

COIL DATA CHART (AT20°C)

| Coil Sensitivity | Nominal Voltage (VDC) | Nominal Current (mA) | Coil Resistance (Ω) $\pm 10\%$ | Power Consumption (W) | Pull-In Voltage (VDC) | Drop-Out Voltage (VDC) | Max-Allowable Voltage (VDC) |
|---------------------------|-----------------------|----------------------|-----------------------------------------|-----------------------|-----------------------|------------------------|-----------------------------|
| TRD (High Sensitivity) | 3 | 120 | 25 | abt. 0.36W | 75% Max. | 5% Min. | 120% |
| | 5 | 71.4 | 70 | | | | |
| | 6 | 60 | 100 | | | | |
| | 9 | 40 | 225 | | | | |
| | 12 | 30 | 400 | | | | |
| | 24 | 15 | 1600 | | | | |
| TRD (Standard) | 3 | 150 | 20 | abt. 0.45W | 75% Max. | 5% Min. | 110% |
| | 5 | 89.3 | 55 | | | | |
| | 6 | 75 | 80 | | | | |
| | 9 | 50 | 180 | | | | |
| | 12 | 37.5 | 320 | | | | |
| | 24 | 18.7 | 1280 | | | | |
| | 48 | 10 | 4500 | abt. 0.50W | | | |

CONTACT RATING

| Item | Type | TRD | | TRDT (Form A) |
|------------------------------------|------|----------------|----------------|--------------------------|
| | | 12A | 15A | |
| Contact Capacity | | 12A 28VDC (UL) | 12A 28VDC (UL) | 125VAC TV-8 |
| Resistive Load ($\cos\Phi=1$) | | 12A 120VAC | 15A 125VAC | (Incandescent Lamp 8A) |
| | | 12A 28VDC(TUV) | 15A 28VDC(TUV) | 10A 250VAC |
| | | 6A 250VAC | 10A 250VAC | 15A 28VDC 1/2HP125VAC |
| Rated Carrying Current | | 12A | 15A | 15A |
| Max. Allowable Voltage | | 250VAC/110VDC | 250VAC/110VDC | 250VAC 110VDC |
| Max. Allowable Current | | 12A | 15A | 15A |
| Max. Allowable Power | | 1440VAC, 336W | 1875VA, 420W | 1875VA, 420W |
| Force | | | | |
| Referenced Min. Applicable Load | | 5VDC, 10mA | 5VDC, 10mA | 5VDC, 10mA |
| Contact Material | | Ag Alloy | | |

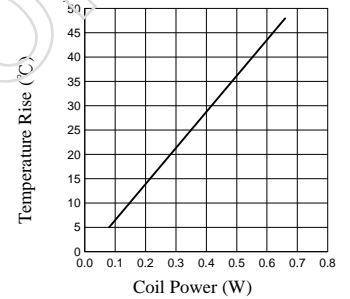
PERFORMANCE (at initial value)

| Item | Type | TRD |
|-------------------------------|------------------------|----------------------------------------------------------|
| Contact Resistance | | 100m Ω Max. |
| Operation Time | | 10msec Max. |
| Release Time | | 5msec Max. |
| Dielectric Strength | Between coil & contact | 1500VAC 50/60HZ (1 minute) |
| | Between contacts | 750VAC 50/60HZ (1 minute) |
| Surge Resistiveness | | 3000V (between coil & contact 1x40u sec) |
| Insulation Resistance | | 100 M Ω Min. (500VDC) |
| Max. ON/OFF Switching | Mechanically | 300 operation/min |
| | Electrically | 30 operation/min |
| Operating Ambient Temperature | | -30°C to +80°C (No water condensation and no water drop) |
| Operating Humidity | | 45 to 85% RH |
| Coil Temperature Rise | | 35 deg. Max. |
| Vibration | Endurance | 10 to 55Hz Double Amplitude 1.5mm |
| | Error Operation | 10 to 55Hz Double Amplitude 1.5mm |
| Shock | Endurance | 100G Min. |
| | Error Operation | 10G Min. |
| Life Expectancy | Mechanically | 10 ⁷ operations. Min. (no load) |
| | Electrically | 10 ⁵ operations. Min. (at rated coil voltage) |
| Weight | | abt. 10grs. |
| UL | | E156521(TV-8) |
| CSA | | LR 102317 |
| TUV | | R 50062544 |

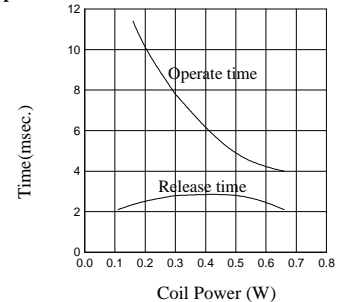
This datasheet for reference and subject to change without notice. Please double check final specification with Tai-Shing.

REFERENCE DATA

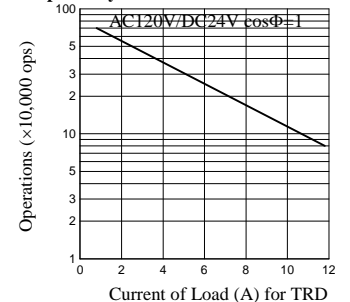
Coil Temperature Rise



Operate Time



Life Expectancy



Life Expectancy

