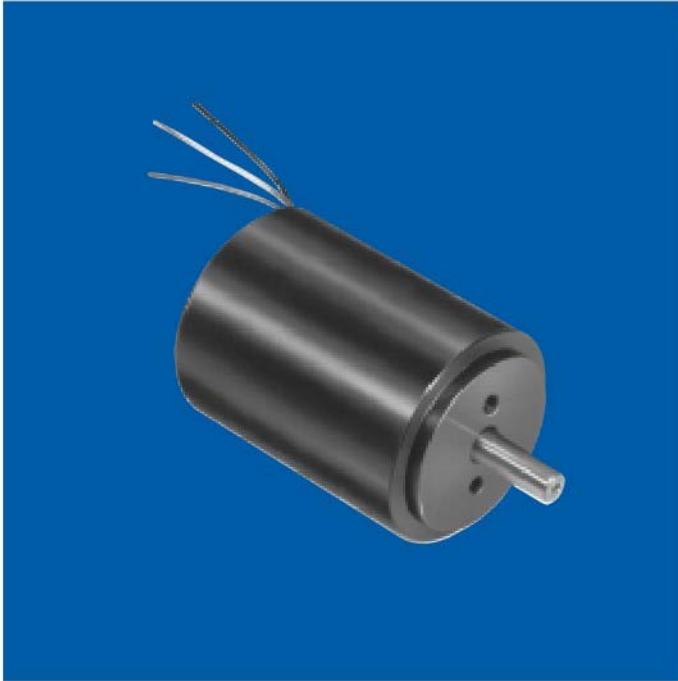


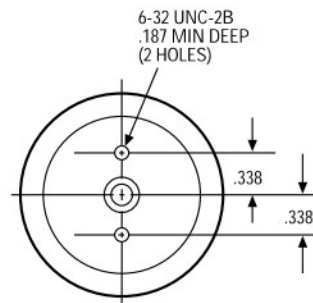
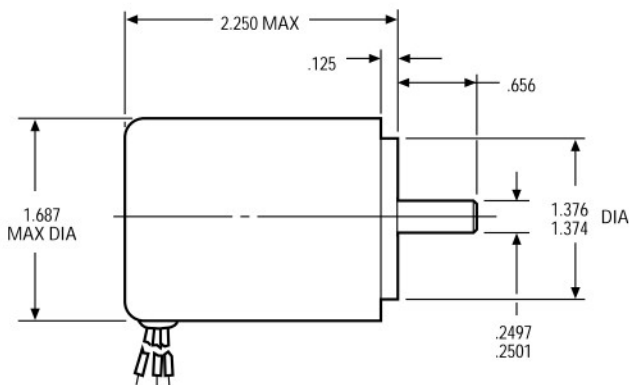
FC MOTORS

AC Hysteresis Synchronous and Induction Motors

B-2700



Dimensions



general design specification: MIL-M-7969

power rating:

Induction — Up to 2.5 oz. in.
Hysteresis Synchronous — Up to 1.2 oz. in.

voltage and frequency: 115 and 200 VAC @ 400 Hz

weight: 11.5 ounces

inertia:

Induction — 2.4×10^{-4} oz. in. sec.²
Hysteresis Synchronous — 2 Pole: 1.7×10^{-4} oz. in. sec.²
— 4 Pole: 1.4×10^{-4} oz. in. sec.²
— 6 Pole: 1.3×10^{-4} oz. in. sec.²

shaft: Precision-ground 416 stainless steel per ASTM A582.

