

# R81 SERIES

## High Voltage Relays

**7kV SYSTEM VOLTAGE**  
*Make & Break Load Switching*



### FEATURES

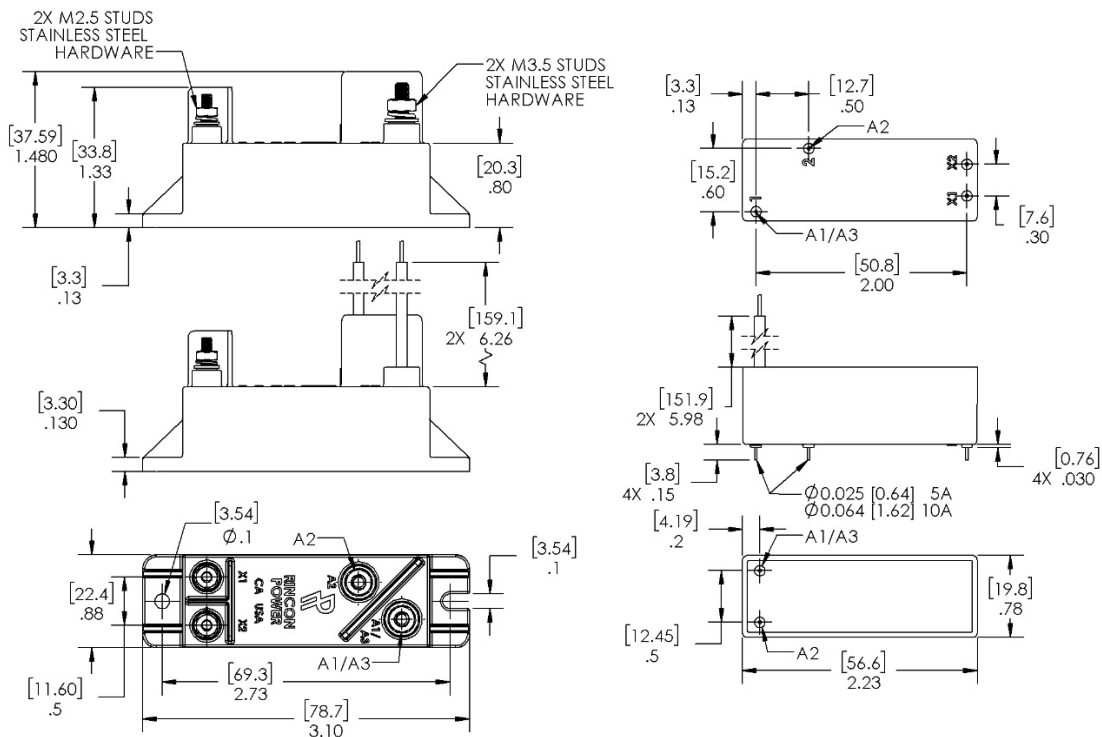
- SPST-NO and SPST-NC
- Vacuum sealed ceramic
- Tungsten contacts for load switching
- PCB Mountable (optional)
- Mountable in any orientation
- Meets RoHS 2011/65/EU



**PERFORMANCE**

TABLE 1. SPECIFICATIONS	
CHARACTERISTIC	MEASURE
Contact Arrangement	Form A, SPST-NO or Form B, SPST-NC
Max Operating Voltage (Peak, between Contacts and Contacts to Base) (Max Leakage Current: 15µA)	7kV dc or 60Hz
Test Voltage (Peak, between Contacts and Contacts to Base) (Max Leakage Current: 15µA)	8kV dc or 60Hz
Continuous Current, Max	5A 2X .025 [0.64mm] PCB Mount Version Only
	10A 2X .065 [1.62mm] PCB Mount Version Only
	10A Panel Mount and Flying Lead Versions Only
Contact Resistance (Max)	0.030 Ω @ 1A
Operate Time (Max, incl bounce)	10ms
Release Time (Max)	10ms
Shock - Functional, 1/2 Sine, 11ms	30G
Vibration, Operating, Sine (50-2,000Hz) Peak	10G
Operating Temperature	-50°C to 85°C
Ingress Protection	Hermetic, exceeds IP67and IP6K9
Mechanical life	2,000,000 cycles
Weight	56 g
COIL (25° C)	MEASURE
Nominal Voltage (VDC)	12 26.5
Pick-up Voltage, Max (VDC)	8 16
Drop-out Voltage (VDC)	0.5-5 1-10
Coil Resistance	70Ω 290Ω

**PRODUCT DIMENSIONS [mm]**



## ORDERING KEY

**TABLE 2. PRODUCT NOMENCLATURE**

Series	Contact Arrangement	Coil	High Voltage Connection / Max Current	Mounting
R81	A Normally Open	2 12Vdc Coil, PC Pins	A PCB A2 & A1/A3 Pins DIA=.064 IN [1.62] / 10A Max	5 PCB Mount
		3 26.5Vdc Coil, PC Pins	3 PCB A2 & A1/A3 Pins DIA=.025 IN [0.64] / 5A Max	
	B Normally Closed	A 12Vdc Coil, Panel Mount	4 Flying Leads / 10A Max	7 Panel Mount
		B 26.5Vdc Coil, Panel Mount	5 Threaded Terminals / 10A Max	

## NOTES

- Relay is operated by a coil that changes resistance with temperature: Maximum coil voltage will be lower than indicated at temperatures above 25°C, and higher than indicated at temperatures below 25°C.
- Nominal Coil Voltage for Pick-up Current, Coil Current and Coil Power specifications, Current/Wattage will be lower than indicated at temperatures above 25°C and higher than indicated at temperatures below 25°C.
- Pick-up Voltage and Drop Out Voltage will be lower than indicated at temperatures below 25°C and higher than indicated at temperatures above 25°C.

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