REC15 SERIES

High Voltage Contactors

150A CONTINUOUS DUTY

1000V SYSTEM VOLTAGE

FEATURES

SPST Normally Open High Voltage Contactors

- Hermetic Seal with gas fill
- Optional Auxiliary Contacts – for main position feedback
- Wide range of options
- Meets RoHS 2011/65/EU
- CE certified
- UL recognized (File E536110) Please refer to UL file for specific part numbers that are recognized

PERFORMANCE

TABLE 1. SPECIFICATIONS			
CHARACTERISTIC	**MEASURE**		
Contact Arrangement	Form X, SPST NO		
Max Switching Voltage	1,000 VDC		
Dielectric Withstand Voltage Contacts to Coil Dielectric Withstand Voltage Across Open Contacts	4,000 VAC, 1 minute 4,000 VDC, 1 minute		
Continuous Current - 35mm² conductor 6AWG, 13.3mm²	150A 100A		
Overload Current 30 seconds 3 Minutes	500A 200A		
Make and Break	See table		
Max Short Circuit Current -1 second	1,250 A		
Min Insulation Resistance	1,000 Mohm @ 1,000V		
Contact Resistance (Max)	0.4mohm @ 100A | (0.25mohm typical)		
Operate Time (Max, incl bounce)	25ms		
Release Time (Max)	10ms		
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	500,000		
AUXILIARY CONTACTS	**MEASURE**		
Contact Arrangement	SPST		
Continuous Current	2A		
Minimum Current	5mA @ 8V		
COIL @ 20°C	**MEASURE**		
Nominal Voltage	12V	24V	48V
Pick-up Voltage (Max)	9.6 VDC	19.2 VDC	38.4 VDC
Drop-out Voltage (Min)	0.8 VDC	1.6 VDC	3.3 VDC
Holding Current	0.46A	0.25A	0.12A
Coil Resistance +/- 5%	26Ω	96Ω	392Ω
Coil Power	5.5W	6W	6W

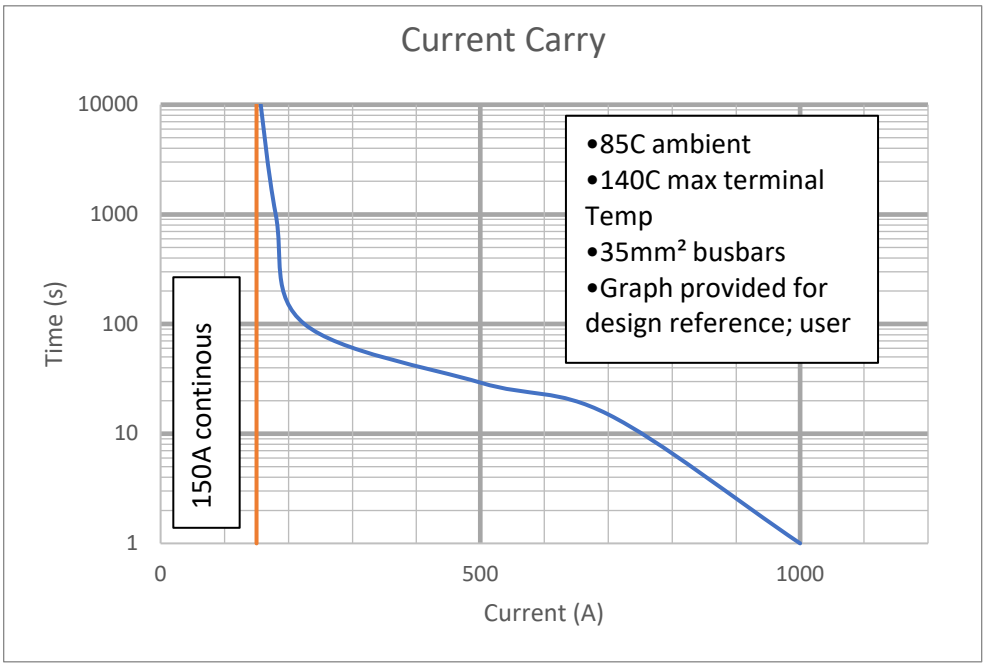

TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	**CURRENT**	
450V	100A	25,000
800V	100	7,500
800V	50A	30,000 BREAK only
1000V	100	500
320V	400A	1 cycle / fault interrupt

