

REC10 SERIES

High Voltage Contactors


100+A 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
- CCC 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	4,000 VAC, 1 minute		
Dielectric Withstand Voltage Across Open Contacts	4,000 VDC, 1 minute		
Continuous Current - 35mm ² conductor	150A		
6AWG, 13.3mm ²	100A		
Overload Current	500A		
30 seconds	200A		
3 Minutes			
Make and Break	See table		
Max Short Circuit Current -1 second	1,250 A		
Min Insulation Resistance	1,000 Mohm @ 1,000V		
Contact Voltage Drop (Max)	80mV @ 100A		
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

Current Carry (85C Ambient)

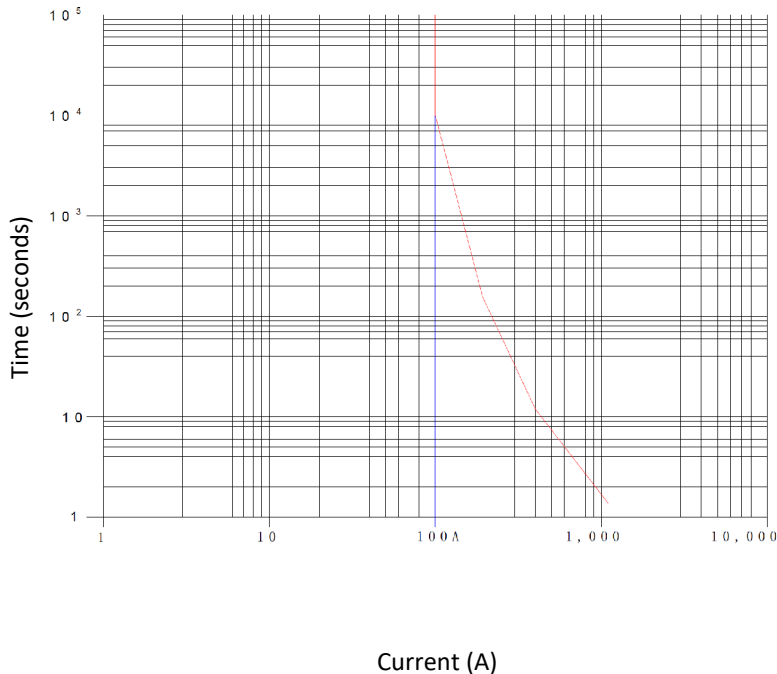


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
POLARITY SENSITIVE VERSION		CYCLES
VOLTAGE	CURRENT	(1 cycle = 1 make + 1 break)
450V	100A	8,000
450V	1,500A	1 (Fault Interrupt)
650V	100A	1,000
BI-DIRECTIONAL VERSION		CYCLES
VOLTAGE	CURRENT	(1 cycle = 1 make + 1 break)
450V	100A	6,000
650V	100A	600

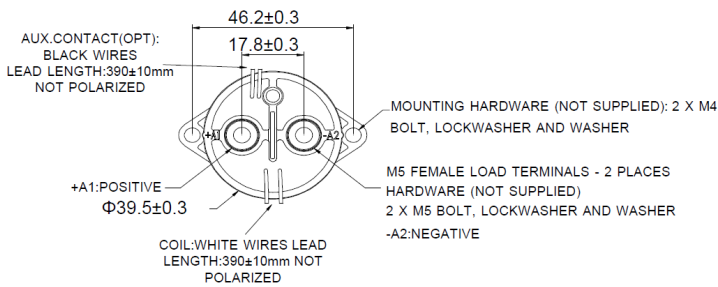
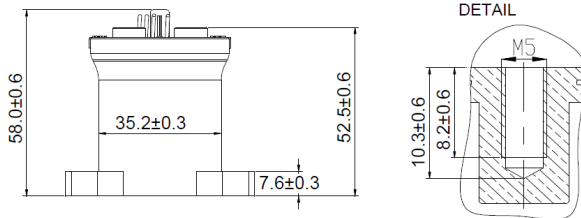
OPTIONS

TABLE 3. PRODUCT NOMENCLATURE

	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
REC10	B Bi-directional	1 Bottom Mount	A 12V single coil	X None
	P Polarity Sensitive	2 Side Mount	B 24V single coil	A SPST, Normally Open
			C 48V single coil	

PRODUCT DIMENSIONS [mm]

A: BOTTOM MOUNT



B: SIDE MOUNT

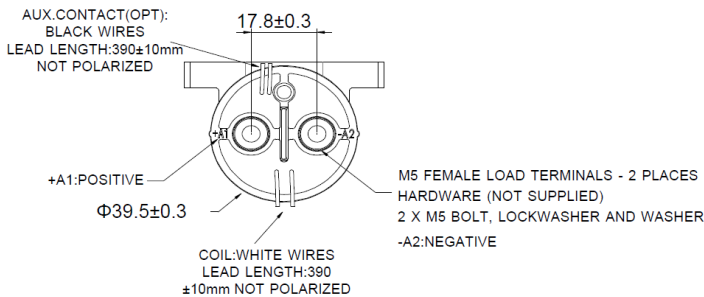
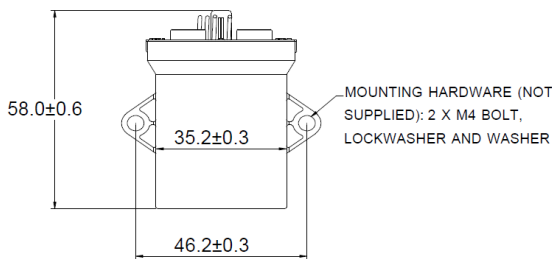


TABLE 4. DIMENSIONAL AND INSTALLATION

CHARACTERISTIC	MEASURE
Weight	190g (0.42 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	30
Install Torque M5 Main Terminals	2.5-4.5Nm (22-40 in-lb)

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