

RXR05 SERIES

High Voltage Contactors

50A CONTINUOUS DUTY

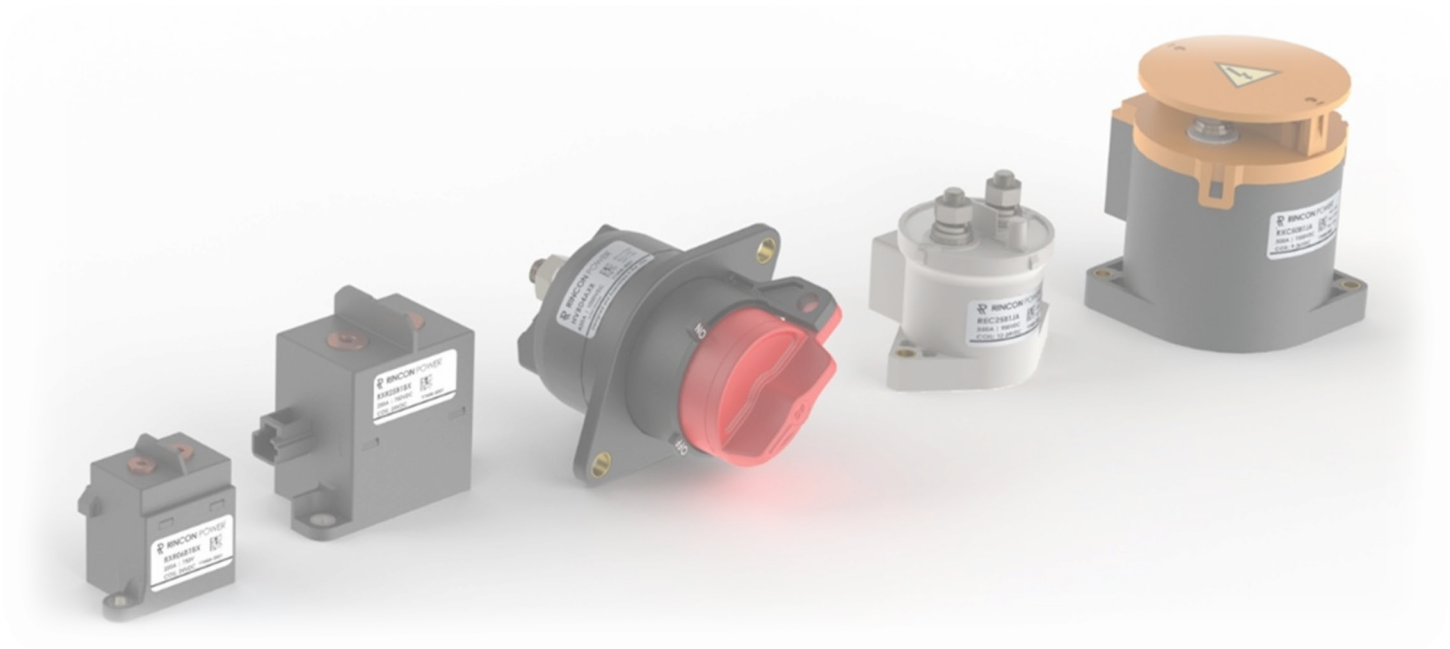
1500V SYSTEM VOLTAGE



FEATURES

SPST Normally Open High Voltage Contactors

- Metal-ceramic hermetic seal
- High Temperature Performance
- Low contact resistance over life
- Meets RoHS 2011/65/EU
- IEC60947-5-1 compliant



PERFORMANCE

TABLE 1. SPECIFICATIONS	
CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST NO
Max Switching Voltage ¹	1500 VDC
Dielectric Withstand Voltage	4,500 VAC, 1 minute contacts to coil 4,500 VDC, 1 minute across open contacts
Continuous Current (15mm ² conductor)	50A
Overload Current	30 seconds 240A 1 hour 90A
Make and Break – 50A @ 750V	3,000 cycles
Max Short Circuit Current -0.5 second	600 A
Min Insulation Resistance	1,000 Mohm @ 1,000VDC
Contact Voltage Drop (Max)	125mV @ 60A
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	Exceeds IP69, (Hermetically sealed)
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)	1 VDC 2 VDC
Holding Current (Max)	0.44A 0.22A
Coil Power at Nominal Voltage	5.2W 5.2W

