

REC37 SERIES

Hermetically Sealed Contactors

350A CONTINUOUS DUTY
1500V SYSTEM VOLTAGE



FEATURES

SPST Normally Open High Voltage Contactors

- Hermetic seal with gas fill
- Optional auxiliary contacts – for main position feedback
- Integrated coil economizer to reduce coil holding power
- Meets RoHS 2011/65/EU
- CE certified
- IEC60947-4-1 compliant



PERFORMANCE

TABLE 1. SPECIFICATIONS	
CHARACTERISTIC	MEASURE
Contact Arrangement	Form X, SPST NO
Max Switching Voltage	1,500 VDC
Dielectric Withstand Voltage Contacts to Coil	5,375 VAC, 1 minute
Dielectric Withstand Voltage Across Open Contacts	5,375 VAC, 1 minute
Continuous Current (130mm ² conductor)	400A
Overload Current	1 minute 5 Minutes
	1000A 500A
Make and Break	See table
Max Short Circuit Current -1 second	3,000 A
Min Insulation Resistance	1,000 Mohm @ 1,000V
Contact Voltage Drop (Max)	125mV @ 250A
Operate Time (Max, incl bounce)	25ms
Release Time (Max)	12ms
Shock - Functional, 1/2 Sine, 11ms	20G
Shock - Destructive, 1/2 Sine, 11ms	50G
Operating Temperature	-40°C to 75°C
Ingress Protection	Exceeds IP69, (Hermetically sealed)
Mechanical life	200,000
AUXILIARY CONTACTS	MEASURE
Contact Arrangement	SPST
Continuous Current	2A
Minimum Current	1 mA @ 8V
COIL	MEASURE
Nominal Voltage	9-36 VDC
Pick-up Voltage (Max)	9 VDC
Drop-out Voltage (Min)	6 VDC
Inrush Current (Max)	3.8A
Holding Current	0.13A @ 12 VDC 0.07A @ 24 VDC

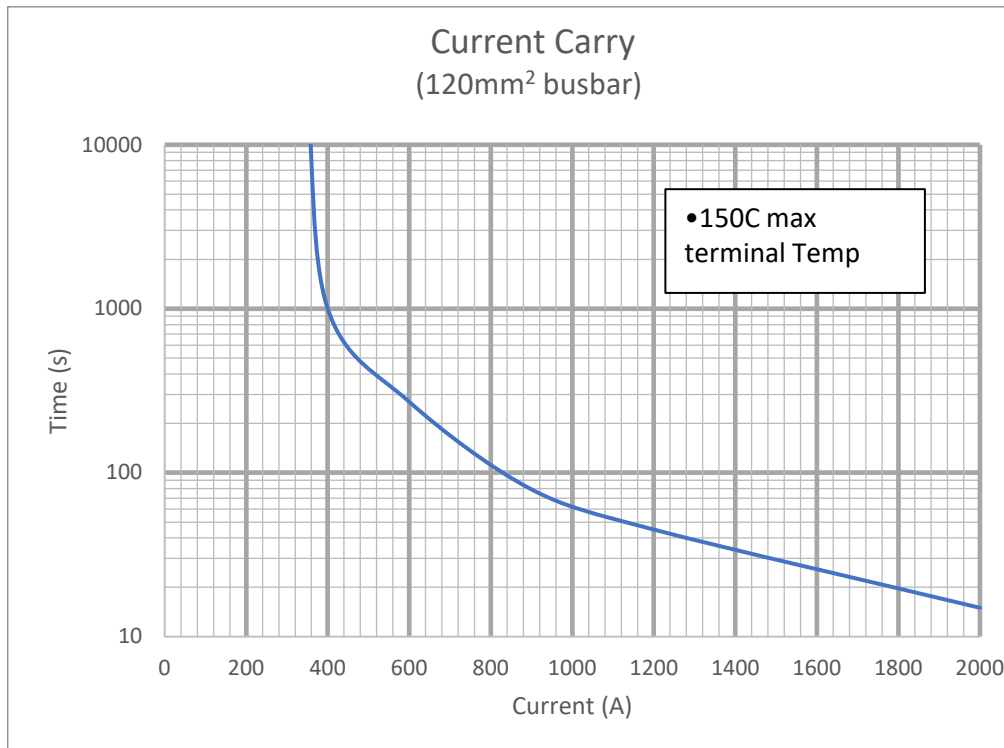


TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)		
POLARITY SENSITIVE VERSION		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	CURRENT	
450V	250A	10,000
650V	250A	2,000
1000V	250A	250
1000	100A	2,500
1500V	250A	10
1500V	10A	25,000
Bi-Directional SENSITIVE VERSION		CYCLES (1 cycle = 1 make + 1 break)
VOLTAGE	CURRENT	
450V	250A	5,000
650V	250A	500
1000V	250A	20
1000V	100A	1,000

