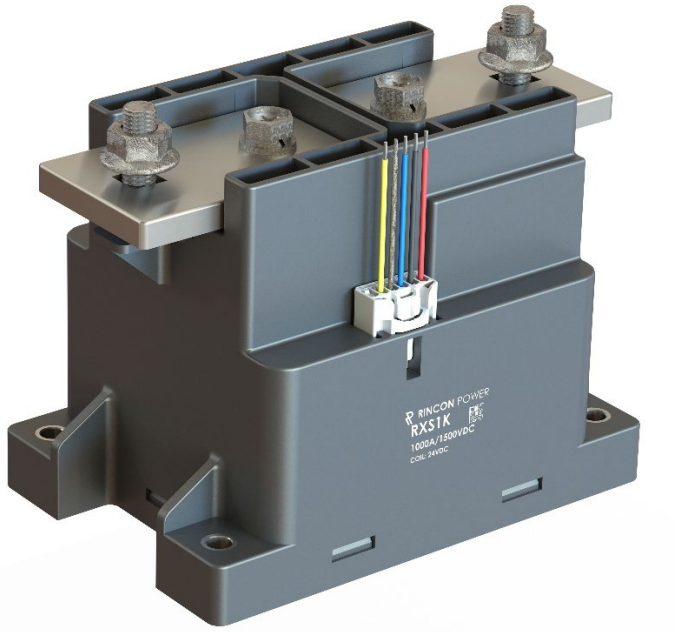
RXS1K SERIES

High Voltage Contactors

1000A CONTINUOUS DUTY

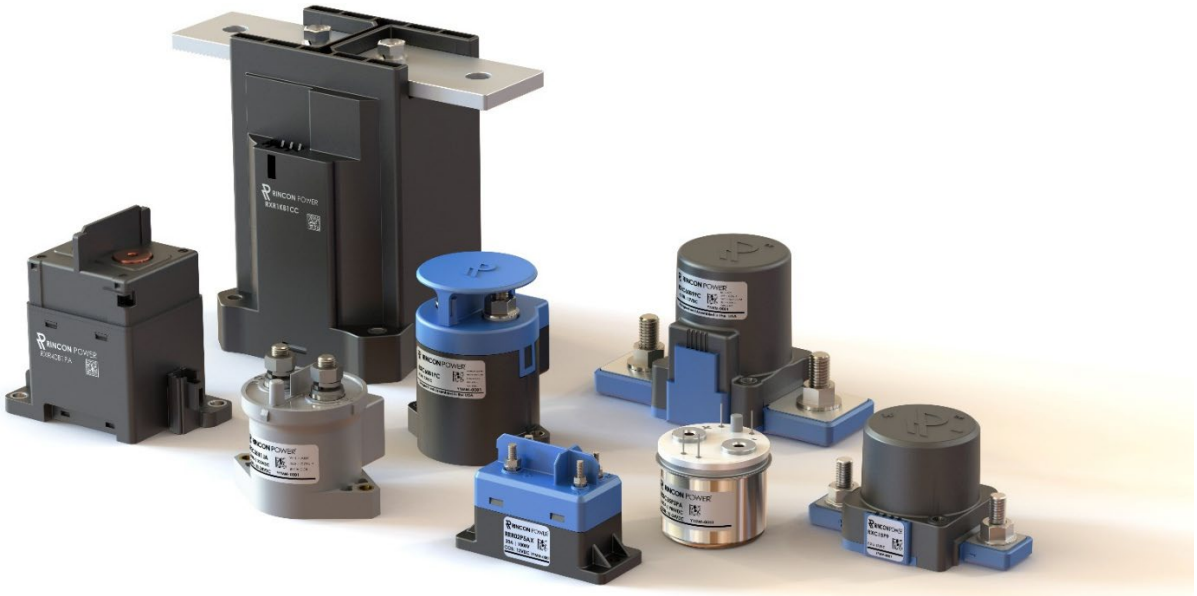
1500V SYSTEM VOLTAGE



FEATURES

SPST Normally Open High Voltage Contactors

- Hermetic Ceramic Seal with gas fill for superior carry and switching performance
- Bi-Directional main contacts
- Mechanically linked SPDT auxiliary contacts for accurate main position feedback
- Meets RoHS 2011/65/EU
- RoHS / REACH compliant
- UL 60947-4 pending



