

## SYNCHRONOUS MOTOR FAMILY

### Series 49mm (A, AB) Direct Drive Synchronous Motor



Output Speed:	300 to 600 RPM
Insulation Class:	Class A (105°C)
Lead Wire:	4 leads 22AWG (approx. 9 inches [228.6 mm])
Operation Ambient Temp:	-10°C to +40°C (approx.)
Shaft Bearing:	Sleeve Bearing
 Recognition:	E37163, Component Time Indicating and Recording Appliances, 115Vac 60 Hz Standard Rotor
 Certification:	Card No. 42576, Motors and Generators, 115 Vac, 60 Hz, Standard Rotor, 3 watts max.
Capacitor is required for operation. Capacitor supplied with 115 Vac motors.	
Note: Typical data subject to change without notification	

Series A and AB reversible, permanent magnet direct drive 60Hz models have Standard motors are 115VAC for 60HZ operation. Other voltages and 50 Hz frequency may be specified. Rated torque with standard rotor for A and AB is 2.0oz-in [14.12 mN-m] and 2.3 oz-in [16.24 mN-m]; with Hi-Torque rotor is 2.7 oz-in [19.07 mN-m] and 3.75 oz-in [26.48 mN-m] respectively.

These motors, among the most popular in the HURST® line, are designed for heavy duty and are widely used in computer peripheral equipment, chart drives, medical instruments and a great variety of industrial applications.

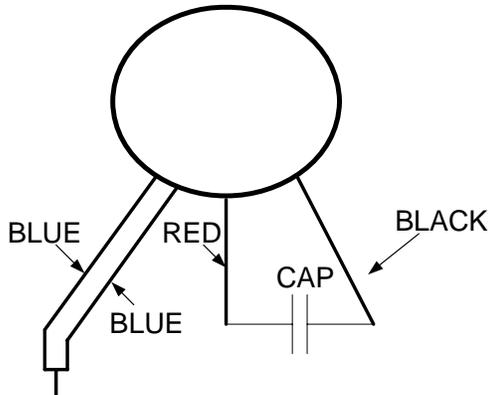
Notes:

- Motors Listed below are 115V,60 Hz models.
- Capacitors are required for operation and must be used in the circuit even if the motor is used in a unidirectional mode synchronous speeds of 300 RPM and 600 RPM respectively.

Model	Part Number	Rated Torque (oz-in)	Rated Torque (mN-m)	Output Speed (RPM)	Input Power (watts)	Voltage (VAC) 60HZ	Full Load Temp. Rise °C	Capacitor Value (mfd)	Weight (oz)	Weight (g)	Maximum Gear Train Loading	Capacitor not supplied	Hi-Torque Rotor
A	3001-001	2	14.122	300	3	115	21	0.25	6.8	193			
A	3001-003	2	14.122	300	3	24	21	5.7	6.8	193		X	
A	3001-005	2	14.122	300	3	230	21	0.062 440VAC +/-5%	6.8	193		X	
A	3009-001	2.7	19.065	300	3	115	21	0.25	6.8	193	X		X
A	3009-002	2.7	19.065	300	3	24	21	5.7 100VDC +/-10%	6.8	193		X	
AB	3005-001	2.3	16.241	600	5	115	36	0.5	6.8	193			
AB	3005-003	2.3	16.241	600	5	24	36	10 100VDC +/-10%	6.8	193		X	
AB	3011-001	3.75	26.479	600	6.5	115	43	0.62	6.8	193			

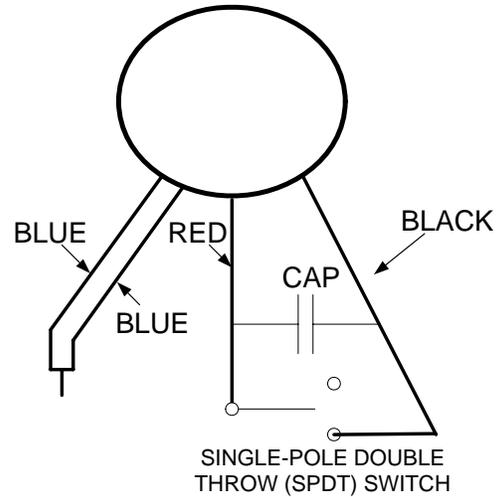


Wiring Diagram



Capacitors are non-polarized and must always be connected between the red and black leads. Always connect the (2) coil blue leads together. Connect the power supply to the blue leads and red lead to produce clockwise (CW) rotation viewing shaft end. Connect the power supply to the blue leads and black lead to produce counter-clockwise (CCW) rotation viewing shaft end.

Optional Wiring Diagram with Switch



Capacitors are non-polarized and must always be connected between the red and black leads. Always connect the (2) coil blue leads together. Connect the power supply to the blue leads and red lead to produce clockwise (CW) rotation viewing shaft end. Connect the power supply to the blue leads and black lead to produce counter-clockwise (CCW) rotation viewing shaft end.