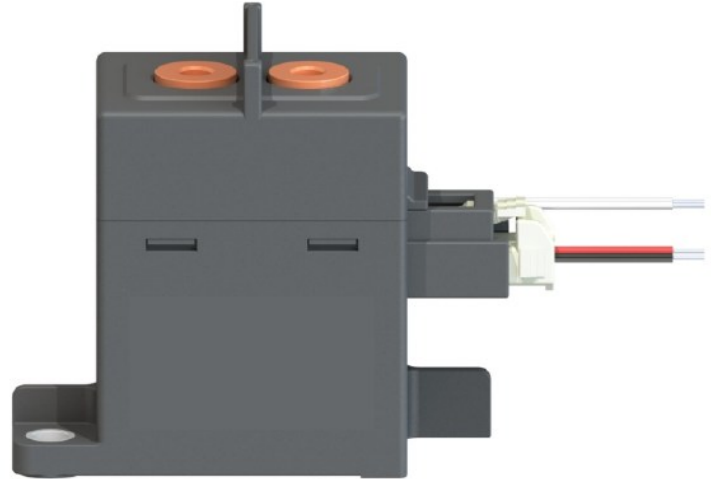


RXR21 SERIES

High Voltage Contactors

200A CONTINUOUS
DUTY

1500VDC SYSTEM
VOLTAGE



DESCRIPTION

The RXR21 Series are ceramic-sealed high voltage DC contactors designed for system-level DC power switching applications requiring elevated voltage capability in a rectangular form factor. Rated for continuous currents up to 200A and system voltages up to 1500VDC, the RXR21 Series delivers reliable bi-directional DC switching performance with a robust ceramic seal for improved environmental resistance compared to epoxy-sealed alternatives.

Capable in 1500V systems, the RXR21 series is suitable for higher voltage energy storage systems, charging infrastructure subsystems, and industrial DC power control applications where ceramic sealing and rectangular packaging are preferred.

FEATURES

SPST Normally Open High Voltage DC Contactor

- Ceramic-sealed DC contactor construction
- Rectangular form factor for system-level integration
- Bi-directional DC power switching
- SPST Normally Open contact arrangement
- Continuous current rating up to 200A
- System voltage rating up to 1500VDC
- Optional auxiliary contacts
- Meets RoHS 2011/65/EU and REACH compliance

TYPICAL APPLICATIONS

- Battery energy storage systems (BESS)
- DC charging infrastructure subsystems
- Industrial DC power distribution
- Renewable energy power conversion systems
- Auxiliary DC power switching
- System-level DC control applications

For factory-direct technical support and application assistance:

