

RV3T PC Board Terminal Relays

1NO contact, 5A. Space-saving (5mm-wide, 12.5mm-high) card relay.

- Highly sensitive 120mW
- SIL terminal enables easy patter design of PC Board terminal.
- Washable
- UL, CSA, TÜV compliant.

Applicable Standards	Mark	Certification Organization/ File No.
UL508		UL recognized File No. E68961
CSA C22.2 No. 14		CSA File No. 20479
EN61810-1		TÜV Rheinland
		EU Low Voltage Directive

Power Consumption	Contact	Coil Rated Voltage	Part No.
120mW	1NO	5V DC	RV3T-1G05
		12V DC	RV3T-1G12
		24V DC	RV3T-1G24
200mW	1NO	5V DC	RV3T-2G05
		12V DC	RV3T-2G12
		24V DC	RV3T-2G24

Coil Ratings

Power Consumption	Rated Voltage	Coil Resistance $\pm 10\%$ (at 20°C)	Rated Current $\pm 10\%$ (at 20°C)	Operating Characteristics (against rated values at 20°C)
120mW	5V DC	210 Ω	24mA	Pickup voltage (initial value): 70% Dropout voltage (initial value): 5% Maximum continuous applied voltage: 190%
	12V DC	1,200 Ω	10mA	
	24V DC	4,800 Ω	5mA	
200mW	5V DC	125 Ω	40mA	
	12V DC	720 Ω	16.7mA	
	24V DC	2,880 Ω	8.3mA	

Coil Ratings

Maximum Applied Voltage	250V AC, 125V DC
Rated Current	5A
Rated Contact Voltage/Current	AC250V 5A (resistive load) 24V DC 5A (resistive load)
Minimum Applicable Load (reference value)	DC0.1V, 100 μ A

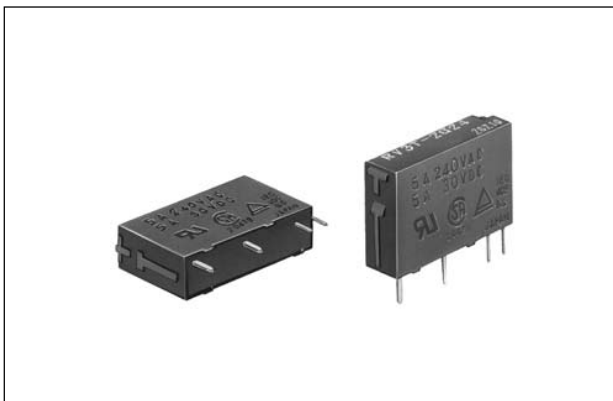
Approved Ratings

UL and CSA Ratings

UL Ratings			CSA Ratings		
Contacts			Contacts		
Voltage	Resistive	Inductive	Voltage	Resistive	Inductive
240V AC	5A	—	240V AC	5A	—
120V AC	—	1A (Pilot duty)	120V AC	—	1A (Pilot duty) (10A inrush)
120V DC	0.5A	0.2A (Pilot duty)	120V DC	0.5A	0.2A (15ms)
30V DC	5A	2A (Pilot duty)	30V DC	5A	2A (15ms)

TÜV Ratings

Rated Contact Data	
Max. Rated Voltage	Max. Rated Current
AC 240V	5A
DC 120V	$\leq 5A$



