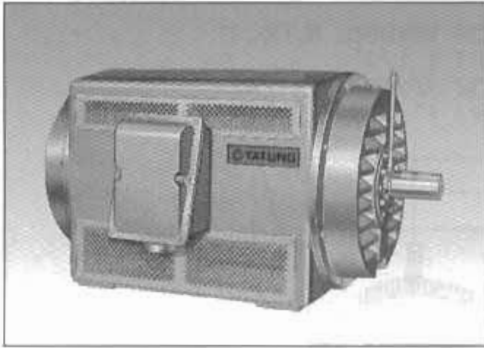


# MEDIUM VOLTAGE-WPI



- AVAILABLE FROM 100 HP TO 1750 HP.
- STATOR WINDING FORM WOUND VPI CLASS F INSULATION.
- COMPUTER-AIDED VENTILATION DESIGN.
- CONTINUOUS DUTY, 1.15 S.F.
- 3/60/2300V, 4000V, 4160V.
- WITH COPPER ROTOR BAR FOR LARGER HP RATING.

## Standard Premium Features

### 1. Extra Rugged Frame

Made from quality cast iron for maximum strength and rigidity.

### 2. Dynamically Balanced Rotor

Specially designed rotor slots minimize stray losses and improve torque.

Aluminum-bar or copper bar rotor incorporating two integral fans to ensure quiet & smooth running.

### 3. Computer-Aided Ventilation Design

The shape of the bi-directional, fan blades and the distance between fan and bracket give maximum air flow and minimize windage noise.

### 4. Oversized Bearings

Open type full grease relief systems, ball or ball & roller bearings ensure long-life and quiet operation.

### 5. Rigid Shaft

High-grade steel shaft material is used to provide sufficient strength against torque and vibration stress.

### 6. Stainless Steel Nameplate

Easy-to-read and long-life nameplate made of corrosion-free stainless steel.

### 7. Specially Designed Over Large Cast Iron Conduit Box

Made from quality cast iron, rotatable in 90° turns give plenty room to make proper connections and easy installation.

### 8. Stator Winding Insulation (Form wound V.P.I. Class F insulation)

The insulation of individual coil consists of a FINE-MICA tape which is impregnated with special resin and is highly resistant to corona.

**MEDIUM VOLTAGE-WPI**

Weather Protect Type I, 3/60/2300V, 4000V, 4160V.

Nema Design B, Class F Insulation,

40°C Ambient, Continuous Duty, 1.15 S.F.

