RXC61B1 SERIES

High Voltage Contactors

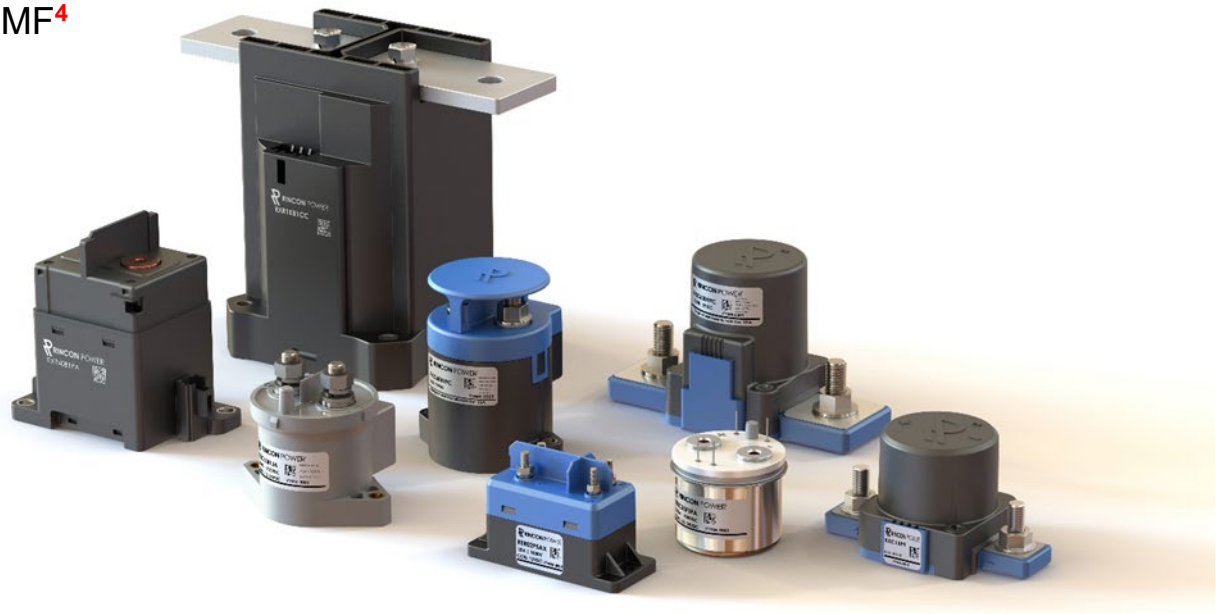
600A CONTINUOUS DUTY

1500Vdc SYSTEM VOLTAGE

FEATURES

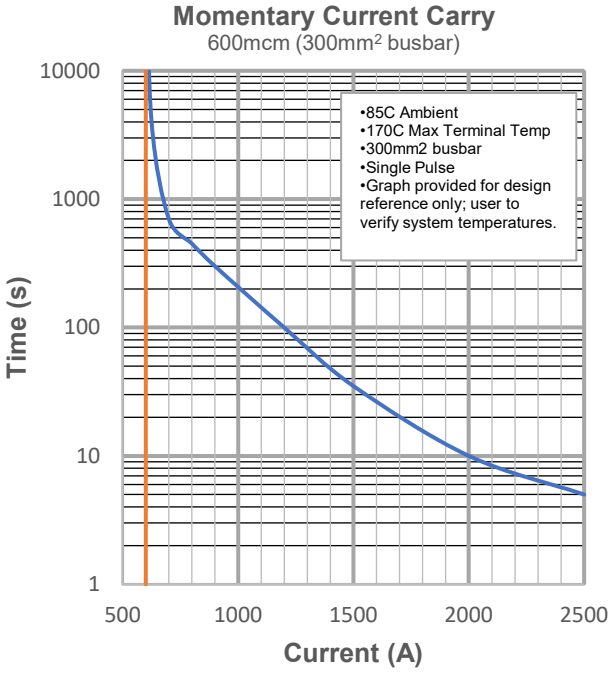
SPST Normally Open High Voltage Contactors

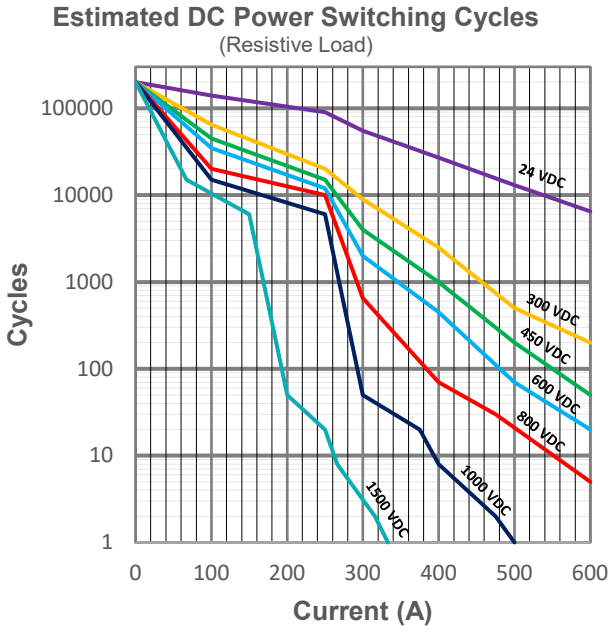
- Hermetic Ceramic Seal with gas fill for superior carry and switching performance
- Bi-Directional Power Switching
- Mechanically linked auxiliary contacts for accurate main position feedback
- Integrated coil economizer for optimized power consumption
- Integrated coil suppression with zero back EMF[4]
- Meets RoHS 2011/65/EU
- IEC60947-4-1 compliant
- Patent Pending
- Designed and Assembled in the USA