PERFORMANCE

TABLE 1. SPECIFICATIONS			
CHARACTERISTIC	**MEASURE**		
Contact Arrangement	Form X, SPST- NO		
Max Switching Voltage[2]	1,500 VDC		
Dielectric Withstand Voltage (Leakage <1mA) Between Open Contacts	5,400 VRMS		
Dielectric Withstand Voltage (Leakage <1mA) Between Contacts to Coil	5,400 VRMS		
Mechanical Life	500,000 cycles		
Continuous Current (600mm^2 conductor)	1000A		
Overload Current 90 seconds 15 seconds	2,000A 3,500A		
Short Circuit Withstanding 2 milliseconds	10,000A		
Make and Break	See Table 2		
Min Insulation Resistance	100 Mohm @ 1,000V (50 Mohm at end of life)		
Contact Resistance (Max) measured at 1,000A	0.15 mOhm		
Operate Time (Max, incl bounce)	90ms		
Release Time (Max)	30ms		
Shock - Functional, 1/2 Sine, 11ms	10 G Peak		
Vibration, Sinusoidal (500-2000 Hz Peak)	6G		
Operating Temperature	-40˚C to 85˚C (180° 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	2A / 24 VDC		
Minimum Current	10mA @ 8V		
COIL (20°C)			
Nominal Voltage	12VDC	24VDC	48VDC
Max Voltage	16V	32V	64V
Pick-up Voltage[3], Max	9V	18V	36V
Drop-out Voltage	>1.2V	>2.4V	>4.8V
Coil Current (pick-up) – max 300ms	4.2A	2.1A	1.1A
Coil Current (hold) - continuous	0.9A	0.45A	0.22A
Coil Power (hold)	10W	10W	10W
Coil Back EMF (coil suppressed via TVS SMAJ48CA)	55V	55V	55V

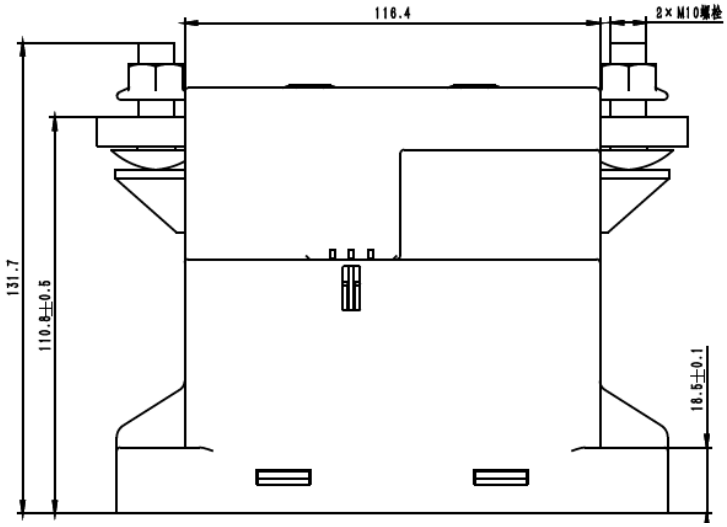
TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK)		
BI-DIRECTIONAL		**CYCLES** (1 cycle = 1 make + 1 break)
VOLTAGE	**CURRENT**	
400V	5,000A	5 (BREAK only)
1,000V	600A	5,000
1,000V	800A	500 (BREAK only)
1,000V	3,000	3 (BREAK only)
1,200V	500A	5,000
1,500V	800A	200 (BREAK only)
1,500V	1,000A	50 (BREAK only)