OPTIONS

TABLE 3. PRODUCT NOMENCLATURE				
SERIES	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
REC15	**B** Bi-directional	**1** Bottom Mount	**A** 12V single coil	**X** None
	P Polarity Sensitive		**B** 24V single coil	**A** SPST, (Normally Open)
			C 48V single coil	

PRODUCT DIMENSIONS [mm]

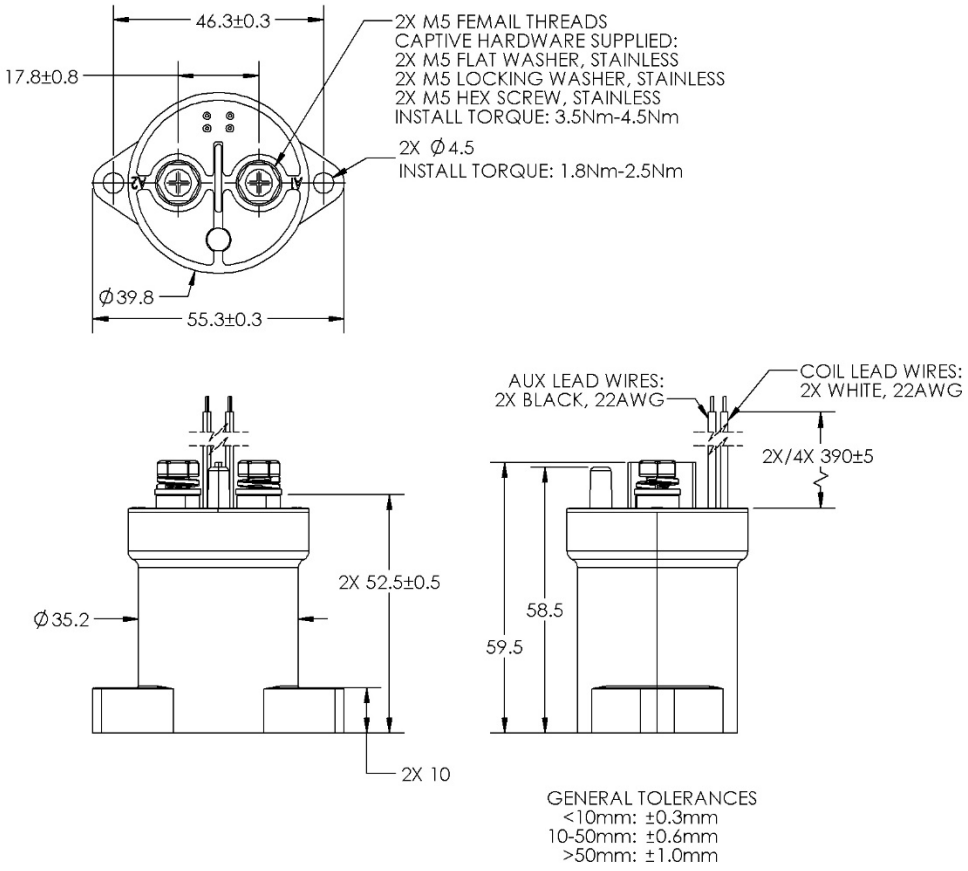

TABLE 4. DIMENSIONAL AND INSTALLATION	
CHARACTERISTIC	MEASURE
Weight	190g (0.42 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	30
Coil / Aux Wires	22 AWG
Install Torque M5 Main Terminals	2.5-4.5 Nm (22-40 in-lb)
Install Torque M4 mounting hardware	2.3 Nm

NOTES

- The auxiliary contacts are connected internally via an armature on the main contact plunger. As the main contacts close, they automatically cause the auxiliary contacts to close.
- 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.