

# REC50 SERIES

High Voltage Contactors

**500A** CONTINUOUS DUTY

**1500V** SYSTEM VOLTAGE



## FEATURES

### SPST Normally Open High Voltage Contactors

- Hermetic seal with gas fill
- Auxiliary contacts – for main position feedback
- Integrated coil economizer to reduce coil holding power
- Meets RoHS 2011/65/EU
- UL recognized (File E536110)



**PERFORMANCE**

TABLE 1. SPECIFICATIONS	
CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST NO
Max Switching Voltage	1,500 VDC
Dielectric Withstand Voltage Across Open Contacts	4,500 VAC, 1 minute 4,500 VDC, 1 minute
Continuous Current (250mm <sup>2</sup> conductor)	500A
Overload Current	1 minute: 1,000A 30 seconds: 2,000A
Make and Break	See table
Min Insulation Resistance	1,000 Mohm @ 1,000V
Contact Voltage Drop (Max)	50mV @ 100A
Operate Time (Max, incl bounce)	40ms
Release Time (Max)	12ms
Shock - Functional, 1/2 Sine, 11ms	20G
Shock - Destructive, 1/2 Sine, 11ms	50G
Operating Temperature	-40°C to 85°C
Ingress Protection	Exceeds IP69, (Hermetically sealed)
Mechanical life	200,000
AUXILIARY CONTACTS	MEASURE
Contact Arrangement	SPST
Continuous Current	3A
Minimum Current	5mA @ 8V
COIL	MEASURE
Nominal Voltage	12-36 VDC
Pick-up Voltage (Max)	9 VDC
Drop-out Voltage (Min)	5 VDC
Inrush Current (Max)	3.8A
Holding Current	0.34A @ 12 VDC 0.16A @ 24 VDC

Current Carry at 85C ambient(239mm<sup>2</sup>)

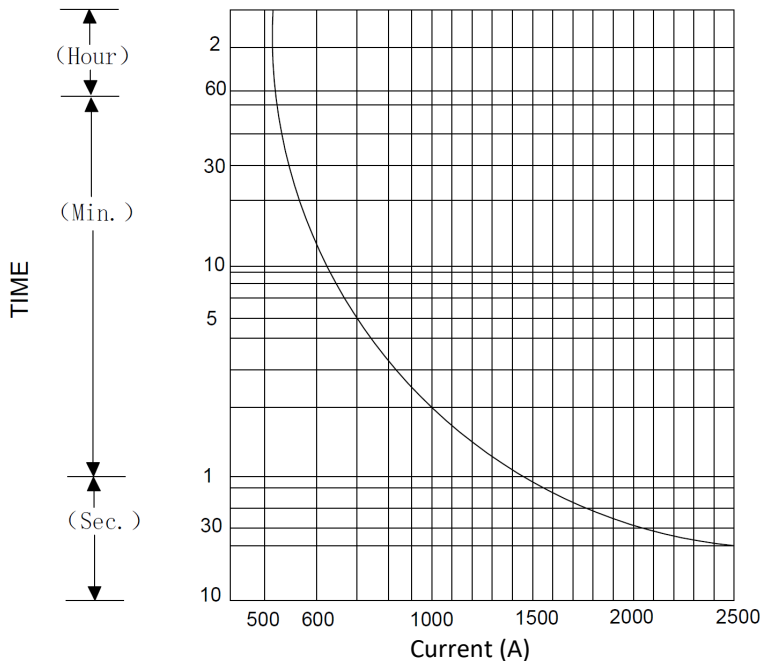


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
BI-DIRECTIONAL		CYCLES
VOLTAGE	CURRENT	(1 cycle = 1 make + 1 break)
750V	500A	1,000
1500V	200A	1,000
1000V	1000A	BREAK only – 1 cycle

OPTIONS

TABLE 3. PRODUCT NOMENCLATURE				
REC50	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
	<b>B</b> Bi-directional	<b>1</b> Bottom Mount	<b>J</b> 12-36V internal PWM	<b>A</b> SPST, Normally Open

PRODUCT DIMENSIONS [mm]

