

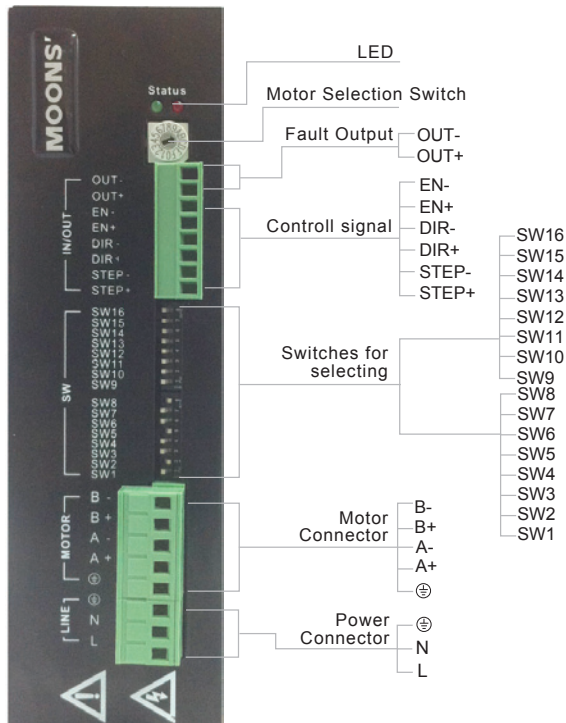
SRAC4

AC Input Step Motor Drive

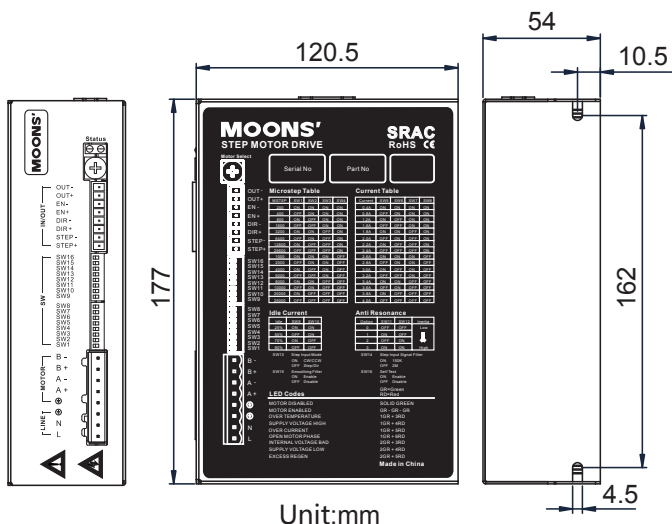
Description

The SRAC4 series drive is a high performance, cost effective 2 phase AC step drive. The design is based on advanced digital current control technology, providing high torque, low noise, and low vibration. The running current, microstep resolution, and other parameters are switch selectable.

Connections - Inputs & Outputs

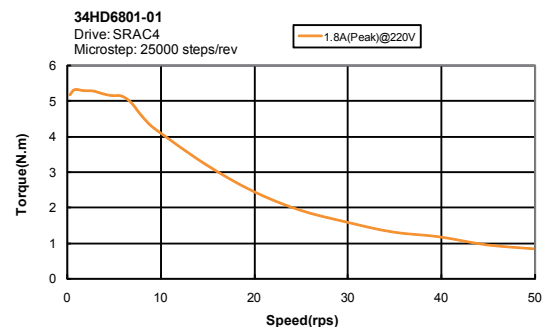
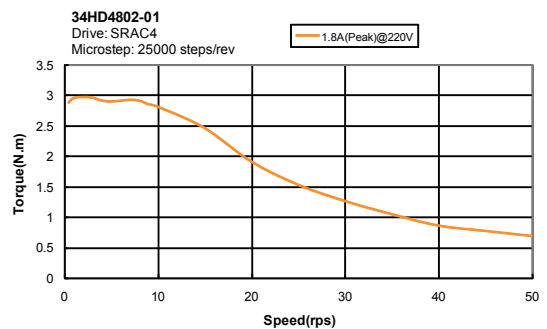
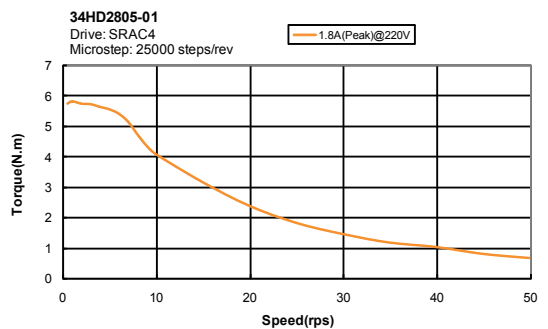
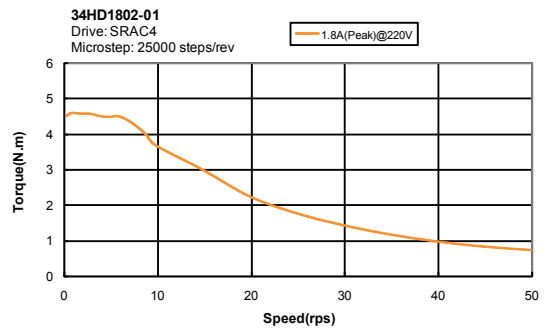
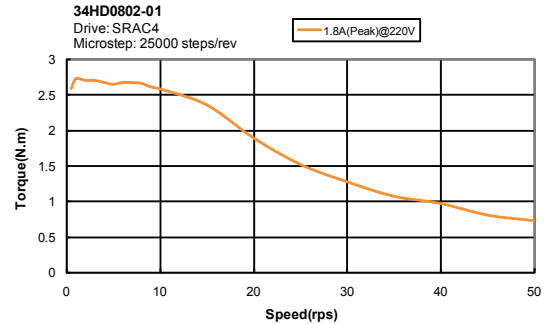


