



SYNCHRONOUS MOTOR FAMILY

Series PC-DA Reversible Hysteresis Synchronous Motor



Output Speed:	1 to 600 RPM						
Torque Range:	Up to 100 oz-in [706 mN-m]						
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							

Hurst offers two series of the DA Hysteresis Synchronous Geared motor with an integral clutch; one of them being the PC-DA (see AR-DA for other style). The clutch on both series is controlled by an actuator which can be specified for operation from either an AC or DC supply. Motors can also be built to order for operation at any AC voltage.

The gearing in PC-DA motors is designed for heavy duty application with loads up to 100 oz-in [706 mN-m]. Geared trains are fabricated from brass gears and steel pinions with hardened wheel shafts running in bronze bearings packed with grease for lifetime lubrication. In addition to the stock motors listed here, a large number of speeds are available as built-to-order items.

The series PC-DA utilizes a positive clutch which operates on the input to the gear train as shown in the figure below. The motor runs continuously and the positive clutch provides fast starting and braking action. The output shaft will start within 20 milliseconds and stop within 0.2 degrees at 1 RPM. The clutch has been life tested for over 2 million operations without failure.

Notes:

- A capacitor is required for operation and is supplied with 115V motors.
- Models listed below are designated for 115, 60 Hz operation of both motor and actuator.





Model	Part Number	Rated Torque (oz-in)	Rated Torque (mN-m)	Torque (In-Lbs)	Output Speed RPM 60Hz	Input Power (watts)	Voltage VAC 60HZ	Capacitor Value (mfd)	Weight (oz)	Weight (grams)	Maximum gear train loading	Max Breaking Angle (degrees)	Angle "A" (degrees)
PC-DA	990522	10.1	71	0.63	12	5	115	0.5	22.01	624		2.4	100
PC-DA	990527	15.0	106	0.94	8	5	115	0.5	22.01	624		1.6	100
PC-DA	990482	1.0	7	0.06	120	5	115	0.5	22.01	624		24	214.5
PC-DA	990490	2.0	14	0.12	60	5	115	0.5	22.01	624		12	166
PC-DA	990497	100.0	706	6.25	1	5	115	0.5	22.01	624	X	0.2	45
PC-DA	990505	4.0	28	0.25	30	5	115	0.5	22.01	624		6	166
PC-DA	990513	5.9	42	0.37	20	5	115	0.5	22.01	624		4	100
PC-DA	990525	12.0	85	0.75	10	5	115	0.5	22.01	624		2	100
PC-DA	990531	20.0	141	1.25	6	5	115	0.5	22.01	624		1.2	100
PC-DA	990535	30.0	212	1.88	4	5	115	0.5	22.01	624		0.8	40
PC-DA	990543	60.0	424	3.75	2	5	115	0.5	22.01	624		0.4	40













