RINCONPOWER™
Products For An Electrified Future

RER02 SERIES

High Voltage Contactors

20A CONTINUOUS DUTY

1000V SYSTEM VOLTAGE

FEATURES

SPST Normally Open High Voltage Contactors

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

PERFORMANCE

TABLE 1. SPECIFICATIONS		
CHARACTERISTIC	**MEASURE**	
Contact Arrangement	Form X, SPST NO	
Max Switching Voltage [1]	1000 VDC	
Dielectric Withstand Voltage	4,200 VAC, 1 minute contacts to coil 4,200 VAC, 1 minute across open contacts	
Continuous Current (15mm^2 conductor)	20A	
Overload Current 30 seconds 1 hour	80A 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

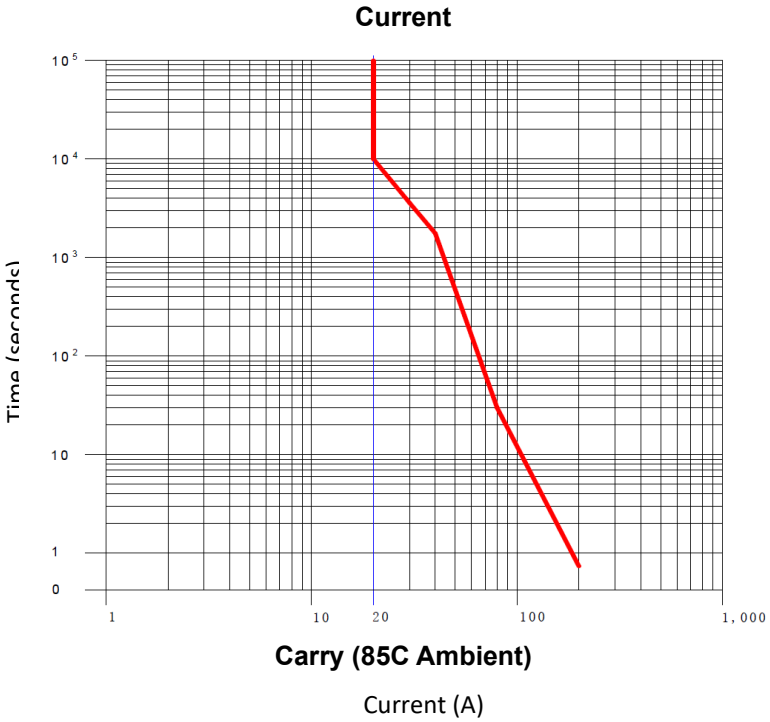


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
Polarity Sensitive		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	CURRENT	
450V	20A	5,000
450V	10A	10,000
450V	20A	75,000 (MAKE only)
800V	15A	50,000 (MAKE only)
1000V	10A	30,000 (MAKE only)
1000V	10A	250 (BREAK only)

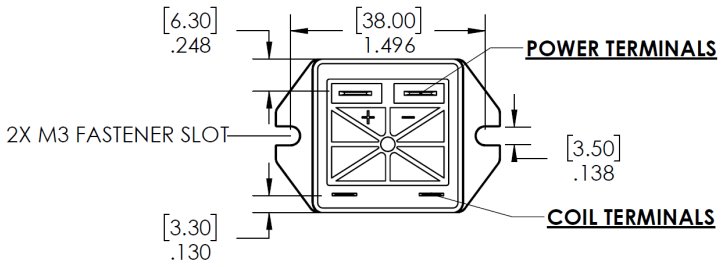
[1] Contactor can be used in systems with higher voltages, but should be limited to no current, or very low current breaking. Contact Rincon Power for more details

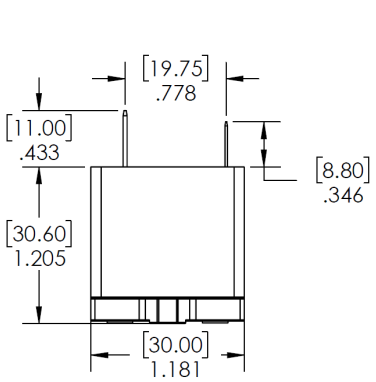
OPTIONS

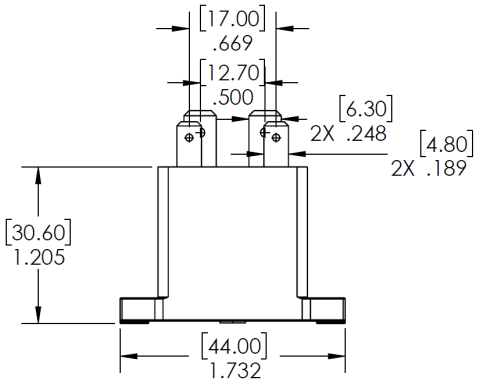
TABLE 3. PRODUCT NOMENCLATURE				
	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RER02	P Polarity Sensitive	1 Bottom Mount	A 12V	X None
		3 PCB Mount		
		4 PCB Assembly with studs	B 24V	
		5 Stud Terminal Package		

