

# RER02 SERIES

High Voltage Contactors

**20A** CONTINUOUS DUTY  
**1000V** SYSTEM VOLTAGE



## FEATURES

SPST Normally Open High Voltage Contactors

- PCB Mountable (optional)
- Meets RoHS 2011/65/EU
- Low-cost pre-charge solution



**PERFORMANCE**

TABLE 1. SPECIFICATIONS		
CHARACTERISTIC	MEASURE	
Contact Arrangement	Form X, SPST NO	
Max Switching Voltage <sup>1</sup>	1000 VDC	
Dielectric Withstand Voltage (Max Leakage Current: 1mA)	3,000 VAC, 1 minute contacts to coil 3,000 VAC, 1 minute across open contacts	
Continuous Current (15mm <sup>2</sup> conductor)	20A	
Overload Current	30 seconds	80A
	1 hour	30A
Max Break – 30A @ 450V	5 cycles	
Max Short Circuit Current -0.5 second	200 A	
Min Insulation Resistance	1,000 Mohm @ 500VDC	
Contact Voltage Drop (Max)	50mV @ 10A	
Operate Time (Max, incl bounce)	30ms	
Release Time (Max)	10ms	
Shock - Functional, 1/2 Sine, 11ms	20G	
Shock – Destructive, 1/2 Sine, 11ms	50G	
Operating Temperature	-40°C to 85°C	
Ingress Protection	IP67,	
Mechanical life	200,000 cycles	
AUXILIARY CONTACTS	MEASURE	
Contact Arrangement	Not available	
COIL (20° C)	MEASURE	
Nominal Voltage	12 VDC	24 VDC
Pick-up Voltage (Max)	9 VDC	18 VDC
Drop-out Voltage (Min)	0.8 VDC	1.6 VDC
Coil Resistance	48Ω	192Ω
Coil Power at Nominal Voltage	3W	3W

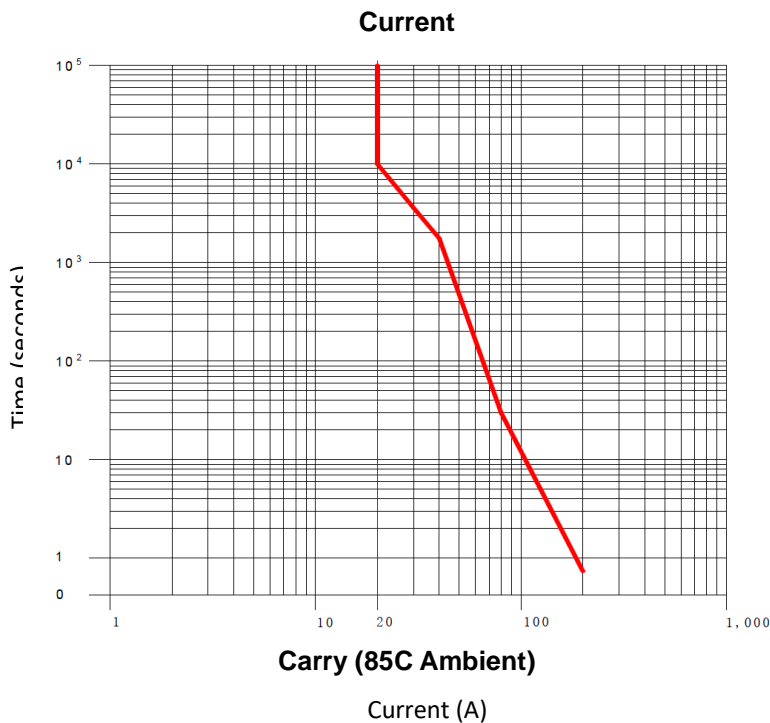


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
Polarity Sensitive	CYCLES (1 cycle = 1 make + 1 break)	
VOLTAGE	CURRENT	
450V	20A	5,000
450V	10A	10,000
450V	20A	75,000 (MAKE only)
800V	15A	50,000 (MAKE only)
1000V	10A	30,000 (MAKE only)
1000V	10A	250 (BREAK only)