Specifications

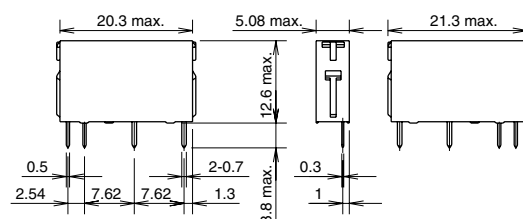
Contact Resistance *1		30 mΩ maximum
Operate Time *2		10 ms maximum
Release Time *2		5 ms maximum
Insulation Resistance		100 MΩ minimum (500V DC megger)
Dielectric Strength		Between contact and coil: 2000V AC, 1 minute Between contact gaps: 750V AC, 1 minute
Vibration Resistance	Damage limits	10 to 55 Hz, amplitude 0.75mm
	Operating extremes	10 to 55 Hz, amplitude 0.75mm
Shock Resistance	Damage limits	1000 m/s ²
	Operating extremes	100 m/s ²
Operating Temperature		−40 to +70°C (no freezing)
Operating Humidity		45 to 85% RH (no condensation)
Storage Temperature		−40 to +70°C (no freezing)
Storage Humidity		45 to 85% RH (no condensation)
Life	Mechanical	20,000,000 operations minimum (operating frequency 18,000 operations/hour)
	Electrical	See electrical life curves (operating frequency 1,800 operations/hour)
Weight (approx.)		3g

Note: Above values are initial values.

*1: Measured using 5V DC, 1A voltage drop method

*2: Measured at the rated voltage (at 20°C)

Dimensions

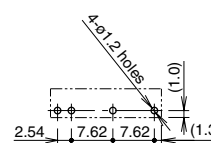


All dimensions in mm.

Internal Connection



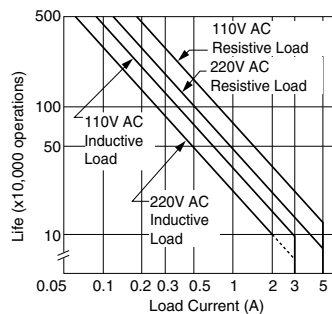
Mounting Hole Layout (bottom view)



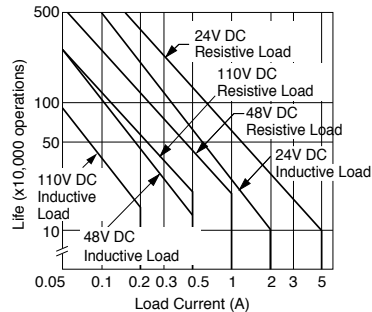
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Electrical Life Curve

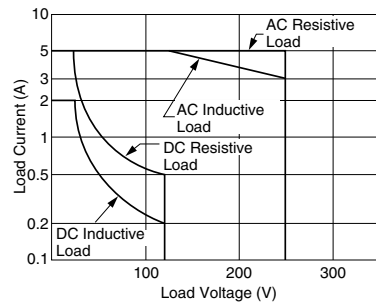
AC Load



DC Load

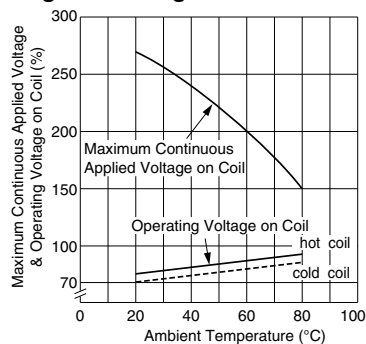


Maximum Switching Current

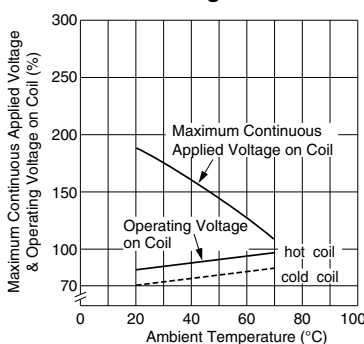


Coil Voltage Range

Single mounting



Collective Mounting

Flush
SilhouetteSwitches &
Pilot LightsDisplay
LightsLED
Illumination
UnitsDisplay
UnitsSafety
ProductsTerminal
BlocksComm.
Terminals

AS-Interface

Relays &
Timers

Sockets

Circuit
ProtectorsPower
SuppliesPLCs &
SmartRelayOperator
Interfaces

Sensors

Control
StationsExplosion
Protection

References