PERFORMANCE

TABLE 1. SPECIFICATIONS			
CHARACTERISTIC	**MEASURE**		
Contact Arrangement	Form X, SPST- NO		
Max Switching Voltage[2]	1500 Vdc		
Dielectric Withstand Voltage (Leakage <1mA) Between Open Contacts	4300 VRMS (60 sec)		
Between Contacts and Coil	4300 VRMS (60 sec)		
Mechanical Life	300,000 cycles		
Continuous Current (300mm^2 conductor)[5]	600A		
Overload Current	See Momentary Current Carry graph		
Withstand Current	4000A, 20ms		
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	0.3mΩ		
(Typical) measured at 200A	0.1-.15mΩ		
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°C max terminal temperature)		
Sealed Contacts	Exceeds IP69K (hermetically sealed)		
Salt Fog	MIL-STD-810		
AUXILIARY CONTACTS	**MEASURE**		
Contact Arrangement	SPDT (Normally Open + Normally Closed)		
Continuous Current	3A / 24 VDC		
Minimum Current	10mA @ 5V		
ECONOMIZED DUAL COIL (20°C)	**MEASURE**		
Nominal Voltage		12V	
Max Voltage	16V	24V	48V
Pick-up Voltage[3]	≥9V	32V	64V
Drop-out Voltage	≤6V	≥18V	≥36V
Inrush Current, Max (80 ms)	3.8A	≤12V	≤24V
Coil Current	0.65A	1.9A	0.9A
Coil Power	7.8 W	0.33A	0.16A





OPTIONS

TABLE 3. PRODUCT NOMENCLATURE

	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RXC61	**B** Bi-directional	**1** Bottom Mount	**P** 12V dual (economized)	**C** SPDT, NO+NC
			Q 24V dual (economized)	**X** None
			R 48V dual (economized)	

PRODUCT DIMENSIONS [mm]

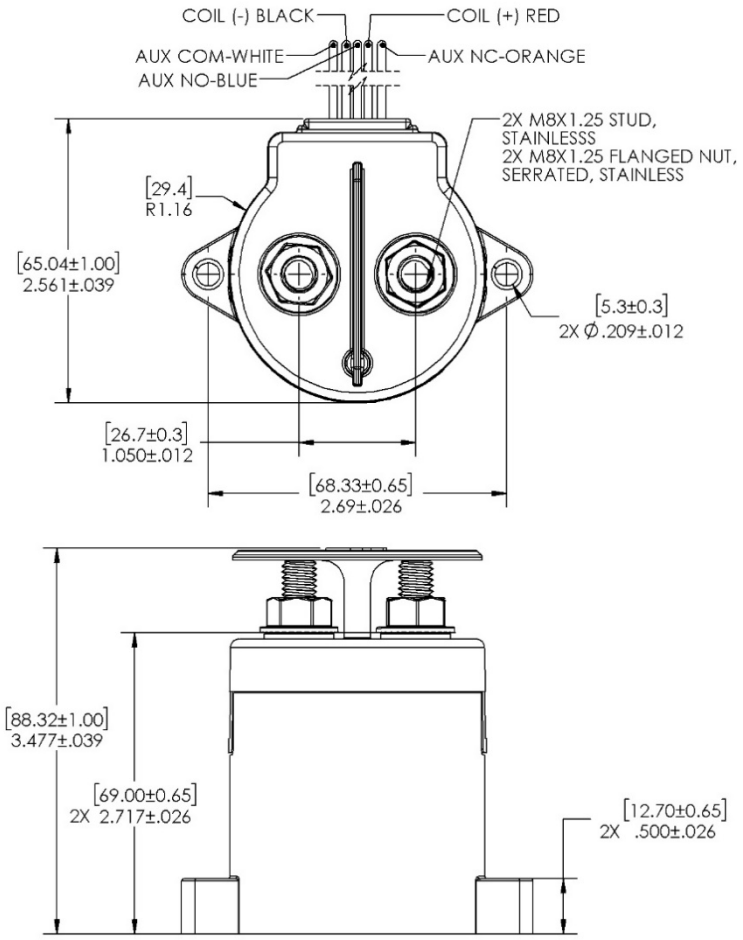
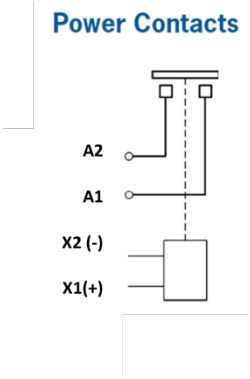


TABLE 4. DIMENSIONAL AND INSTALLATION

CHARACTERISTIC	MEASURE
Weight	1.36 lb, [620g ±10g]
Mounting Position	Any / Not Position Sensitive
Package Quantity	20 pcs
Install Torque, 2X M8 Main Terminals	80-88 in-lb, [9-10Nm]
Mounting Install Torque, 2X M5 or No. 10 Thru Hole	18-35 in-lb, [2-4Nm]
COIL / AUX WIRE	**FUNCTION**
Black	Coil GND (-)
Red	Coil POS (+)
White	Aux COM
Blue	AUX N.O.
Orange	AUX N.C.
Lead Wire Length	19 in +/- 1 in, [48 cm +/-2.5 cm]
Lead Wire Size	20AWG, Stranded
Jacket Material	PVC
UL Ratings	UL 1007, UL 1569



- 3D model available upon request

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. Dual coil economizer design: Pickup Voltage must be applied as a pulse. Do not ramp voltage.
4. Integrated coil suppression limits back EMF to 0V. External diodes or suppressors do not affect operation.
5. 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.

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