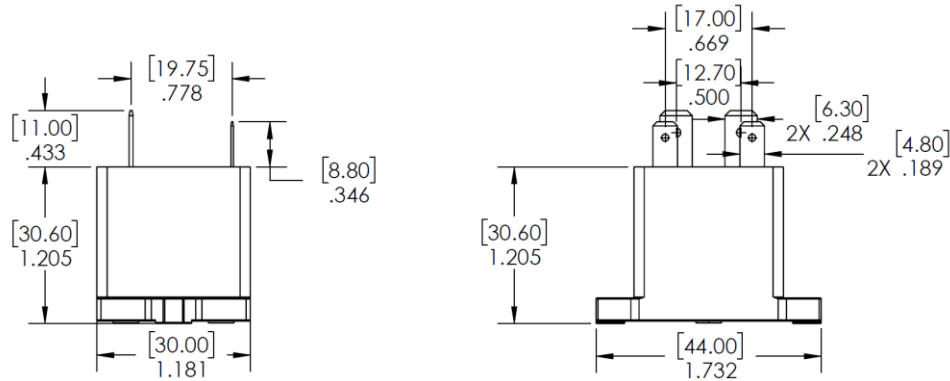
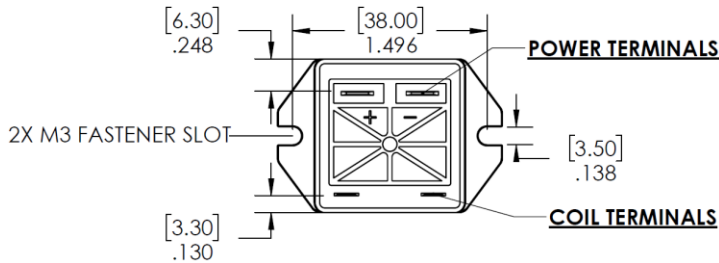
<sup>1</sup> Contactor can be used in systems with higher voltages, but should be limited to no current, or very low current breaking. Contact Rincon Power for more details

**OPTIONS**

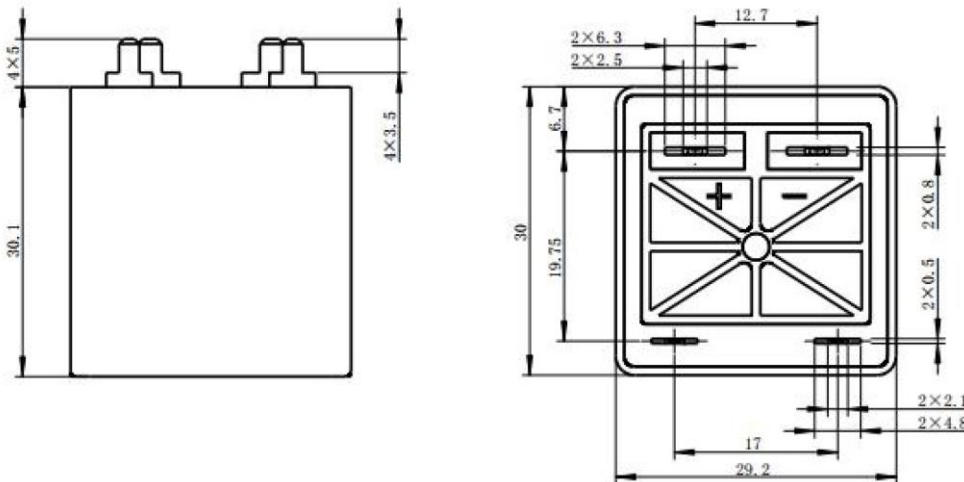
TABLE 3. PRODUCT NOMENCLATURE				
	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RER02	P Polarity Sensitive	1 Bottom Mount	A 12V	X None
		3 PCB Mount		
		4 PCB Assembly with studs	B 24V	
		5 Stud Terminal Package		