Call +1 805 456 6424

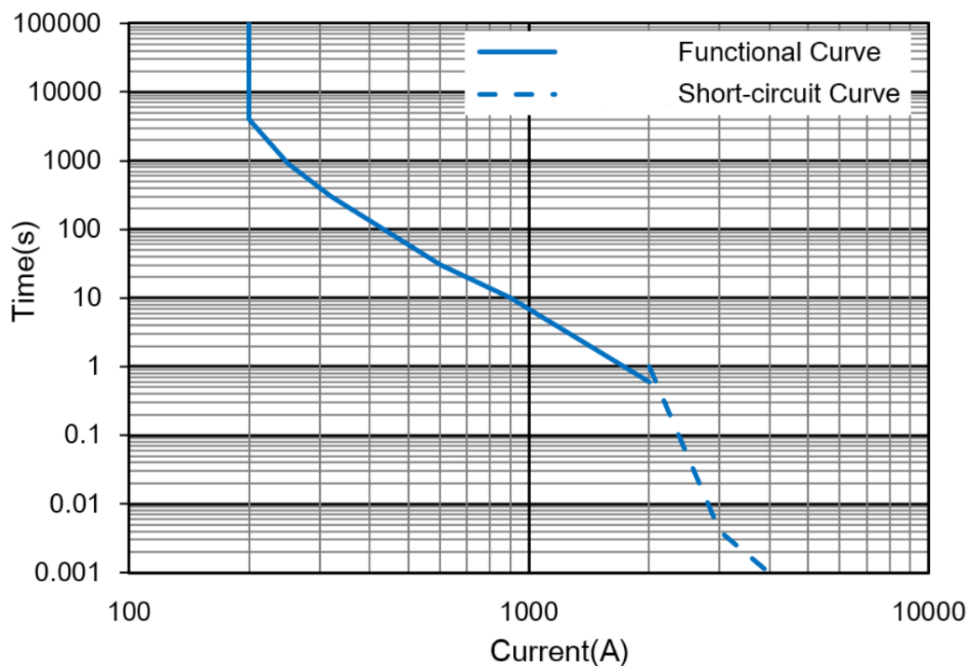
Email info@rinconpower.com

Visit <https://www.rinconpower.com/contact-us>

PERFORMANCE

TABLE 1. SPECIFICATIONS

CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST NO
Max Switching Voltage ¹	1,500 VDC
Dielectric Withstand Voltage	3,500 VAC, 1 minute contacts to coil
	5,000 VDC, 1 minute across open contacts
Continuous Current (60mm ² conductor) ²	200A
Overload Current 30 seconds	600A
10 minutes	300A
Fault Interrupt (450V, 1 cycle)	2,000A
Max Short Circuit Current -5ms	3,500 A
Min Insulation Resistance	1,000 Mohm @ 500VDC
Contact Resistance (Typical)	0.15 mohm
Operate Time (Max, incl bounce)	30ms
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 (limit terminal temp to 180°C) ³
Max Terminal Temperature ³	180°C
Ingress Protection	Exceeds IP69, (Hermetically sealed)
Mechanical life	200,000 cycles
AUXILIARY CONTACTS (optional)	MEASURE
Contact Arrangement	Normally Open (SPST)
Aux contact current rating	2A
COIL (20° C)	MEASURE
Nominal Voltage	12 VDC 24 VDC 48 VDC
Pick-up Voltage (Max) ⁴	9 VDC 18 VDC 36VDC
Drop-out Voltage (Min) ⁴	1.2 VDC 2.4 VDC 4.8 VDC
Max Voltage (continuous) ⁵	16 VDC 32 VDC 64 VDC
Coil Power at Nominal Voltage ⁶	6 Watt 6 Watt 6 Watt


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

BI-DIRECTIONAL VERSION		CYCLES 1 cycle = 1 make + 1 break
VOLTAGE	CURRENT	
450V	200A	2,000
800V	200A	500
1000V	150A	500 (BREAK ONLY)
800V	1000A	1 cycle (BREAK ONLY)

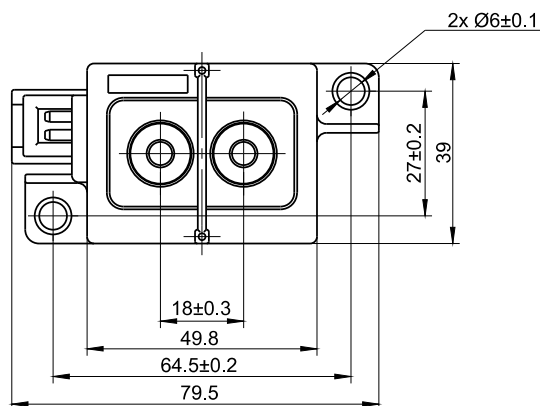
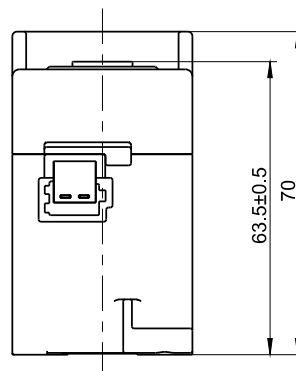
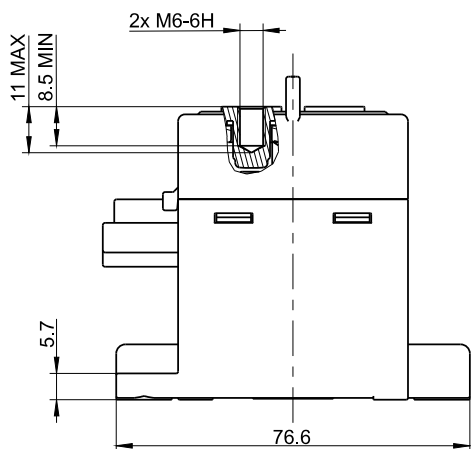
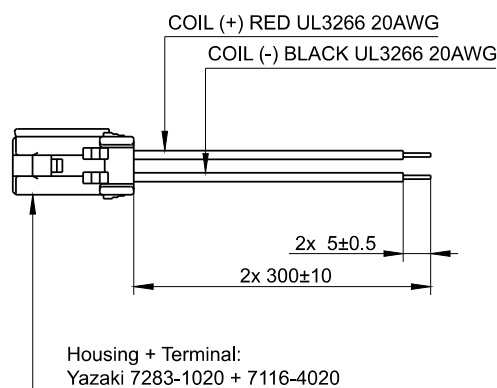
OPTIONS

TABLE 3. PART NUMBER CONFIGURATION

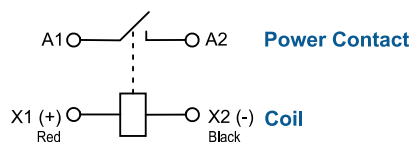
SERIES	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RXR21	B Bi-directional	1 Bottom Mount	A 12V single coil	X None
			B 24V single coil	A Normally open (SPST)
			C 48V single coil	

Available Part Numbers: RXR21B1AX, RXR21B1BX, RXR21B1CX, RXR21B1AA, RXR21B1BA, RXR21B1CA