Mechanical Drawings



Torque Curves

The torque curves below were generated using some of the recommended motors.



Specifications

Electrical Specifications

Parameter	Min.	Typ.	Max.	Unit
Power Supply	80	-	265	VAC
Output Current (Peak)	0.4	-	4.0	amps
Step Frequency	2	-	2M	Hz
STEP Minimum Pulse Width Hi and Low	250	-	-	ns
DIR Minimum Pulse Width	62.5	-	-	us
Under Voltage Protection	-	80	-	VAC
Over Voltage Protection	-	295	-	VAC
STEP/DIR Input Signal Voltage	4.0	-	28	V
OUT mximum output current	-	-	100	mA
OUT maximum voltage	-	-	30	V

Environmental Specifications

Heat Sinking Method	Natural cooling or fan-forced cooling
Surrounding Air Conditions	Avoid dust, oily mist and corrosive air
Operating Temperature	0 - 40°C (32 - 104°F)
Maximum Ambient Humidity	90% non-condensing
Shock	5.9m/s ² maximum
Storage Temperature	-10 - 70°C (14 - 158°F)

Switch Selections - Parameters selectable by a switch or a combination of ON/OFF settings of 2 or more switches.

Microstep resolution - 4 switches for a total of 16 settings:

Microstep(steps/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 - 2 switches for a total of 4 settings:

Idle	SW9	SW10
25%	ON	ON
50%	OFF	ON
70%	ON	OFF
90%	OFF	OFF

Step Input Mode (**SW13**) - OFF for Step and Direction input, ON for CW/CCW input

Step Smoothing Filter (**SW15**) - ON to enable, OFF to disable

Running current - 4 switches for a total of 16 settings:

Current(Peak)	SW5	SW6	SW7	SW8
0.4A	ON	ON	ON	ON
0.8A	OFF	ON	ON	ON
1.2A	ON	OFF	ON	ON
1.6A	OFF	OFF	ON	ON
1.8A	ON	ON	OFF	ON
2.0A	OFF	ON	OFF	ON
2.2A	ON	OFF	OFF	ON
2.4A	OFF	OFF	OFF	ON
2.6A	ON	ON	ON	OFF
2.8A	OFF	ON	ON	OFF
3.0A	ON	OFF	ON	OFF
3.2A	OFF	OFF	ON	OFF
3.4A	ON	ON	OFF	OFF
3.6A	OFF	ON	OFF	OFF
3.8A	ON	OFF	OFF	OFF
4.0A	OFF	OFF	OFF	OFF

Anti-Resonance - 2 switches for a total of 4 settings:

Option	SW11	SW12	Inertia
0	ON	ON	Low
1	OFF	ON	↓
2	ON	OFF	↓
3	OFF	OFF	High

Step Input Signal Filter (**SW14**) - ON for 150 kHz, OFF for 2 MHz

Self test (**SW16**) - ON for 2 rev CW/CCW .5 rps self test, OFF for none