**PRODUCT DIMENSIONS [mm]**

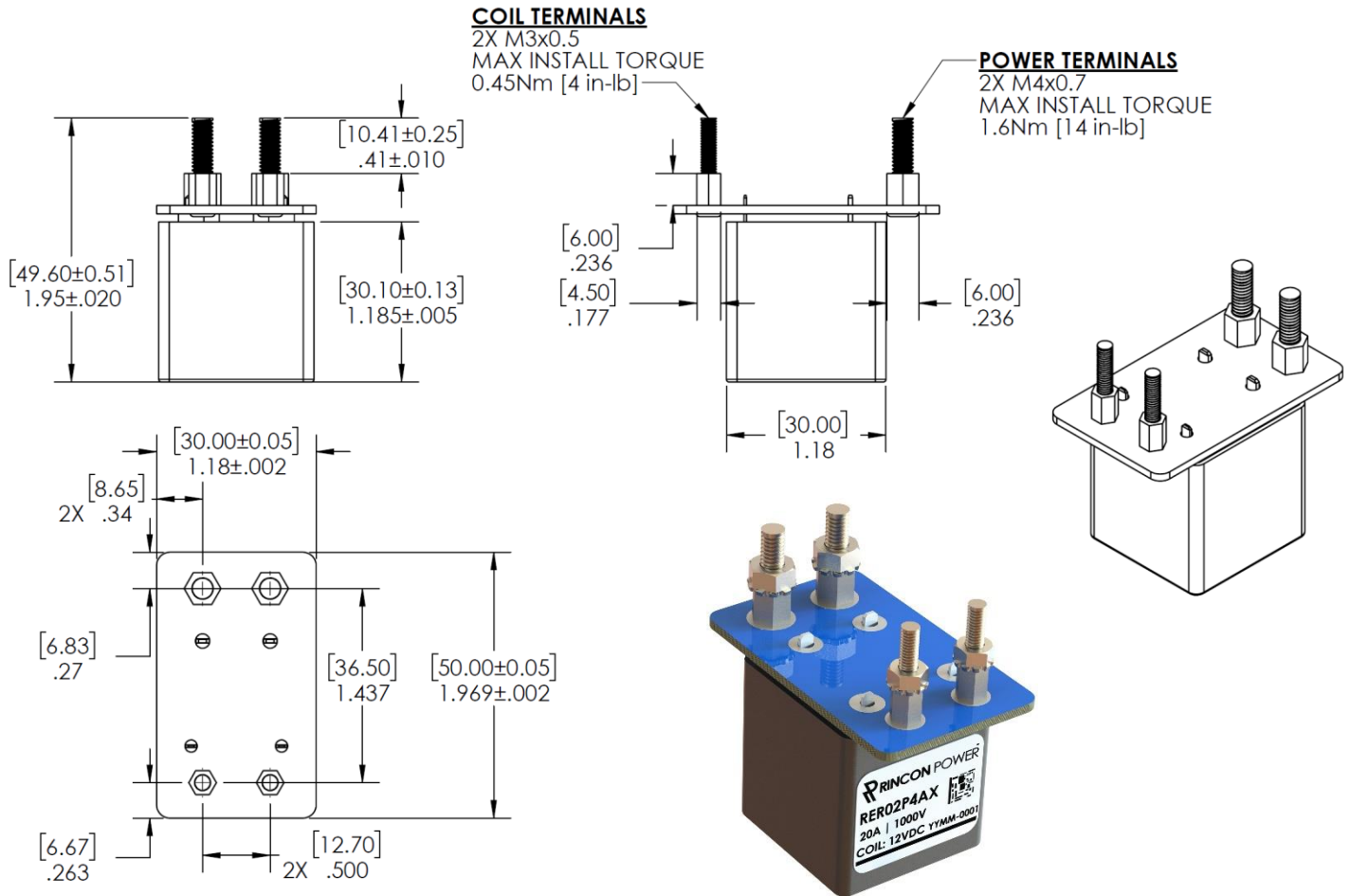
**Bottom Mount**



**PCB Mount (Option 3)**



**PCB Assembly with Studs (Option 4)**



**TABLE 4. DIMENSIONAL AND INSTALLATION**

CHARACTERISTIC	MEASURE
Weight	50g PCB mount version 65g PCB assembly version 105g Stud terminal version
Mounting Position	Any / Not Position Sensitive
Package Quantity	100
(PCB) welding Parameters	<b>Manual welding:</b> (350±20°C), time 3s; <b>Wave soldering:</b> (265±5°C), time (3~8)s.

**Stud Terminal Package (Option 5)**

