

RXX50 SERIES

High Voltage Contactors

500A CONTINUOUS DUTY

1000Vdc SYSTEM VOLTAGE

PRELIMINARY



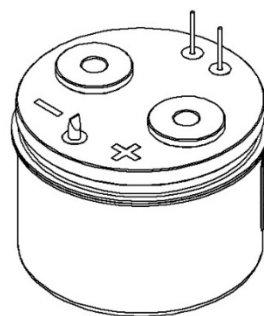
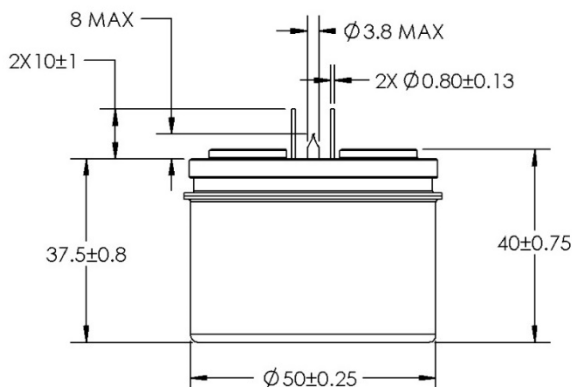
FEATURES

SPST Normally Open High Voltage Contactors

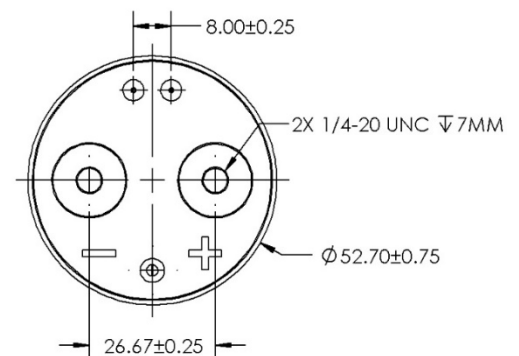
- *Hermetic Ceramic Seal* with gas fill for superior carry and switching performance
- World's Smallest and Lightest Contactor with a 3MWatt Interrupt Rating (1000V/3kA).
- *Ultra-Low* Contact Resistance
- Patent Pending *Fast Break* Arc Technology
- Meets RoHS 2011/65/EU
- IEC60947-4-1 compliant
- Efficient PWM coil (external)

TABLE 1. DIMENSIONAL AND INSTALLATION

CHARACTERISTIC	MEASURE
Weight	0.617 lb, [280g ±5g]
Mounting Position	Any / Not Position Sensitive
Package Quantity	20 pcs
Install Torque, 2X 1/4-20 Main Terminals	80-88 in-lb, [9-10Nm]



TRIMETRIC VIEW



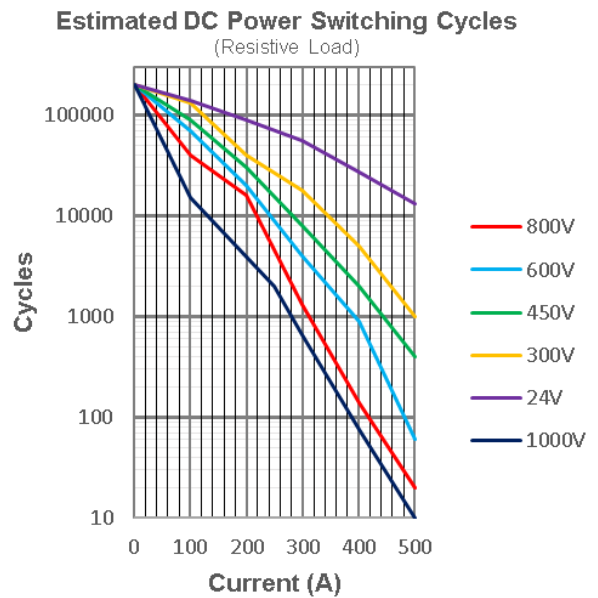
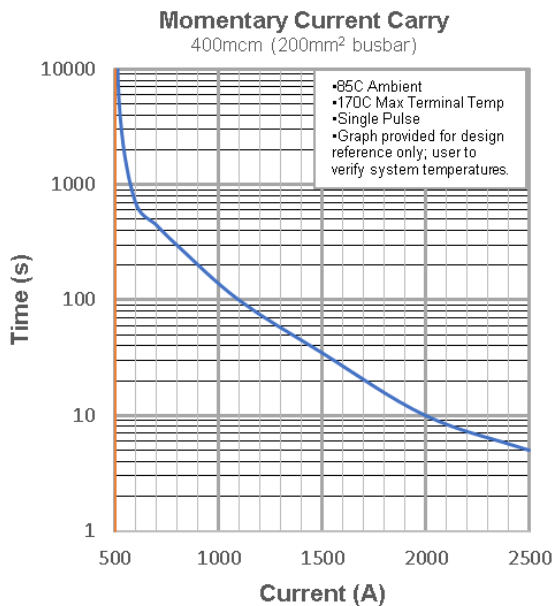
PERFORMANCE