Current Carry (85C Ambient)

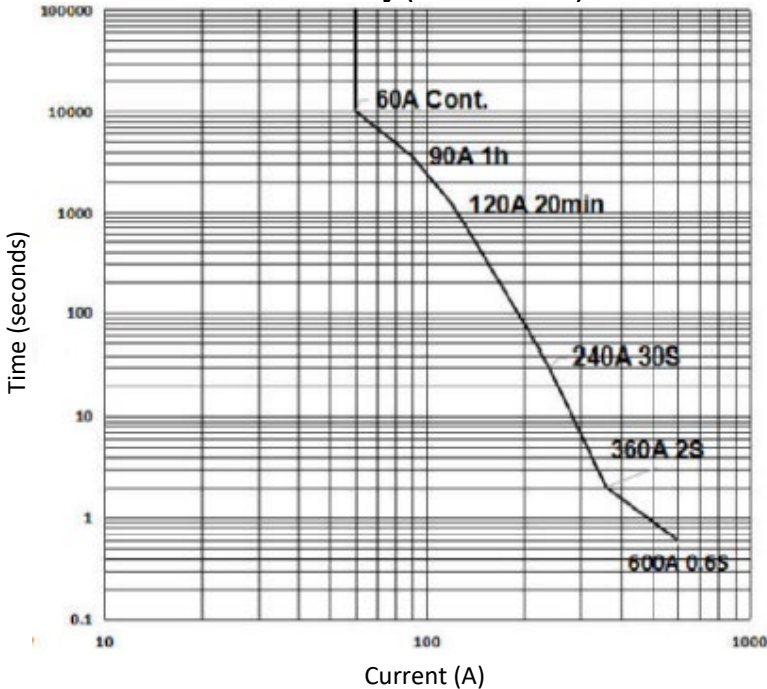


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
BI-DIRECTIONAL VERSION		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	CURRENT	
750V	60A	3,000
750V	10A	50,000
1000V	50A	1,000
1000V	20A	10,000

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
RXR05	B Bi-directional	1 Bottom Mount 4 PCB Assembly	A 12V B 24V	X None

PRODUCT DIMENSIONS [mm]

