## SRAC2

## AC Input Step Motor Drive

## Requirements

To use the SRAC2 Step Drive, the following items are needed:

- Universal AC input of 80 to 265 VAC
- AC input voltage must be selected by switch
- Pulse \& Direction signal
- A compatible step motor



## Connect to Power

Use the supplied connector to connect to the AC supply according to the diagram below. Use 16 AWG wire for Line (L) and Neutral (N). Use 14 AWG for Earth Ground (G).

AC input voltage must be selected by switch. Check input voltage avoiding damage before power on!


80VAC<Input AC Voltage<135VAC:
set the switch on 115 V Status
135VAC<Input AC Voltage<265VAC:
set the switch on 230V Status
The SRAC2 has an internal 5A fast acting fuse.


Care should be taken when working with high voltages.

## Connecting to a Motor

Connect the drive to the motor. Four lead
 motors can be connected in only one way. If using a non MOONS' motor, consult the motor specs for wiring information.


8-Lead Parallel Connected


8-Lead Series Connected


## Selecting the Motor

Each position of the 16-bit rotary selects a different motor, automatically setting the configuration parameters in the drive. The SRAC2 drive comes programmed with up to 16 typical motors as factory defaults. Drives can be customized with specially selected motors when required. Available options are listed on the drive label. Each motor in the loaded database has unique settings to optimize the anti-resonance.
If the motor selection is changed, the drive power supply will need to be cycled.


## Selection

## Switches

Many operational parameters of the SRAC2 can be set or changed by position switches - either by a single switch or a combination of ON/OFF settings of 2 or more switches.


Microstepping - 4 switches for a total of 16 settings:

| Microstep(step/rev) | SW1 | SW2 | SW3 | SW4 |
| :---: | :---: | :---: | :---: | :---: |
| 200 | ON | ON | ON | ON |
| 400 | OFF | ON | ON | ON |
| 800 | ON | OFF | ON | ON |
| 1600 | OFF | OFF | ON | ON |
| 3200 | ON | ON | OFF | ON |
| 6400 | OFF | ON | OFF | ON |
| 12800 | ON | OFF | OFF | ON |
| 25600 | OFF | OFF | OFF | ON |
| 1000 | ON | ON | ON | OFF |
| 2000 | OFF | ON | ON | OFF |
| 4000 | ON | OFF | ON | OFF |
| 5000 | OFF | OFF | ON | OFF |
| 8000 | ON | ON | OFF | OFF |
| 10000 | OFF | ON | OFF | OFF |
| 20000 | ON | OFF | OFF | OFF |
| 25000 | OFF | OFF | OFF | OFF |

Idle Current(SW8) - 1 switches for a total of
2settings:

| Idle | SW8 |
| :---: | :---: |
| $50 \%$ | ON |
| $90 \%$ | OFF |

Step Input Signal Filter (SW9) - ON for 150 kHz , OFF for 2 MHz

Running current -3 switches for a total of 8 settings:

| Current(Peak) | SW5 | SW6 | sW7 |
| :---: | :---: | :---: | :---: |
| 0.6 A | ON | ON | ON |
| 0.8 A | OFF | ON | ON |
| 1.0 A | ON | OFF | ON |
| 1.2 A | OFF | OFF | ON |
| 1.6 A | ON | ON | OFF |
| 1.8 A | OFF | ON | OFF |
| 2.0 A | ON | OFF | OFF |
| 2.5 A | OFF | OFF | OFF |

Anti-Resonance(SW10) - 1 switches for a total of 2 settings:

| Option | SW10 | Inertia |
| :---: | :---: | :---: |
| 0 | ON | Low <br> $\downarrow$ <br> High |
| 1 | OFF | Hig |

Step Smoothing Filter (SW11) - ON to enable, OFF to disable

Self test (SW12) - ON for 1 rev CW/CCW 0.5 rps self test, OFF for none

## Safety Instructions

- Only qualified personnel should assemble, install, operate, or maintain this equipment.

- AC input voltage must be selected by switch.
- Read all available documentation before assembly and operation.
- It is vital to ensure that all system components are connected to earth ground.
- This product contains electrostatically sensitive components that can be damaged by incorrect handling