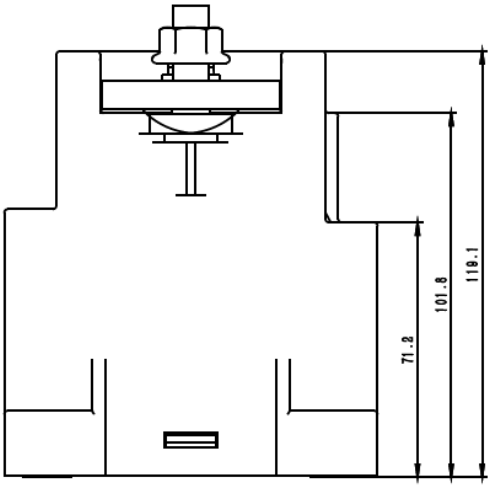
OPTIONS / ORDERING KEY

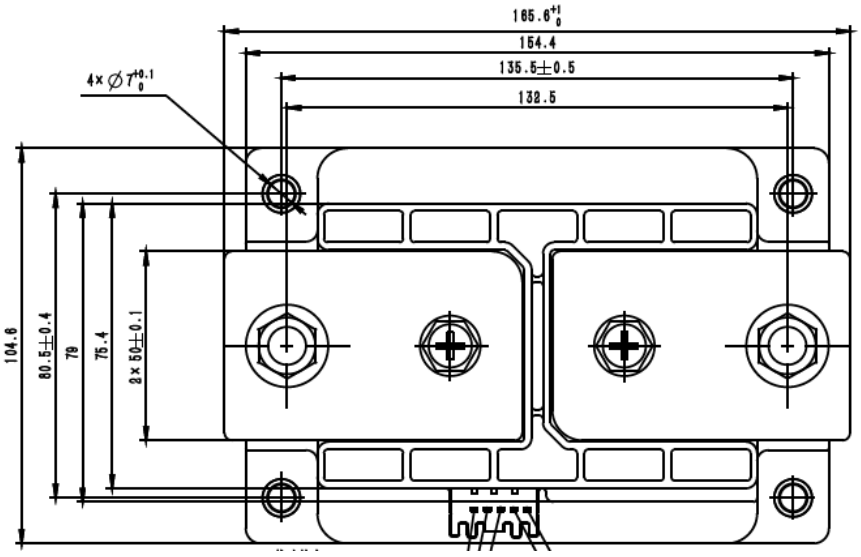
TABLE 3. PRODUCT NOMENCLATURE

	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RXS1K	**B** Bi-directional	**1** Bottom Mount	**P** 12VDC dual coil	**C** SPDT, NO+NC
			Q 24VDC dual coil	
			R 48VDC dual coil	

PRODUCT DIMENSIONS [mm]







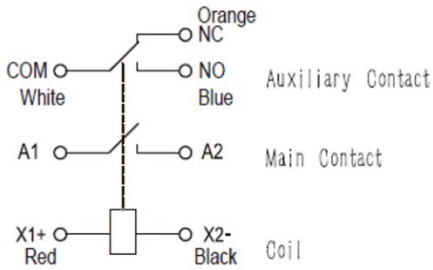


TABLE 4. DIMENSIONAL AND INSTALLATION

CHARACTERISTIC	MEASURE
Weight	7.1 lb, [3,230g]
Coil Connection	Wires, 20AWG, 30cm length, UL3266
Housing Material	Zytel FR50
Busbar	Copper, Nickel plated
Mounting Position	Any / Not Position Sensitive
Package Quantity	3 per box
Mounting Install Torque, 4X M6	50-65 in-lb, [6-8Nm]

NOTES

1. Attach cables and busbars directly to the main terminal pad. Do not use washers or other materials between the contactor power terminals and the conductor.
2. Continuous current tested with 85°C temperature rise at the power terminals. Terminal temperature should be limited to 180°C
3. Contactor is operated by a coil that changes resistance with temperature: Maximum coil voltage will be lower than indicated at temperatures above 25°C, and higher than indicated at temperatures below 25°C.
4. Nominal Coil Voltage for Pick-up Current, Coil Current and Coil Power specifications, Current/Wattage will be lower than indicated at temperatures above 25°C and higher than indicated at temperatures below 25°C.
5. Pick-up Voltage and Drop Out Voltage will be lower than indicated at temperatures below 25°C and higher than indicated at temperatures above 25°C.
6. 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.