SPECIFICATIONS

No. ISD2403B
Date. January, 16. 2023
Approved by Y.Onishi
Checked by T.Taki
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RC SERIES PC BOARD RELAY

TYPE RC2V-◇- D□

- ◇: Contact configuration
- □: Coil rated voltage

1. Applicable standard

IEC61810-1
EN61810-1(TÜV SÜD Approval)
UL508 (c-UL Recognition)
CSA C22.2 No.14 (c-UL Approval)
CQC GB/T21711.1, GB/T15092.1, GB/T15092.101

2. Operating conditions

(1) Operating temperature: -40 to +75℃ (no freezing)
(2) Operating humidity: 5 to 85%RH (no condensation)
(3) Storage temperature: -40 to +85℃ (no freezing)
(4) Storage humidity: 5 to 85%RH (no condensation)

3. Ratings

3.1 Rated insulation voltage: 250V

3.2 Coil rating (at 20℃)

(1) Rated voltage(DC)— (□)	2a	2c	2a	2c	2a	2c	2a	2c
	5V		12V		24V		48V	
(2) Rated current (approx.)	81mA	106 mA	33mA	44 mA	17mA	22 mA	9mA	11 mA
(3) Coil resistance (±10%)	62Ω	47Ω	360Ω	270Ω	1440Ω	1100Ω	5360Ω	4400Ω
(4) Maximum allowable voltage	9.87V	8.7V	23.7V	21.0V	47.4V	42.0V	94.8V	84.0V

2a	2c
110V	
-	5 mA
-	22000Ω
-	192.5V

(5) Minimum pickup voltage (initial value): 75% maximum (2a), 70% maximum (2c)
(6) Dropout voltage (initial value): 10% minimum
(7) Power consumption (approx.)
(a) 2a: 5～48V DC：400mW, 110V DC：-
(b) 2c: 5～48V DC：530mW, 110V DC：550mW

3.3 Switching ratings

(1) Contact ratings
(a) Allowable switching power: Resistive load: 2000VA AC, 192W DC
(b) Rated load

	Voltage	Resistive load
Standard	250VAC, 24VDC	8A

(2) Allowable contact current: 8A
(3) Allowable contact voltage: 400V AC, 300V DC
(4) Minimum applicable load(reference value): 5V DC・10mA

4. Constructions

(1)	Outside view	See attached sheet
(2)	Degree of protection	Flux-resistant type (RTII)
(3)	Contact configuration－（◇）	2a(A), 2c(C)
(4)	Contact capacity	Standard
(5)	Contact material	Movable: $AgSnO_2$+Au
		Fixed: $AgSnO_2$
(6)	Terminal style	PCB terminal
(7)	Weight (approx.)	12g

5. Characteristics (initial value)

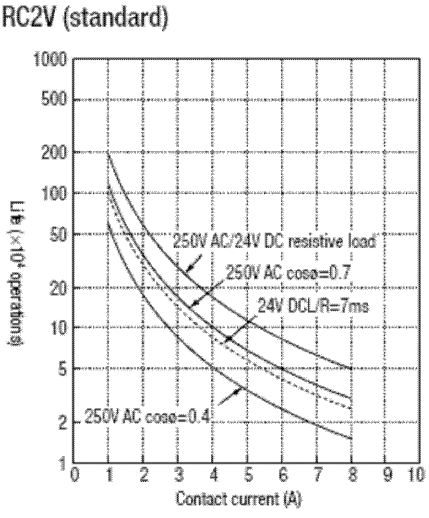
(1)	Contact resistance	100mΩmaximum
		(Note: Measured using 6V DC, 1A voltage drop method.)
(2)	Operate time	15 ms max. (at the rated voltage)
(3)	Release time	5 ms max. (at the rated voltage)
(4)	Insulation resistance	1000MΩminimum (measured with a 500V DC megger)
(5)	Impulse voltage	
(a)	Between contact circuit and coil	10,000V (impulse wave form 1.2×50μs)
(6)	Dielectric strength	
(a)	Between contact circuit and coil	5000V AC for 1min.
(b)	Between contacts of different poles	3000V AC for 1min.
(c)	Between contacts of the same pole	1000V AC for 1min.
(7)	Vibration resistance	
(a)	Operating extremes	Frequency 10 to 55Hz, Amplitude 0.825mm
(b)	Damage limits	Frequency 10 to 55Hz, Amplitude 1.65mm
(8)	Shock resistance	
(a)	Operating extremes	100 m/s^2
(b)	Damage limits	1000 m/s^2

6. Life

(1)	Electrical life (rated load)	50,000 operations min. (250V AC/24V DC, 8A)
		(Operating frequency 600 times/hour)
(2)	Mechanical life (without load)	20,000,000 operations min.
		(Operating frequency: 18,000 times/ hour)

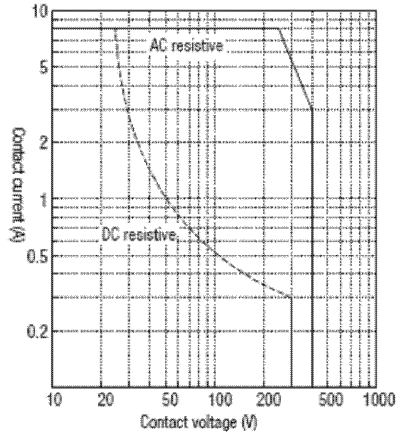
□Various Characteristic Charts (Reference)

◇Electric life curves



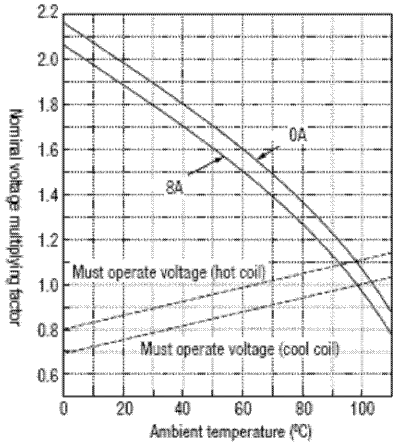
◇Maximum operating frequency (Electric life is not satisfied)

RC2V (standard)



◇Operating range

RC2V (standard)



◇Coil temperature rise

RC2V (standard)