

RXC15 SERIES

High Voltage Contactors

150A+ CONTINUOUS DUTY

900V SYSTEM VOLTAGE



FEATURES

SPST Normally Open High Voltage Contactors

- Hermetic seal with gas fill
- Optional auxiliary contacts – for main position feedback
- High temperature performance
- Meets RoHS 2011/65/EU
- Designed and Assembled in US

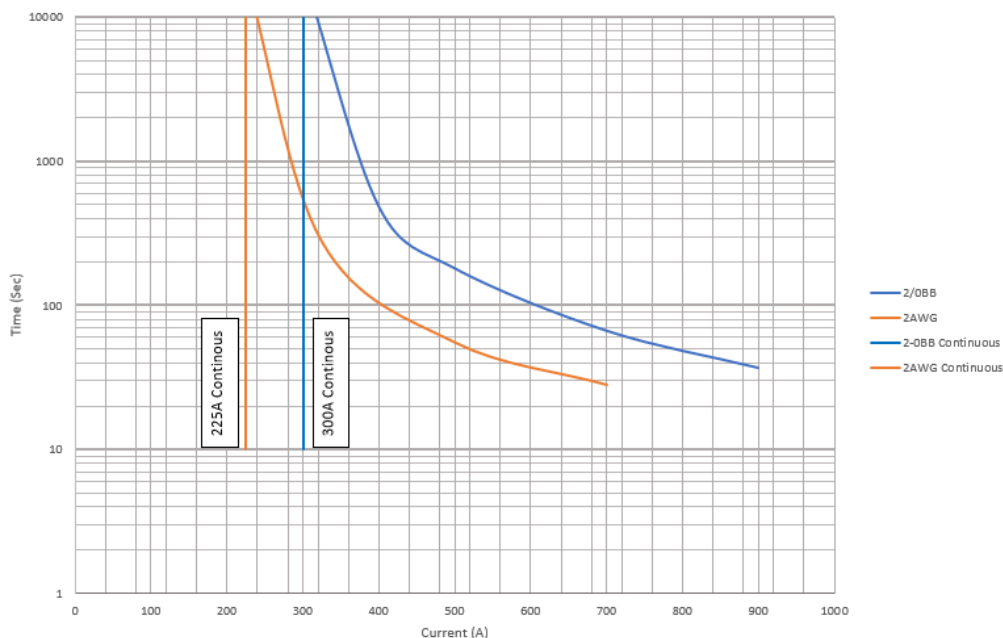


PERFORMANCE

TABLE 1. SPECIFICATIONS

CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST NO
Max Switching Voltage	900 VDC
Dielectric Withstand Voltage Contacts to Coil	2,500 VAC, 1 minute
Dielectric Withstand Voltage Across Open Contacts	4,000 VDC, 1 minute
Continuous Current (67mm ² conductor)	300A
Overload Current	800A
30 seconds	500A
3 Minutes	
Make and Break	See table
Max Short Circuit Current -1 second	1,500 A
Min Insulation Resistance	1,000 Mohm @ 1,000V
Contact Voltage Drop (Max)	80mV @ 100A
Operate Time (Max, incl bounce)	25ms
Release Time (Max)	10ms
Shock - Functional, 1/2 Sine, 11ms	20G
Shock – Destructive, 1/2 Sine, 11ms	50G
Operating Temperature	-40°C to 100°C (175°C max terminal temperature)
Ingress Protection	Exceeds IP69, (Hermetically sealed)
Mechanical life	300,000
AUXILIARY CONTACTS	MEASURE
Contact Arrangement	SPST, Normally Open
Continuous Current	2A
Minimum Current	5mA @ 8V
COIL @ 20°C	MEASURE
Nominal Voltage	12V
Max Voltage	16 VDC
Pick-up Voltage (Max)	7.5 VDC
Drop-out Voltage (Min)	0.6 VDC
Pull-in current (max 300ms)	4.3A
Holding Current	0.24A
Coil Power (pull-in)	46W
Coil Power (Holding)	2.9W
Coil Back EMV (V) ¹ via internal TVS	150V

2AWG vs 2-0BB Comparison


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)

POLARITY SENSITIVE VERSION		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	CURRENT	
450V	150A	10,000
750V	150A	1,500
320V	-150A	20
320V	1200A	1
750V	50A	10,000
450V	100A	30,000

¹ Coil back EMF can be further reduced by an external TVS, but should not be reduced to less than 30V for 12V coil or 55V for a 24V coil.

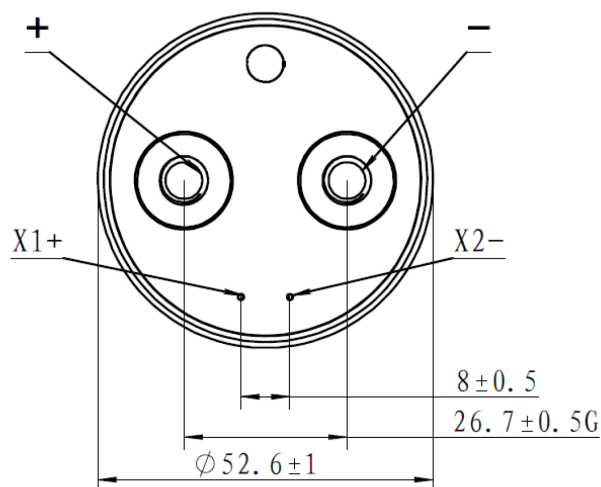
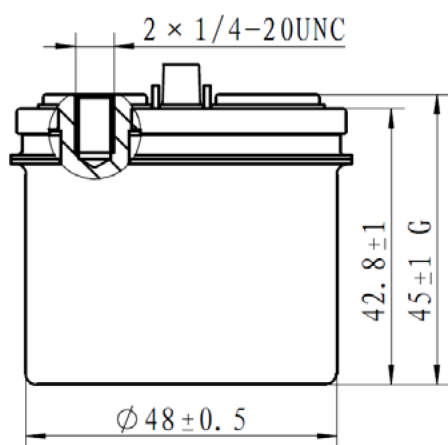
OPTIONS

