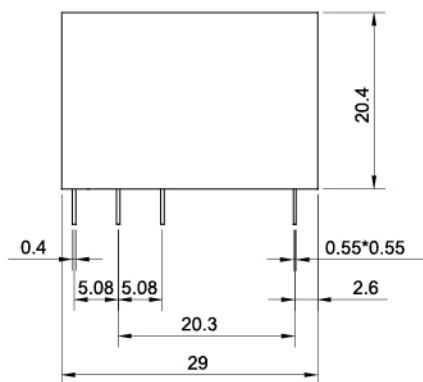
| Model | Coil Rating | Safety Standard | Contact Rating |
|-------|-------------|-----------------|--------------------------|
| TRA2 | 3 to 48VDC | TÜV | NO: 16A 240VAC 16A 30VDC |
| | | | NC: 12A 240VAC 12A 30VDC |
| | | UL/cUL | 16A 240VAC |
| | | | 16A 30VDC |
| CQC | 16A 240VAC | | |

■ Engineering Data

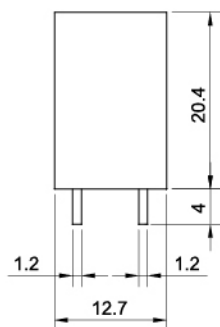




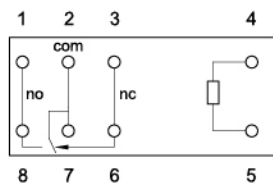
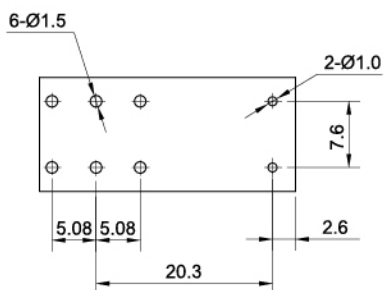
Overall and Mounting Dimensions



PCB Layout



Wiring Diagram



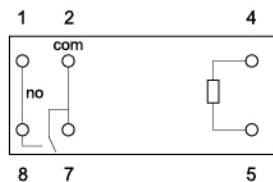
Form C

Remark:

- 1). 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: $1\sim 5\text{mm}$ and $\pm 0.4\text{mm}$ for outline dimension $> 5\text{mm}$.
- 2). 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.



Form A