PRODUCT DIMENSIONS [mm]

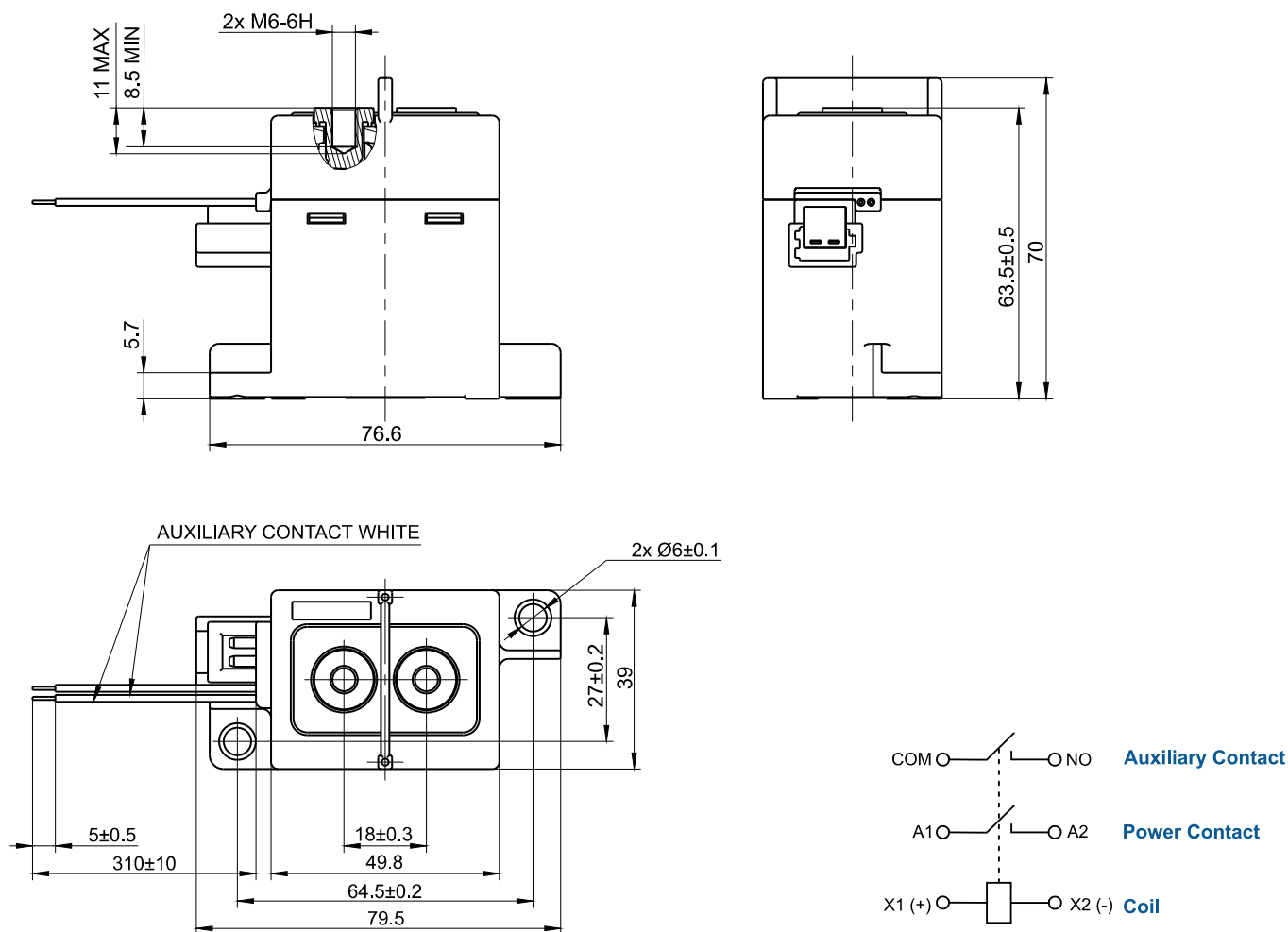

COIL CONNECTOR (OPTIONAL)


3D model available upon request


TABLE 4. DIMENSIONAL AND INSTALLATION

CHARACTERISTIC	MEASURE
Weight	350g (0.77 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	20 each
Install Torque M6 Main Terminals ²	6-8Nm (53-70 in-lb)
Install Torque M5 housing / mount	3-4Nm (26-36 in-lb)

Auxiliary Contact Version



3D model available upon request

NOTES

1. 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.
2. 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.
3. Continuous current tested with 85°C temperature rise at the power terminals. Terminal temperature should be limited to 180°C.
4. 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.
5. 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.
6. 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.

Legal notice: This datasheet is subject to Rincon Power's Product Datasheet Legal Disclaimer.

<https://tcs.rinconpower.com/product-datasheet-legal-disclaimer.pdf>