

RER02 SERIES

High Voltage Contactors

20A CONTINUOUS DUTY

1000V SYSTEM VOLTAGE



FEATURES

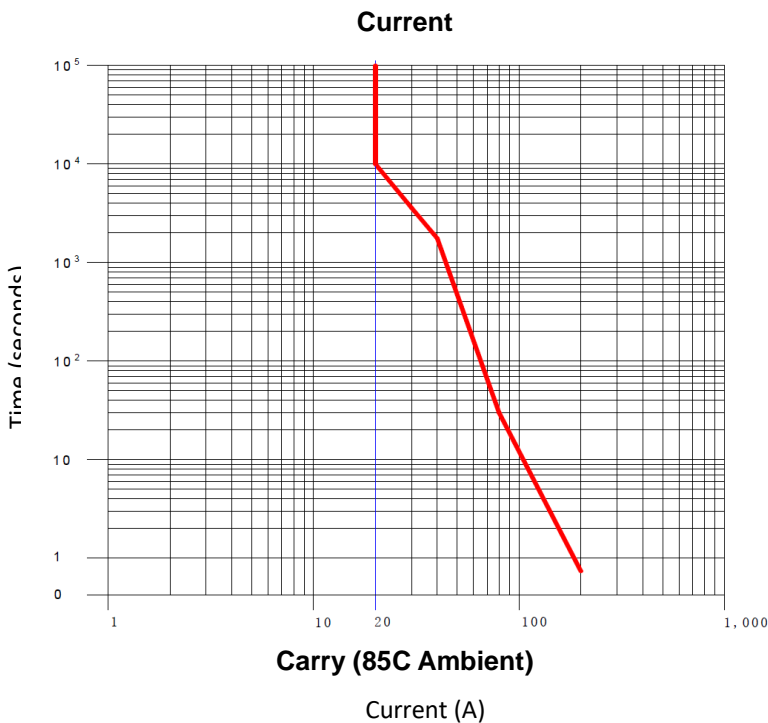
SPST Normally Open High Voltage Contactors

- 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 ¹ | 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 ² 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) |

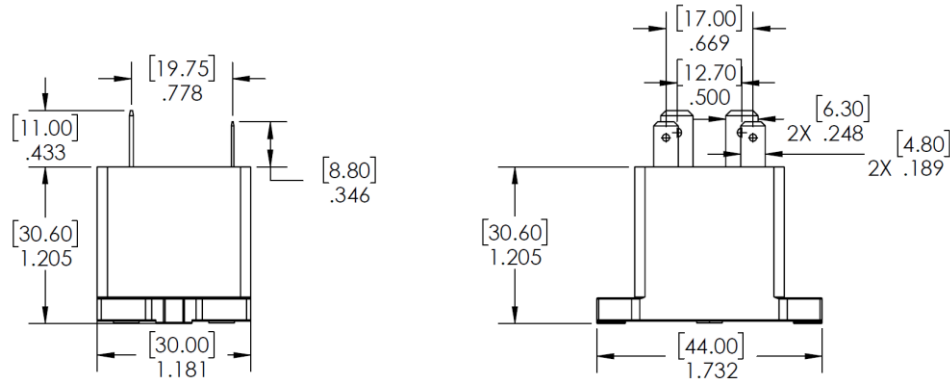
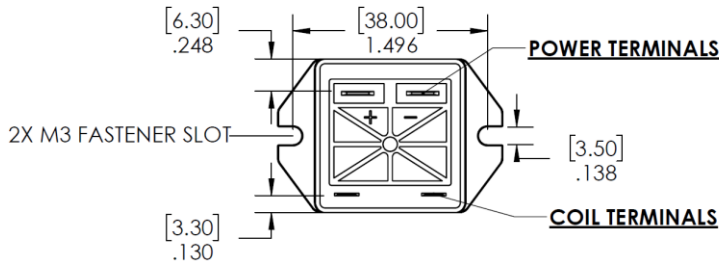
¹ Contactor can be used in systems with higher voltages, but should be limited to no current, or very low current breaking. Contact Rincon Power for more details