Options: length, smaller diameter, flats, pinions, gears, holes (through or tapped), threaded ends and tapers. Type of steel used may change depending upon variation selected

bearings: Double-shielded, life-lubricated for -55°C to $+85^{\circ}\text{C}$ operation. Special lubricants available for temperature extremes

cables/leads: 8" #26 AWG leads per MIL-W-16878/4

housing: Aluminum

marking: Per MIL-STD-130

life: 200 to 1,000 hours continuous duty depending upon the voltage, frequency and number of poles

options available:

- Gear train (see B-2730 for details)
- Electromechanical brakes
- Lengths. FC motors are available in 4 lengths with output torque being proportional to length as follows:

TYPE	LENGTH (in.)	TORQUE
FC (Standard)	2.25	See Chart, opposite page
FCS	1.75	0.5 x standard torque
FCL	2.75	1.5 x standard torque
FCLL	3.25	2.0 x standard torque

B-2700

Standard Part Numbers and Data

Hysteresis Synchronous

VOLT-AGE (VAC)	FREQUENCY (Hz)	P O L E S	P H A S E	SCHEMATIC WIRING	VARIABLE LEAD COLOR		PHASING CAPACITOR		SYNC SPEED (rpm)	MAX RATED LOAD @ SYNC SPEED (oz. in.)	MIN PULL UP TORQUE (oz. in.)	MAX POWER (watts)		STANDARD PART NUMBER* TAPPED HOLE
					B	C	(μ F)	(wvac)				no load	rated load	
115	60	2	1 or 3	C	WHT	YLW	3.00	200	3,600	1.0	1.0	20	20	75A121-2
115	60	4	1 or 3	C	WHT	GRN	2.00	200	1,800	1.0	1.0	11	12	75A120-2
115	60	6	1 or 2	D	WHT	GRY	1.50	200	1,200	.8	.8	20	20	75A119-2
115	400	2	1	A		BLK	.22	400	24,000	1.0	1.0	28	40	75A1003-2
115	400	2	3	B		BLK	NOT REQ'D		24,000	1.0	1.0	23	37	75A1004-2
115	400	4	1	A		GRN	.12	500	12,000	1.0	1.0	19	24	75A1005-2
115	400	4	3	B		GRN	NOT REQ'D		12,000	1.2	1.2	21	26	75A1006-2
115	400	6	1	D	BLK	GRY	1.30	200	8,000	.5	.5	35	45	75A107-2
200	400	2	3	B		BLK	NOT REQ'D		24,000	1.0	1.0	24	38	75A1008-2
200	400	4	3	B		GRN	NOT REQ'D		12,000	1.2	1.2	21	28	75A1009-2

Note: All 3-phase voltages are line to line. MIL-STD-704 is 200V line to line

Induction

VOLT-AGE (VAC)	FREQUENCY (Hz)	P O L E S	P H A S E	SCHEMATIC WIRING	VARIABLE LEAD COLOR		PHASING CAPACITOR		MIN SPEED @ RATED LOAD (rpm)	RATED LOAD (oz. in.)	MIN PULL UP TORQUE (oz. in.)	MAX POWER (watts)		STANDARD PART NUMBER*
					B	C	(μ F)	(wvac)				no load	rated load	
115	60	2	1 or 3	C	WHT	YLW	3.00	200	3,000	1.4	1.4	18	20	75A121-1
115	60	4	1 or 3	C	WHT	GRN	2.00	200	1,300	1.0	1.0	11	12	75A120-1
115	60	6	1 or 2	D	WHT	GRY	1.50	200	600	1.0	1.0	15	17	75A119-1
115	400	2	1	A		BLK	.22	400	21,500	1.5	.8	19	50	75A1003-1
115	400	2	3	B		BLK	NOT REQ'D		22,500	2.5	2.5	10	65	75A1004-1
115	400	4	1	A		GRN	.12	500	10,000	1.5	1.5	15	31	75A1005-1
115	400	4	3	B		GRN	NOT REQ'D		11,000	2.5	2.5	12	40	75A1006-1
200	400	2	3	B		BLK	NOT REQ'D		22,500	2.5	2.5	10	65	75A1008-1
200	400	4	3	B		GRN	NOT REQ'D		11,000	2.5	2.5	12	40	75A1009-1

Note: All 3-phase voltages are line to line. MIL-STD-704 is 200V line to line

*When You Order

Units shown above are standard and may be ordered by part number. Remember to include armature winding dash number, EXAMPLE: 75A1003-2.

Schematic Wiring

