

INDUSTRIAL RELAYS

The RJ series has a nominal power of 360mW and operating power of 200mW. This relay can handle heavy current up to 12 Amps.

UL & CUL File #E223388

FEATURES

1. UL, CSA, & TUV safety approval.
2. TV-5 rated available.
3. UL Class F (155°C) coil insulation type available.
4. Nominal power 360mW.
5. Operating power 200mW.
6. Heavy current up to 12 Amps.

ORDERING INFORMATION

RJ **1C** - **12** **S** **F** **P**
(1) (2) (3) (4) (5) (6)

(1) **Basic Designation**
RJ = RJ Series

(2) **Contact Arrangement**
1A = 1 Form A (SPST-NO)
1B = 1 Form B (SPST-NC)
1C = 1 Form C (SPDT)

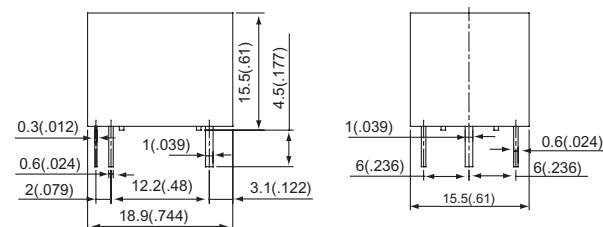
(3) **Coil Voltage**
3~48V

(4) **Enclosure**
Nil = Unsealed
S = Sealed

(5) **Cover Insulation**
Nil = Class B
F = Class F

(6) **RoHS Compliance**
P = RoHS
Nil = Standard

DIMENSIONS

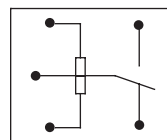


Unit: mm(inch)

Tolerance: $\pm 0.2(.008)$

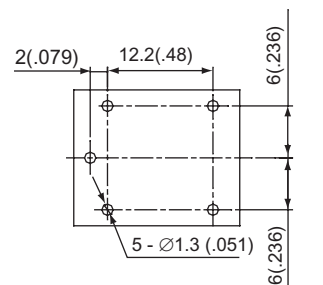
SCHEMATICS

(bottom view)



PCB LAYOUT

(bottom view)



Unit: mm(inch)

COIL RATINGS (AT 20°C)

Coil Type	Coil Nominal Voltage (V)	Coil Resistance ($\Omega \pm 10\%$)	Pick-up Voltage (V) $\leq$	Drop-Out Voltage (V) $\geq$	Nominal Current (mA)
DC Standard	3	25	2.25	0.3	120
	5	70	3.75	0.5	71
	6	100	4.5	0.6	60
	9	225	6.75	0.9	40
	12	400	9	1.2	30
	18	900	13.5	1.8	20
	24	1600	18	2.4	15
	48	6400	36	4.8	7.5

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

CONTACT RATINGS

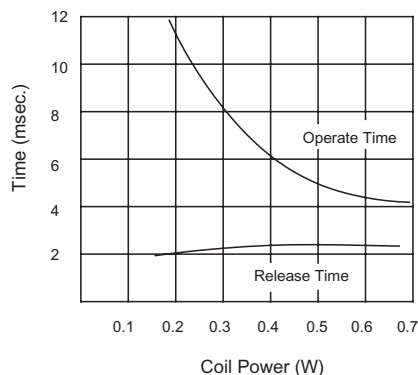
Contact Arrangement	1 Form A (SPST-NO)	1 Form B (SPST-NC)	1 Form C (SPDT)
Max. Switching Power	1750VA / 210W		
Mac. Switching Voltage	250VAC / 30VDC		
Max. Switching Current	12A		
Contact Resistance	$\leq 100\text{m}\Omega$		
Resistive Load	15A / 125VAC 12A / 125VAC 7A / 250VAC 7A / 30VDC	12A / 125VAC 7A / 250VAC 7A / 30VDC	12A / 125VAC 7A / 250VAC 7A / 30VDC
Pilot Duty Load	1.5A Break 5.4A Inrush / 277VAC		
Horse Power Load	FLA 5.8 / LRA 34.8A 240VAC		
TV Rating	TV-5 (SPNO Only)		
Contact Material	silver alloy		

CHARACTERISTICS

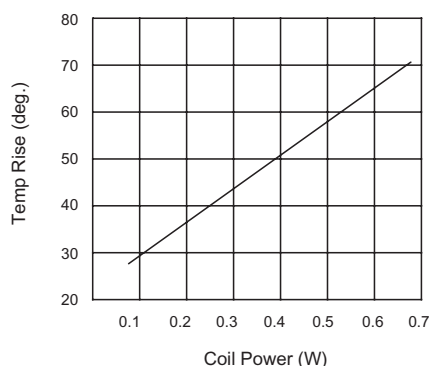
Electrical Life	1×10^5 (12A 125VAC 3×10^4)
Mechanical Life	1×10^7
Initial Insulation Resistance	Min. 100M Ω 500VDC
Contact Resistance (Initial)	$\leq 100\text{m}\Omega$
Operate Time	$\leq 10\text{ms}$
Release Time	$\leq 5\text{ms}$
Initial Dielectric Strength	50/60Hz 750VAC 1 min. (between open contact) 50/60Hz 1500VAC 1 min. (between contacts and coil)
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: 100G(6ms)
Ambient Temperature	-30°C ~ +60°C
Relative Humidity	85% at 40°C
Unit Weight	Approx. 10g

REFERENCE DATA

Timing



Coil Temperature Rise



Life Curves

