

REC50 SERIES

High Voltage Contactors

500A CONTINUOUS DUTY

1500V SYSTEM VOLTAGE



FEATURES

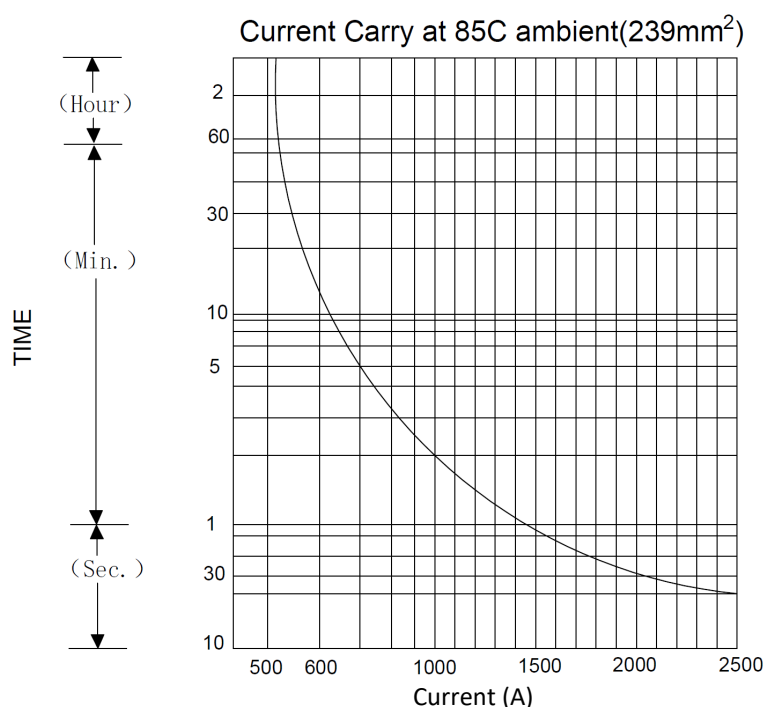
SPST Normally Open High Voltage Contactors

- Hermetic seal with gas fill
- Auxiliary contacts – for main position feedback
- Integrated coil economizer to reduce coil holding power
- Meets RoHS 2011/65/EU
- IEC60947-5-1 compliant



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 ² 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		100mA @ 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



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

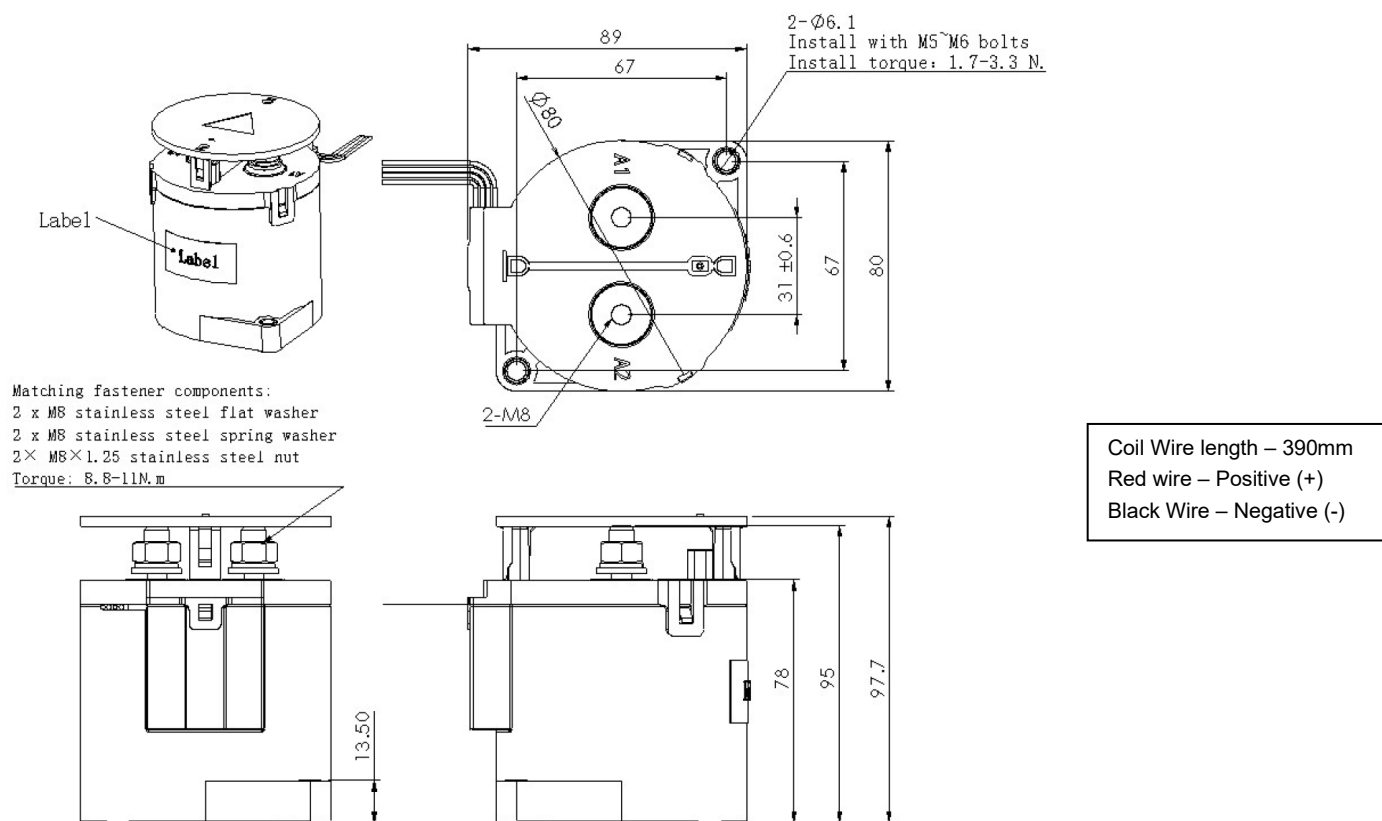
BI-DIRECTIONAL		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	CURRENT	
750V	500A	1,000
1500V	200A	1,000

OPTIONS

TABLE 3. PRODUCT NOMENCLATURE

	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
REC50	B Bi-directional	1 Bottom Mount	J 12-36V internal PWM	A 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	TBD
Install Torque	9-11Nm (80-97 in-lb)
M10 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.