PRODUCT DIMENSIONS [mm]

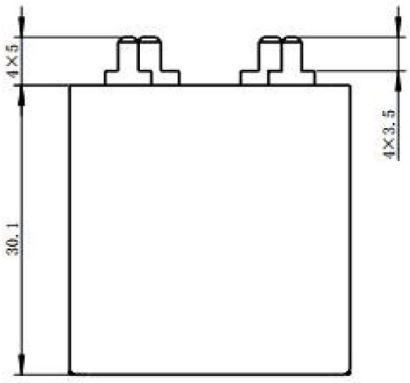
Bottom Mount

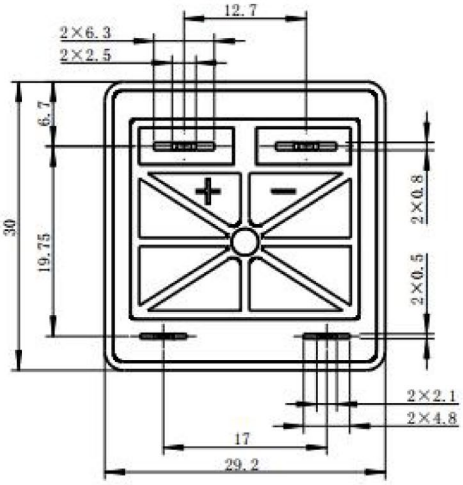






PCB Mount (Option 3)





PCB Assembly with Studs (Option 4)