Bottom Mount

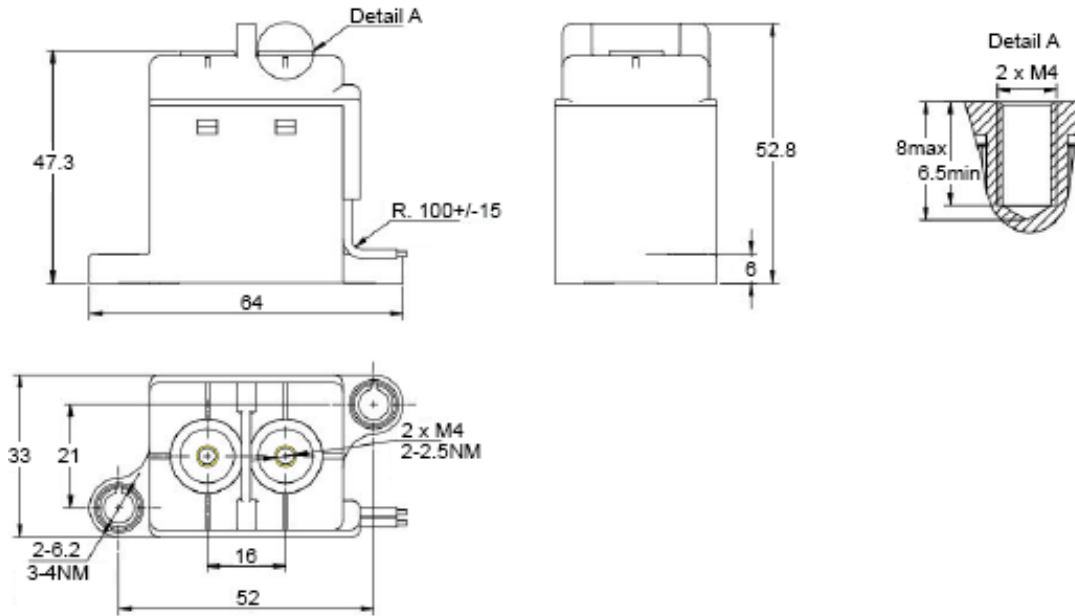
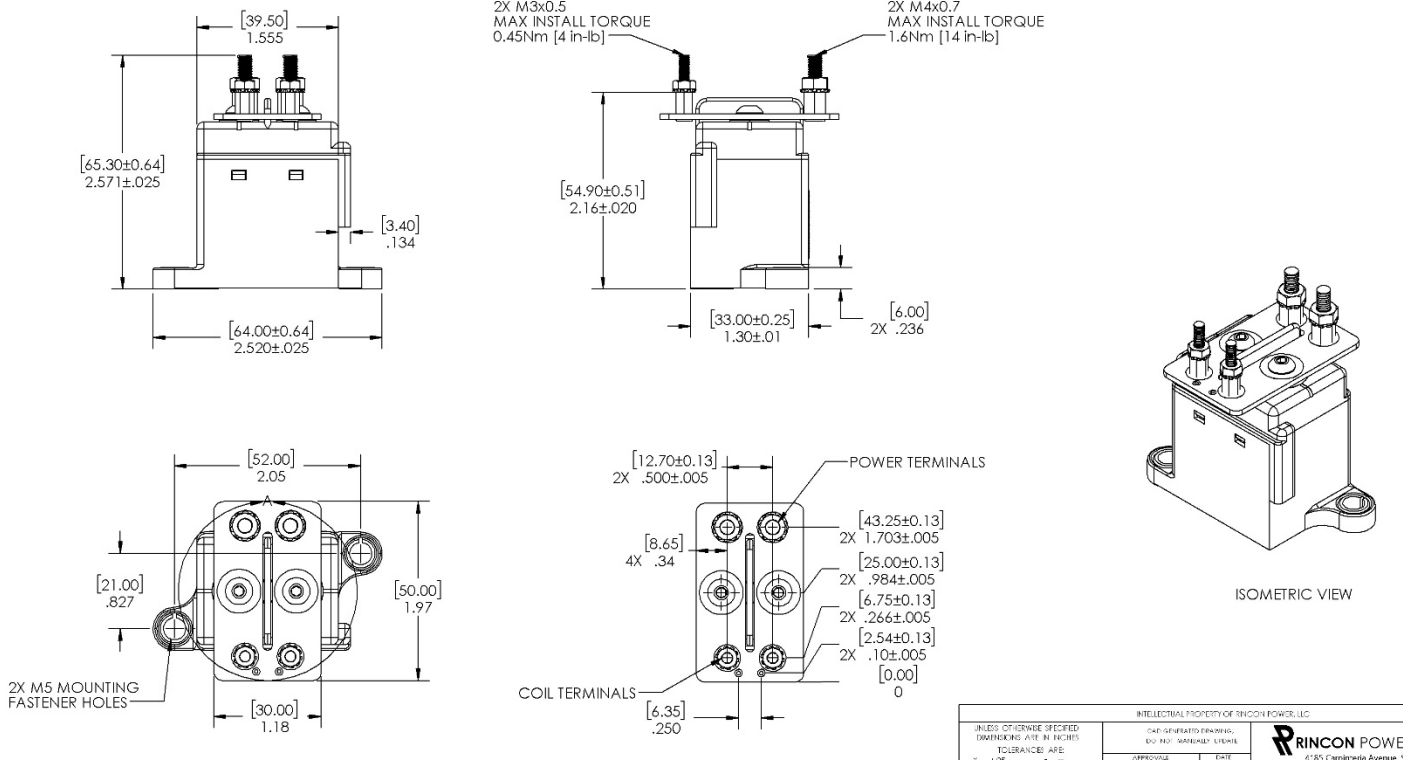


TABLE 4. DIMENSIONAL AND INSTALLATION	
CHARACTERISTIC	MEASURE
Weight	170g (0.38 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	TBD
Install Torque M4 Main Terminals	3-4Nm (27-35 in-lb)

PCB Assembly with Studs (Mounting Option 4)



NOTES

- Attached cables and busbars directly to the main terminal pad using the recommended install torque. Do not use washers or other materials between the contactor and the conductor. This will ensure the lowest possible contact resistance
- Avoid excessive coil voltages. Exceeding the ratings on the datasheet may result in high coil temperature and coil failure
- Contactors 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