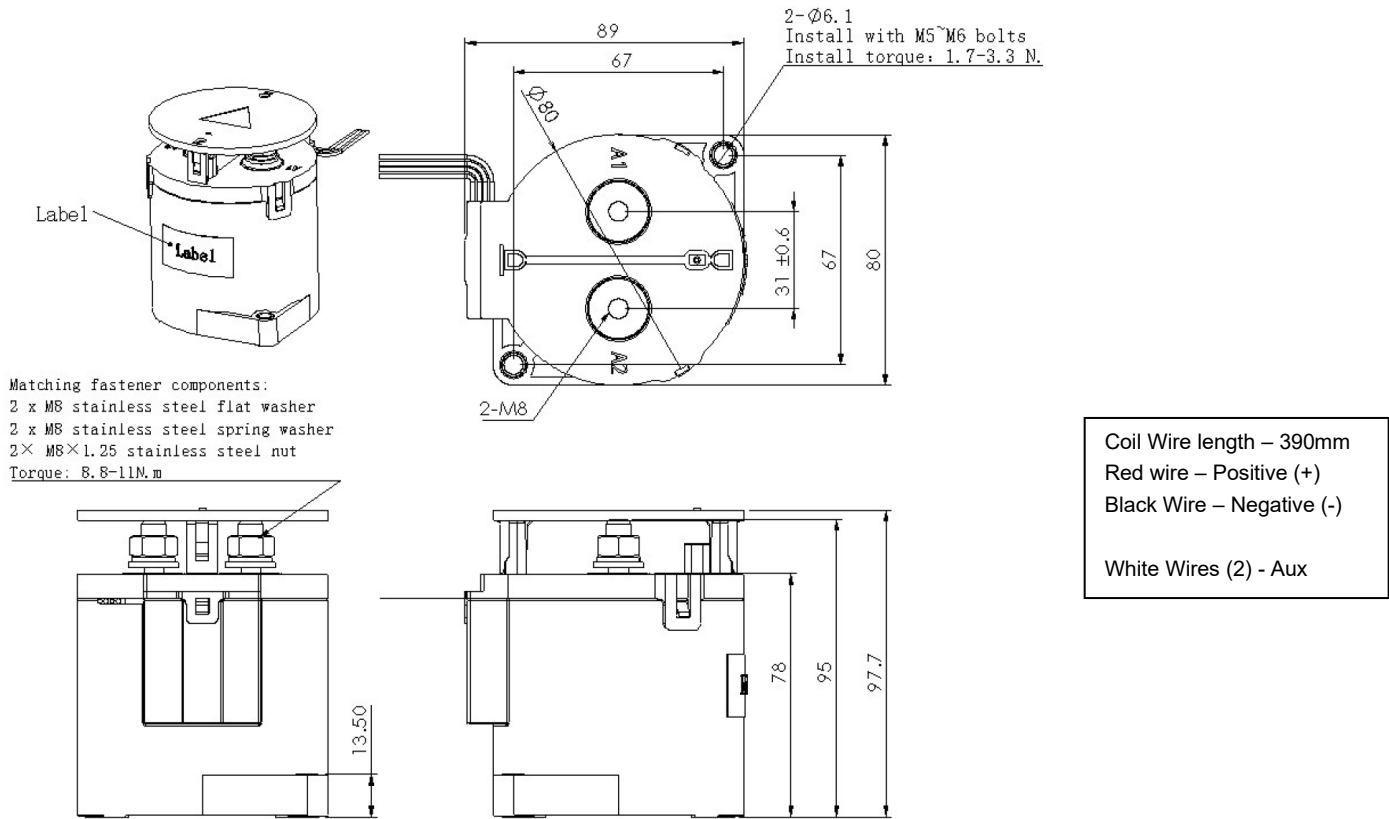


TABLE 4. DIMENSIONAL AND INSTALLATION	
CHARACTERISTIC	MEASURE
Weight	1180g (2.6 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	8 each
Install Torque	9-11Nm (80-97 in-lb)
M8 Main Terminals	

NOTES

- Polarity Sensitive versions are marked +A1 and -A2 for the power terminals. For applications that require the contactor under load, please ensure current is flowing from the +A1 to the -A2 terminal when breaking/opening under load For Bi-Directional versions the direction of current does not matter when breaking under load
- Attached cables and busbars directly to the main terminal pad using the recommended install torque. Do not use washers or other materials between the contactor and the conductor. This will ensure the lowest possible contact resistance
- Avoid excessive coil voltages. Exceeding the ratings on the datasheet may result in high coil temperature and coil failure
- 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