TABLE 2. SPECIFICATIONS

CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST- NO
Max Switching Voltage ²	1000 Vdc
Dielectric Withstand Voltage (Leakage <1mA) Between Open Contacts	2200 VRMS (60 sec)
	Between Contacts and Coil
Mechanical Life	300,000 cycles
Continuous Current (200 mm ² conductor) ⁴	500A
Overload Current	See Momentary Current Carry graph
Make and Break	See DC Power Switching graph
Min Insulation Resistance	100 MΩ @ 1,000V (50 MΩ at end of life)
Contact Resistance (Max) measured at 200A	0.15mΩ
	(Typical) measured at 200A
Operate Time (Max, incl bounce)	25ms
Release Time (Max)	10ms
Shock - Functional, 1/2 Sine, 11ms	20 G Peak
Shock - Destructive, 1/2 Sine, 11ms	50 G Peak
Vibration, Sinusoidal (500-2000 Hz Peak)	15G
Operating Temperature	-40°C to 85°C (170° max terminal temperature)
Sealed Contacts	Exceeds IP69K (hermetically sealed)
Salt Fog	MIL-STD-810
PWM ECONOMIZED COIL (20°C)	
MEASURE	
Nominal Voltage	12V
Max Voltage	16V
Pick-up Voltage ³	≥9.5V
Drop-out Voltage	≤5V
Inrush Current, Max (80 ms)	4.0A
Coil Current	1.1A
Coil Power, HOLD (5v)	5.5 W
Coil Resistance	3.5-4.0 Ω

TABLE 3. PRODUCT NOMENCLATURE

	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RXX50	P Polarity Sensitive	3 PCB Mount	A 12V PWM (External)	X None



NOTES

1. Attach cables and busbars directly to the main terminal pad using the recommended install torque. Do not use washers or other materials between the contactor power terminals and the conductor.
2. Contactor may be used above Max Switching Voltage if the application does not require significant load breaking. Please contact Rincon Power for more details.
3. Pickup Voltage must be applied as a pulse. Do not ramp voltage.
4. Rigid busbar structures have the potential to induce stress into the device and can damage the hermetic seal. When using busbars, it is important to design compliance into the bus bar structure via the use of flexible laminated busbars and or by means of incorporating adjustability in adjacent bolted interfaces.

Legal Disclaimer Notice for Rincon Power, LLC Datasheet

This legal disclaimer applies to purchasers and users of products manufactured by or on behalf of Rincon Power, LLC ("Rincon"). Unless otherwise expressly indicated in writing, Rincon's products, product specifications and data sheets relating thereto are subject to change without notice. Users should check for and obtain the latest revision information and verify that such information is current and complete before placing orders for Rincon's products. Users should always verify the actual performance of the Rincon's products in their specific systems and applications.

Except as expressly set forth in the relevant purchaser order terms and conditions or applicable agreement, Rincon makes no warranty, representation or guarantee regarding the products, expressed or implied, including, but not limited to, a warranty of merchantability or fitness for a particular purpose. To the maximum extent permitted by applicable law, Rincon disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

In no event shall Rincon be liable for any incidental or consequential damages resulting from the use, misuse or inability to use the product. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory.