

INDUSTRIAL RELAYS

The RS Series has high dielectric strength 1000VAC between open contacts and 4000VAC between coil and contact. This WPI industrial relay has sensitive and standard coil available.

UL & CUL File #E223388

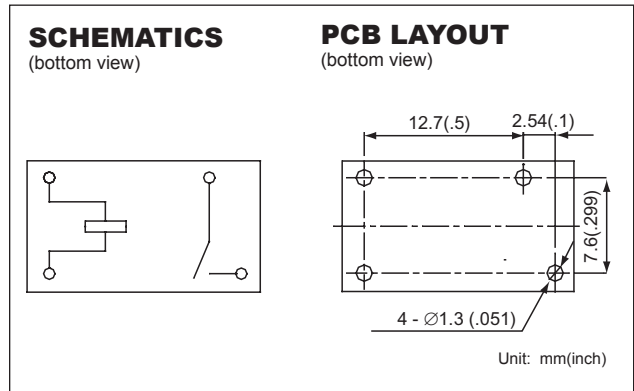
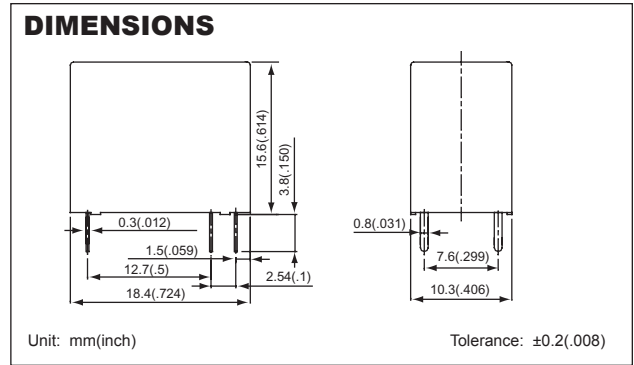
FEATURES

1. High dielectric strength 1000VAC between open contacts and 4000VAC between coil and contact.
2. Miniature size 18.5×10.4×15.6.
3. Nominal power 200mW~450mW.
4. Operating power 120mW~260mW.
5. Sensitive and standard coil available.
6. Surge strength of 10,000V.

ORDERING INFORMATION

RS 1A - 12 H S F P
(1) (2) (3) (4) (5) (6) (7)

- | | |
|--|--|
| <p>(1) Basic Designation RS = RS Series</p> <p>(2) Contact Arrangement 1A = 1 Form A (SPST-NO)</p> <p>(3) Coil Voltage 3~48V</p> <p>(4) Coil Sensitivity Nil = Standard H = High sensitivity</p> | <p>(5) Enclosure Nil = Unsealed type S = Sealed type</p> <p>(6) Insulation Nil = Class B F = Class F</p> <p>(7) RoHS Compliance P = RoHS Nil = Standard</p> |
|--|--|



COIL RATINGS (AT 20°C)

| Coil Type | Coil Nominal Voltage (V) | Coil Resistance (Ω ± 10%) | Pick-Up Voltage (V) ≤ | Drop-Out Voltage (V) ≥ | Nominal Current (mA) |
|---------------------------|--------------------------|---------------------------|-----------------------|------------------------|----------------------|
| DC Standard Coils | 3 | 20 | 2.25 | 0.3 | 150 |
| | 5 | 55 | 3.75 | 0.5 | 91 |
| | 6 | 80 | 4.5 | 0.6 | 75 |
| | 9 | 180 | 6.75 | 0.9 | 50 |
| | 12 | 320 | 9 | 1.2 | 37.5 |
| | 24 | 1280 | 18 | 2.4 | 18.8 |
| DC High Sensitivity Coils | 48 | 5100 | 36 | 4.8 | 9.4 |
| | 3 | 45 | 2.4 | 0.3 | 67 |
| | 5 | 125 | 4 | 0.5 | 40 |
| | 6 | 180 | 4.8 | 0.6 | 33.3 |
| | 9 | 400 | 7.2 | 0.9 | 22.5 |
| | 12 | 720 | 9.6 | 1.2 | 16.7 |
| | 24 | 2800 | 19.2 | 2.4 | 8.6 |

* Max continuous Voltage at 20°C: 130% of Coil Nominal Voltage.

CONTACT RATINGS

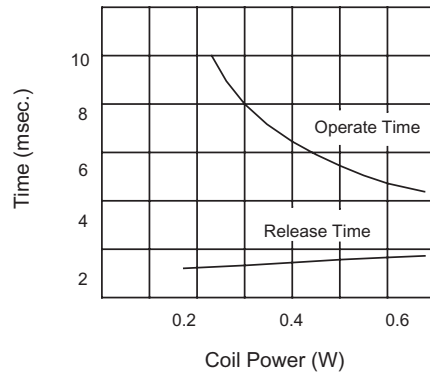
| Contact Arrangement | Standard Type | High Sensitivity Type |
|------------------------|---|---|
| Max. Switching Power | 2770VA 300W | 1939VA 210W |
| Mac. Switching Voltage | 277VAC 30VDC | 277VAC 30VDC |
| Max. Switching Current | 12A | 10A |
| Contact Resistance | ≤100mΩ | ≤100mΩ |
| Resistive Load | 10A / 277VAC | 7A / 277VAC |
| | 12A / 125VAC | 10A / 125VAC |
| | 10A / 30VDC | 7A / 30VDC |
| Horse Power Load | FLA: 5A LRA: 30A / 120VAC FLA: 1.5A LRA: 5A / 277VAC | FLA: 5A LRA: 30A / 120VAC FLA: 1.5A LRA: 5A / 277VAC |
| Contact Material | silver alloy | silver alloy |

CHARACTERISTICS

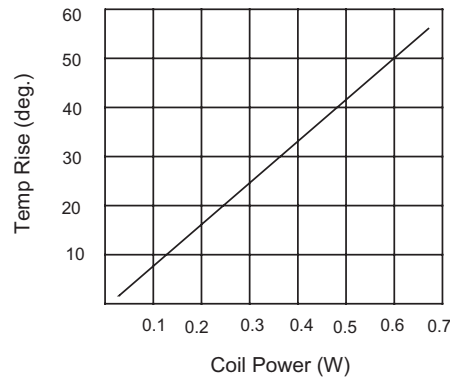
| | |
|-------------------------------|--|
| Electrical Life | 1 x 10 ⁵ |
| Mechanical Life | 1 x 10 ⁷ |
| Initial Insulation Resistance | Min. 100MΩ 500VDC |
| Contact Resistance (Initial) | ≤100mΩ |
| Operate Time | ≤10ms |
| Release Time | ≤4ms |
| Initial Dielectric Strength | 50/60Hz 1000VAC 1 min. (between open contact) |
| | 50/60Hz 4000VAC 1 min. (between all conductors) |
| Vibration Resistance | Malfunction: 10 to 55Hz at Double Amplitude of 1.5mm |
| | Destructive: 10 to 55Hz at Double Amplitude of 1.5mm |
| Shock Resistance | Malfunction: 10G(11ms) |
| | Destructive: 10G(6ms) |
| Ambient Temperature | -30°C ~ +80°C |
| Relative Humidity | 20~85% at 40°C |
| Unit Weight | Approx. 7g |

REFERENCE DATA

Timing



Coil Temperature Rise



Life Curves