OPTIONS

TABLE 3. PRODUCT NOMENCLATURE

	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
REC37	P Polarity Sensitive B Bi-Directional	1 Bottom Mount	J 9-36V integrated PWM	X None A Normally Open B Normally Closed ¹

¹ NC aux contacts only available on the polarity sensitive version

² K coil only available as REC37P1KX variant

PRODUCT DIMENSIONS [mm]

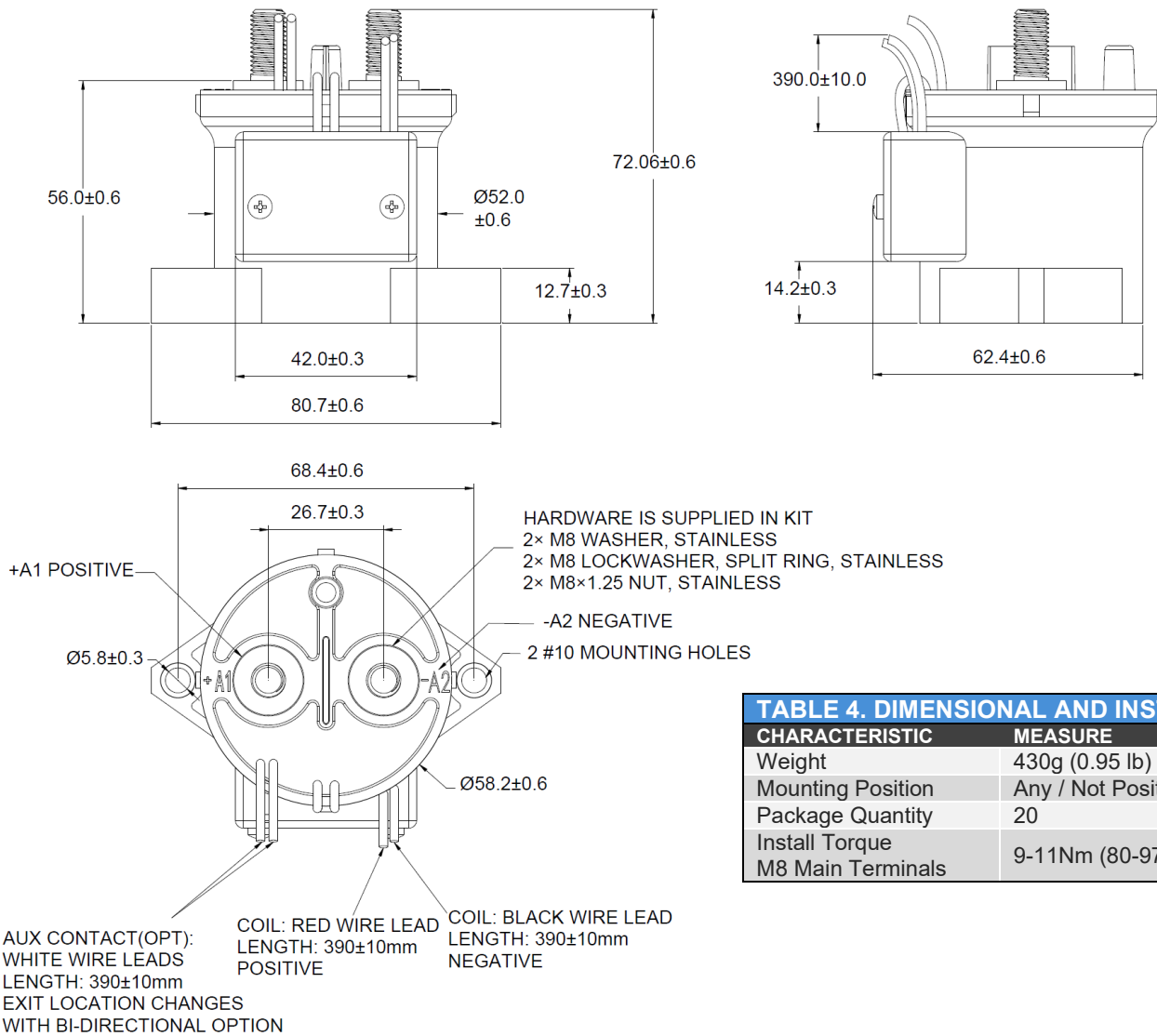


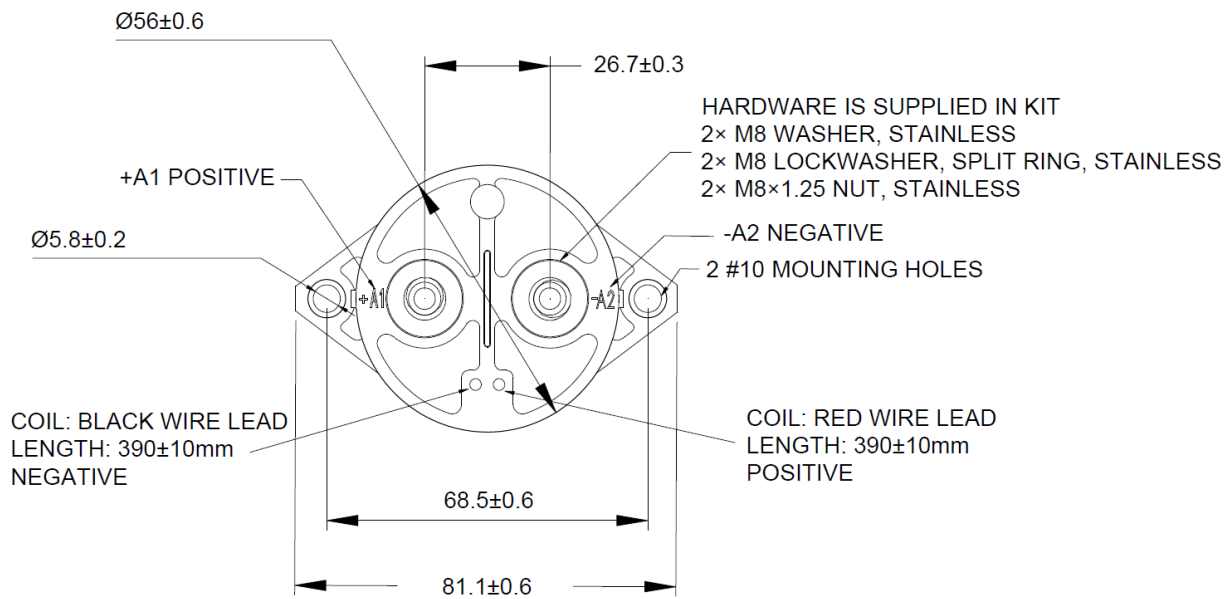
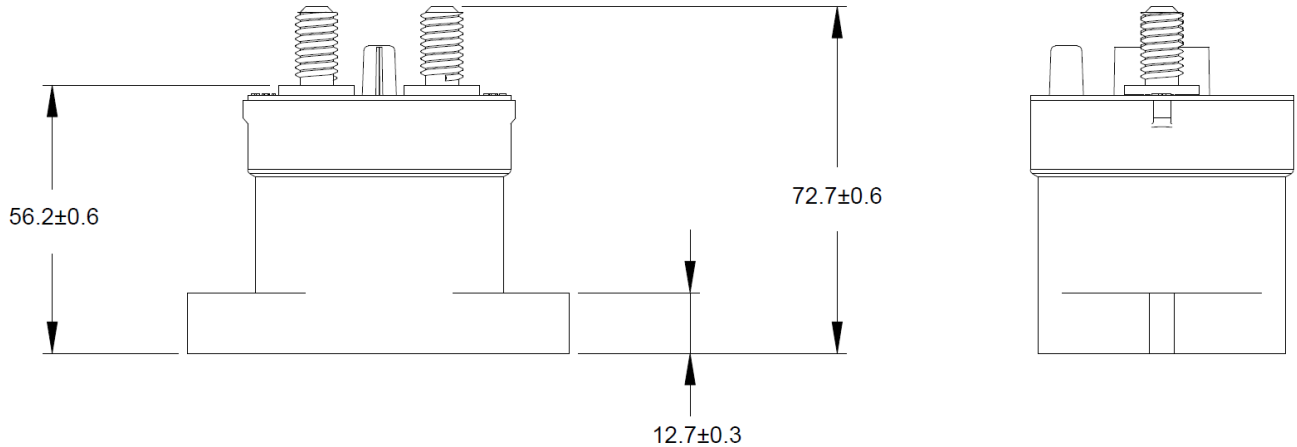
TABLE 4. DIMENSIONAL AND INSTALLATION

CHARACTERISTIC	MEASURE
Weight	430g (0.95 lb)
Mounting Position	Any / Not Position Sensitive
Package Quantity	20
Install Torque	9-11Nm (80-97 in-lb)
M8 Main Terminals	

Internal Coil Economizer Version

TABLE 5. PRODUCT NOMENCLATURE				
	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
REC37	P Polarity Sensitive	1 Bottom Mount	K 9-36V internal PWM	X None

PRODUCT DIMENSIONS [mm]



Auxiliary contacts are not an option for the REC37 version with internal economizer (K coil) or the PCB mountable version

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.
- 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.
- 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.
- 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.
- 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.