TABLE 3. PRODUCT NOMENCLATURE

		MOUNTING	COIL	AUXILIARY CONTACTS
RXC15	P Polarity Sensitive	3 PCB Mount	P 12V dual coil (economized)	X None
		9 Chassis Mount	Q 24V dual coil (economized)	A Normally Open

PRODUCT DIMENSIONS [mm]

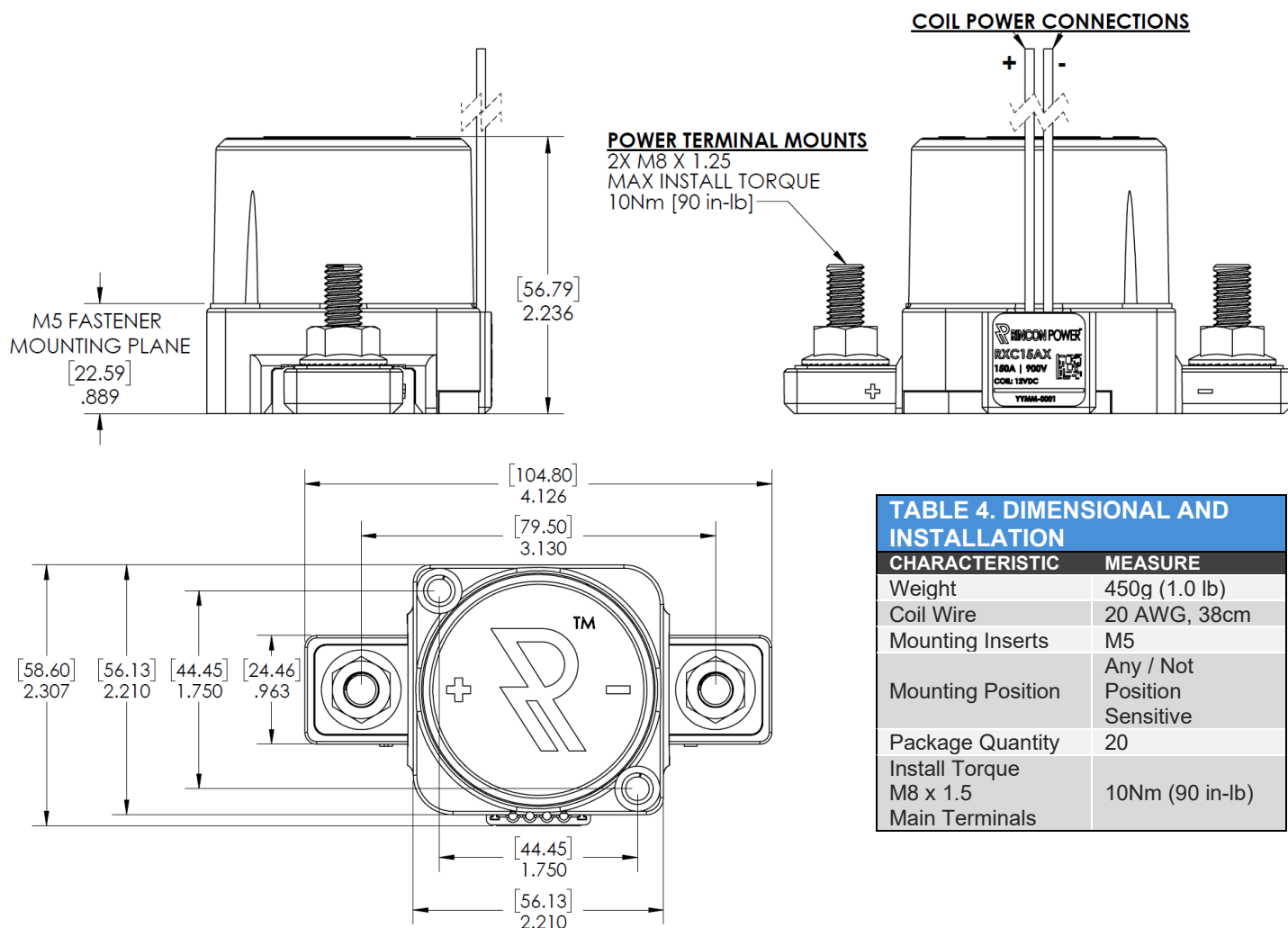
Mounting Option 3 – PCB Mount


TABLE 4. DIMENSIONAL AND INSTALLATION PCB Mount

CHARACTERISTIC	MEASURE
Weight	290g (0.64 lb)
Coil Wire	N/A
Mounting Inserts	N/A
Mounting Position	Any / Not Position Sensitive
Package Quantity	TBD
Install Torque	7 Nm; 1/4" – 20
Main Terminals	7mm thread engagement



Mounting Option 9 – Chassis Mount



NOTES

- Polarity Sensitive versions are marked + and - for the power terminals. For applications that require the contactor under load, please ensure current is flowing from the + to the - terminal when breaking/opening under load. For Bi-Directional versions the direction of current does not matter when breaking under load.
- 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.
- 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.