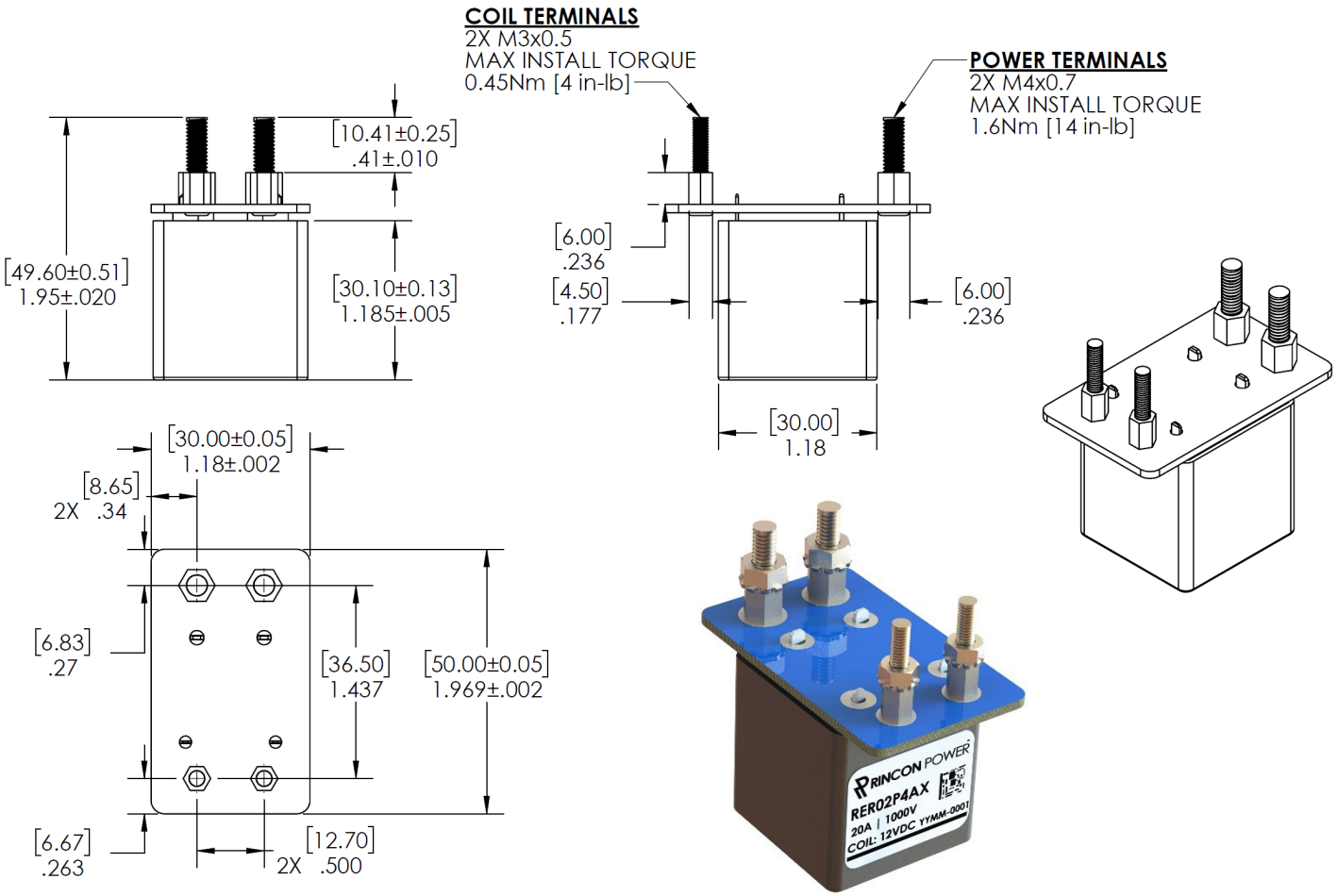
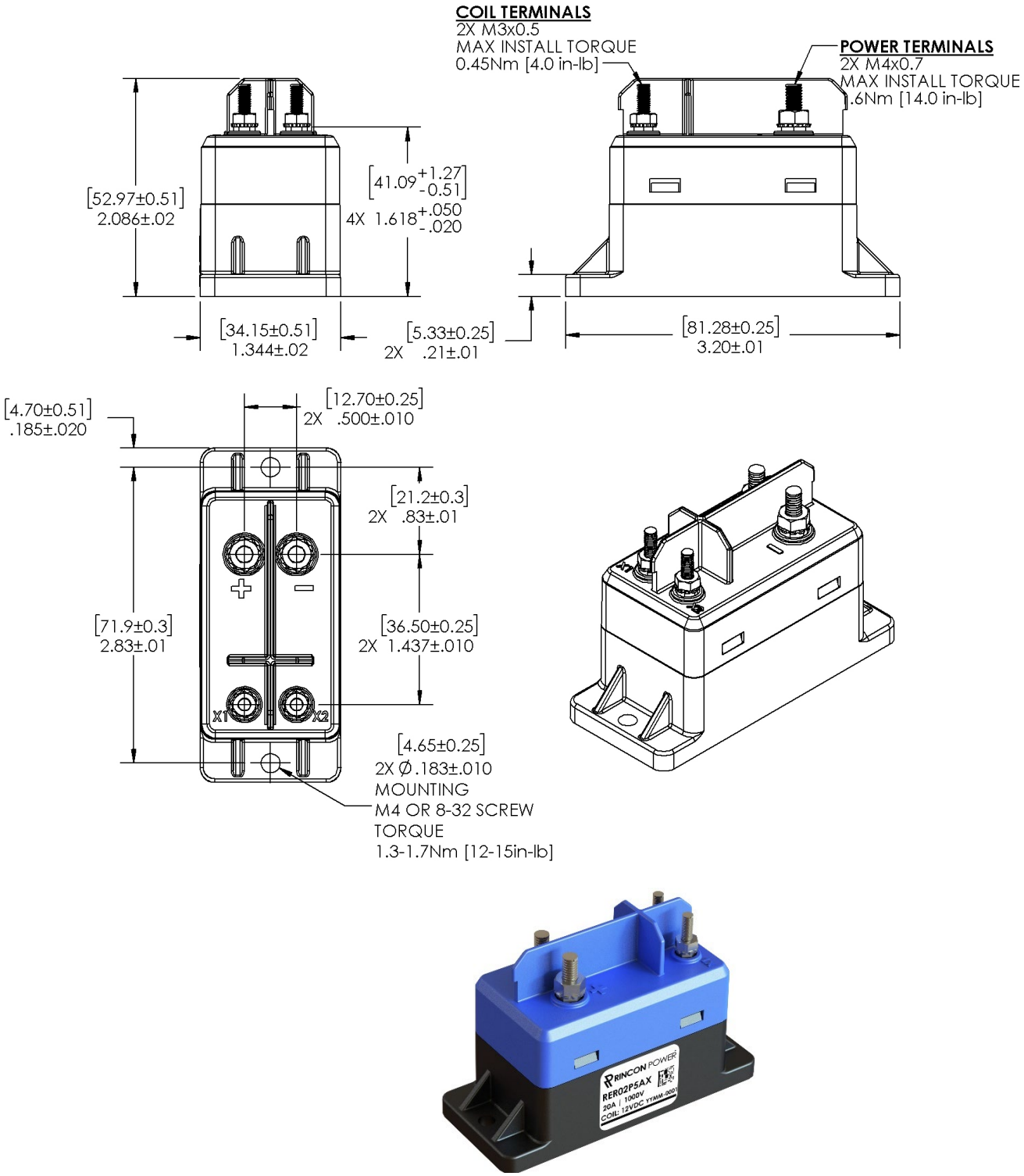


TABLE 4. DIMENSIONAL AND INSTALLATION	
CHARACTERISTIC	**MEASURE**
Weight	50g (0.11 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	100
(PCB) welding Parameters	**Manual welding**: (350±20)℃,time 3s；**Wave soldering**: (265±5)℃,time (3～8) s.

Stud Terminal Package (Option 5)



NOTES

- Avoid excessive coil voltages. Exceeding the ratings on the datasheet may result in high coil temperature and coil failure.
- Contactor may be used above Max Switching Voltage if the application does not require significant load breaking. Please contact Rincon Power to discuss in more detail.