

RXC60B1 SERIES

High Voltage Contactors

600A CONTINUOUS DUTY

1000Vdc 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 EMF⁴
- Meets RoHS 2011/65/EU
- IEC60947-4-1 compliant

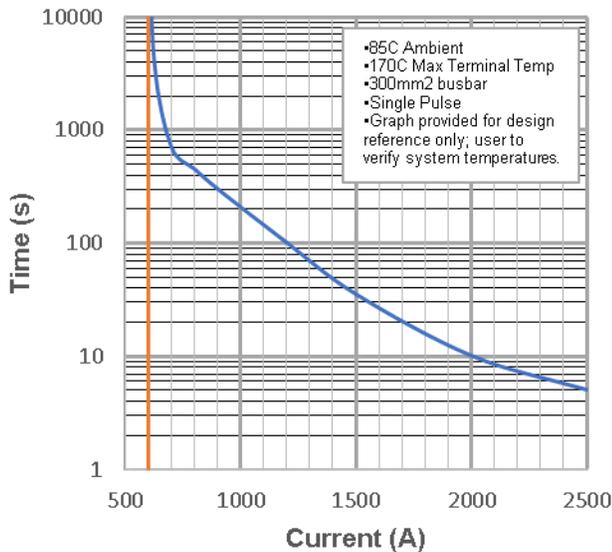


PERFORMANCE

TABLE 1. 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)	
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Mechanical Life	300,000 cycles	
	600A	
Continuous Current (300mm ² conductor) ⁵	See Momentary Current Carry graph	
Overload Current	See DC Power Switching graph	
Make and Break	100 MΩ @ 1,000V (50 MΩ at end of life)	
Min Insulation Resistance	0.3mΩ	
Contact Resistance (Max) measured at 200A	0.1-.15mΩ	
(Typical) measured at 200A	25ms	
Operate Time (Max, incl bounce)	10ms	
Release Time (Max)	20 G Peak	
Shock - Functional, 1/2 Sine, 11ms	50 G Peak	
Shock - Destructive, 1/2 Sine, 11ms	15G	
Vibration, Sinusoidal (500-2000 Hz Peak)	-40°C to 85°C (170° max terminal temperature)	
Operating Temperature	Exceeds IP69K (hermetically sealed)	
Sealed Contacts	MIL-STD-810	
Salt Fog		
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	24V
Max Voltage	16V	32V
Pick-up Voltage ³	≥9V	≥18V
Drop-out Voltage	≤5V	≤10V
Inrush Current, Max (80 ms)	3.8A	1.9A
Coil Current	0.65A	0.33A
Coil Power	7.8 W	7.8W

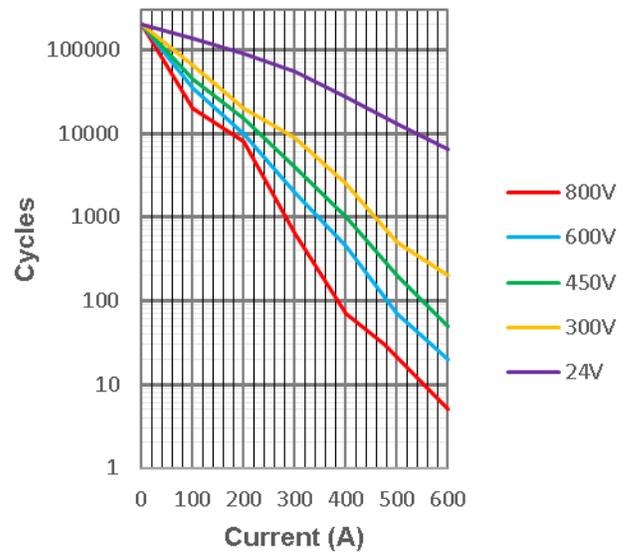
Momentary Current Carry

600mcm (300mm² busbar)



Estimated DC Power Switching Cycles

(Resistive Load)



OPTIONS

TABLE 3. PRODUCT NOMENCLATURE				
	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RXC60	B Bi-directional	1 Bottom Mount	P 12V dual (economized)	C SPDT, NO+NC
			Q 24V dual (economized)	X None

PRODUCT DIMENSIONS [mm]

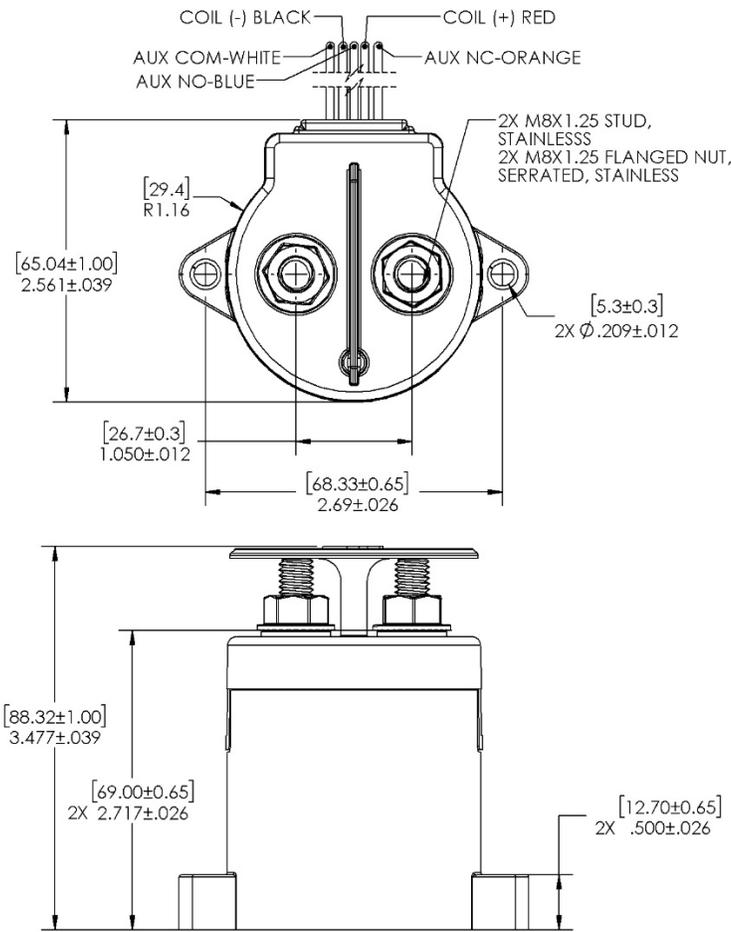
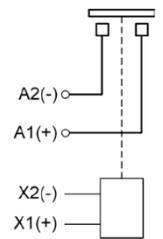


TABLE 4. DIMENSIONAL AND INSTALLATION	
CHARACTERISTIC	MEASURE
Weight	1.36 lb, [620g ±10g]
Mounting Position	Any / Not Position Sensitive
Package Quantity	20 pcs
Install Torque, 2X M8 Main Terminals	80-88 in-lb, [9-10Nm]
Mounting Install Torque, 2X M5 or No. 10 Thru Hole	18-35 in-lb, [2-4Nm]
COIL / AUX WIRE	FUNCTION
Black	Coil GND (-)
Red	Coil POS (+)
White	Aux COM
Blue	AUX N.O.
Orange	AUX N.C.
Lead Wire Length	15 in [38 cm]
Lead Wire Size	20AWG, Stranded
Jacket Material	PVC
UL Ratings	UL 1007, UL 1569

Power Contacts



- 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.