OPTIONS

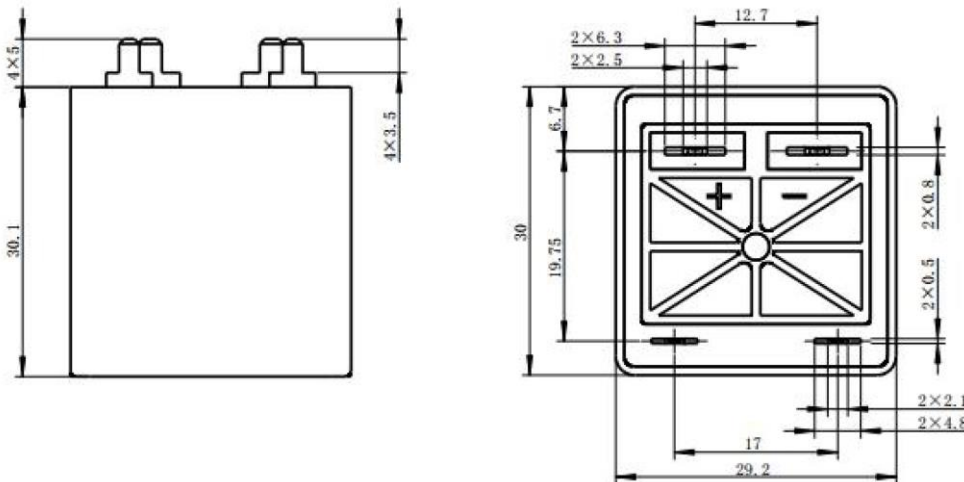
| TABLE 3. PRODUCT NOMENCLATURE | | | | |
|-------------------------------|----------------------|---------------------------|-------|--------------------|
| | CONTACT POLARITY | MOUNTING | COIL | AUXILIARY CONTACTS |
| RER02 | P Polarity Sensitive | 1 Bottom Mount | A 12V | X None |
| | | 3 PCB Mount | | |
| | | 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)

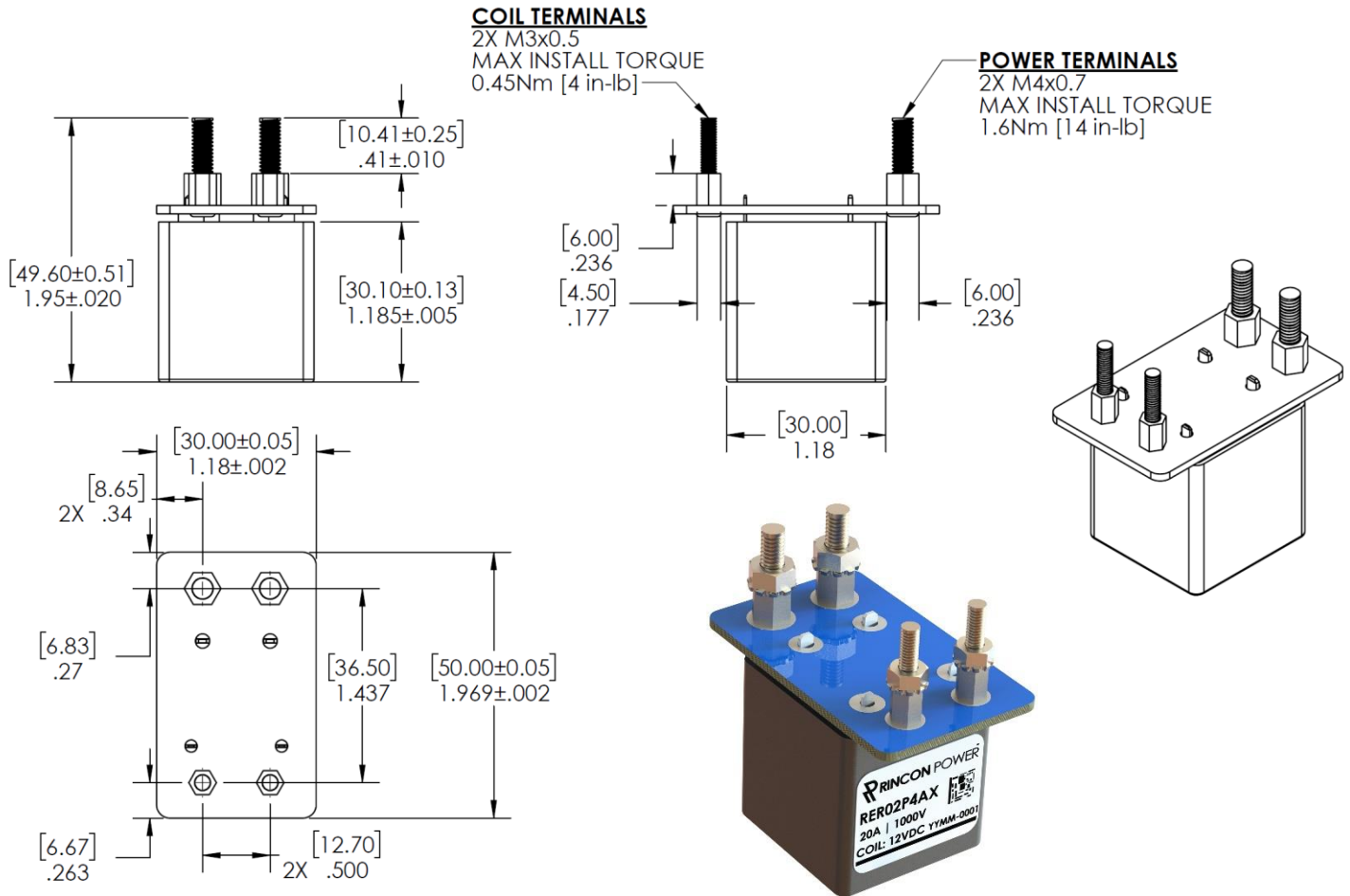


TABLE 4. DIMENSIONAL AND INSTALLATION

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

Stud Terminal Package (Option 5)