**PERFORMANCE DATA**

HP	Full Load RPM	Frame Size	Full Load				Locked Rotor		Breakdown Torque %FLT	Rotor WR <sup>2</sup> 1b-ft <sup>2</sup>	NEMA Code Letter	APPROX NET WT. LBS.	
			Torque 1b-ft	Eff %	P.F. %	Current AT 4160V	Torque %FLT	Current (4160V) Amps					
100	3545	444TS	148	91.0	90.2	12.6	120	80	220	14	G	1600	
	1765	444T	297	91.0	87.5	13.0	140	80	220	30	G	1600	
	1165	445T	451	91.0	80.0	14.2	140	80	220	50	G	1700	
	865	445T	607	91.0	77.0	14.8	130	80	210	85	G	1700	
	685	5007N	766	90.2	72.0	15.9	130	80	210	170	G	3400	
	570	5007N	921	90.2	66.0	17.4	130	80	210	225	G	3400	
125	3550	444TS	185	91.0	90.2	15.8	120	100	220	17	G	1600	
	1765	444T	372	91.0	87.5	16.3	140	100	220	35	G	1600	
	1165	445T	563	91.0	80.0	17.8	140	100	220	62	G	1700	
	865	504T	759	91.0	77.0	18.5	130	100	210	105	G	2090	
	690	5007N	951	90.2	72.0	20.0	120	100	210	215	G	3400	
	570	5007N	1151	90.2	66.0	21.7	120	100	200	280	G	3400	
150	3555	445TS	222	91.7	90.2	18.8	110	130	210	20	C	1700	
	1770	445T	445	91.7	87.5	19.4	140	130	220	45	G	1700	
	1170	504T	673	91.7	81.5	20.8	140	130	220	75	G	2090	
	870	505T	905	91.0	77.0	22.2	130	130	210	145	G	2050	
	690	5007N	1141	91.0	74.0	23.1	130	130	200	245	G	3400	
	570	5007N	1382	90.2	68.0	25.3	130	130	200	340	G	3400	
200	3555	504TS	295	91.7	90.2	25.0	110	170	210	25	G	2090	
	1770	504T	593	91.7	87.5	25.8	130	170	220	70	G	2090	
	1170	505T	897	91.7	82.5	27.4	130	170	220	105	G	2500	
	870	5007N	1207	91.7	78.5	28.8	130	170	210	200	G	3500	
	690	5807N	1522	91.0	74.0	30.8	130	170	210	380	G	3500	
	570	5807N	1842	91.0	70.0	32.5	120	170	210	460	G	3500	
250	3560	505TS	369	92.4	91.0	30.8	110	210	210	30	C	2500	
	1775	505T	739	93.0	88.5	31.4	130	210	220	90	G	2500	
	1175	5007N	1117	92.4	83.0	33.8	130	210	220	145	G	3400	
	875	5807N	1500	92.4	78.5	35.7	120	210	210	300	G	3500	
	695	5807N	1889	91.7	75.5	37.4	110	210	200	485	G	3500	
	575	5810N	2283	91.7	72.0	39.2	110	210	190	620	C	4400	
300	3560	505TS	442	93.0	91.0	36.7	110	250	210	35	C	2500	
	1775	505T	887	93.0	88.5	37.7	120	250	220	110	G	2500	
	1175	5007N	1340	93.0	84.0	39.8	120	250	220	180	G	3400	
	875	5807N	1800	93.0	80.0	41.7	110	250	210	400	G	3500	
	695	5810N	2266	91.7	75.5	44.9	110	250	200	580	C	4400	
	575	5810N	2739	91.7	72.0	47.0	100	250	190	750	G	4400	
350	3565	5007NS	515	93.0	90.2	43.2	90	290	200	40	G	3400	
	1775	5007N	1035	93.6	89.5	43.3	120	290	220	140	G	3400	
	1175	5807N	1564	93.0	86.0	45.3	120	290	220	280	G	3500	
	875	5807N	2100	93.0	80.0	48.7	110	290	210	480	C	3500	
	695	5810N	2644	92.4	77.0	51.0	110	290	210	690	C	4400	
	575	5810N	3196	92.4	74.0	53.0	90	290	190	1050	G	4400	
400	3570	5007NS	588	93.6	91.0	48.6	90	330	200	50	G	3400	
	1775	5007N	1183	93.6	89.5	49.4	120	330	220	160	G	3400	
	1175	5807N	1787	93.6	86.0	51.4	120	330	220	320	G	3500	
	875	5810N	2400	93.0	82.5	54.0	110	330	210	585	G	4400	
	695	5810N	3022	92.4	77.0	58.2	110	330	200	750	C	4400	
	575	5810N	3652	92.4	74.0	60.6	90	330	190	1300	C	4400	
450	3570	5807NS	662	93.6	91.0	54.7	90	380	200	75	C	3500	
	1780	5807N	1327	93.6	89.5	55.6	100	380	200	180	G	3500	
	1175	5807N	2011	93.6	86.0	57.9	110	380	220	360	G	3500	
	875	5810N	2700	93.6	82.5	60.7	110	380	210	660	C	4400	
	700	6808N	3375	93.6	78.5	63.8	100	380	190	950	C	7480	
	580	6808N	4073	92.4	74.0	67.7	100	380	190	1460	G	7480	
500	3570	5807NS	735	94.1	91.7	60.0	90	420	200	85	C	3500	
	1780	5807N	1475	94.1	90.2	61.0	100	420	200	215	C	3500	
	1180	5810N	2225	94.1	86.0	64.0	110	420	220	390	G	4400	
	880	5810N	2983	93.6	82.5	67.0	100	420	210	740	G	4400	
	700	6808N	3750	93.0	78.5	71.0	100	420	210	1020	G	7480	
	580	6808N	4526	93.0	74.0	75.2	90	420	190	1600	G	7480	
600	3575	5810NS	881	94.1	91.7	72.0	90	500	190	105	C	4400	
	1780	5810N	1770	94.1	90.3	73.2	100	500	190	260	C	4400	
	1180	5810N	2670	94.1	86.5	76.3	100	500	190	450	G	4400	
	880	6808N	3580	93.6	84.0	79.0	100	500	200	900	C	7480	
	700	5810NS	1028	94.5	91.7	83.6	90	570	190	125	C	4400	
	1780	5810N	2065	94.5	90.2	85.0	100	570	190	305	C	4400	
700	1180	5810N	3114	94.5	86.5	88.7	100	570	190	520	G	4400	
	880	6808N	4176	94.5	85.0	90.2	100	570	200	980	G	7480	
	3580	5810NS	1173	94.5	91.7	95.6	90	650	190	140	C	4400	
	1780	5810N	2360	94.5	90.2	97.0	100	650	190	340	G	4400	
	1180	6808N	3559	94.5	87.0	101	100	650	190	720	C	7480	
	880	6808N	4773	94.5	84.0	104	100	650	200	1180	C	7480	
900	1785	5810N	2647	95.0	90.2	109	100	720	190	380	G	4400	
	1185	6808N	3987	94.5	87.0	113	100	720	190	800	C	7480	
	3580	5810NS	1291	95.0	90.2	121	100	800	190	550	C	7480	
	1780	5810N	2440	95.0	87.0	125	100	800	190	890	C	7480	
	1185	6808N	3676	95.0	90.2	151	100	1000	190	720	C	7480	
	880	6810N	5538	95.0	87.0	156	100	1000	190	1120	C	8580	
1500	1785	6810N	4412	95.4	90.2	180	100	1200	190	850	G	8580	
	1185	6810N	6646	95.4	87.0	187	100	1200	190	1350	G	8580	
	1750	1785	6810N	5147	95.4	90.2	211	100	1400	190	1050	G	8580

Note: 1. The aforementioned data was based on test as depicted on item 2.

2. Test method:

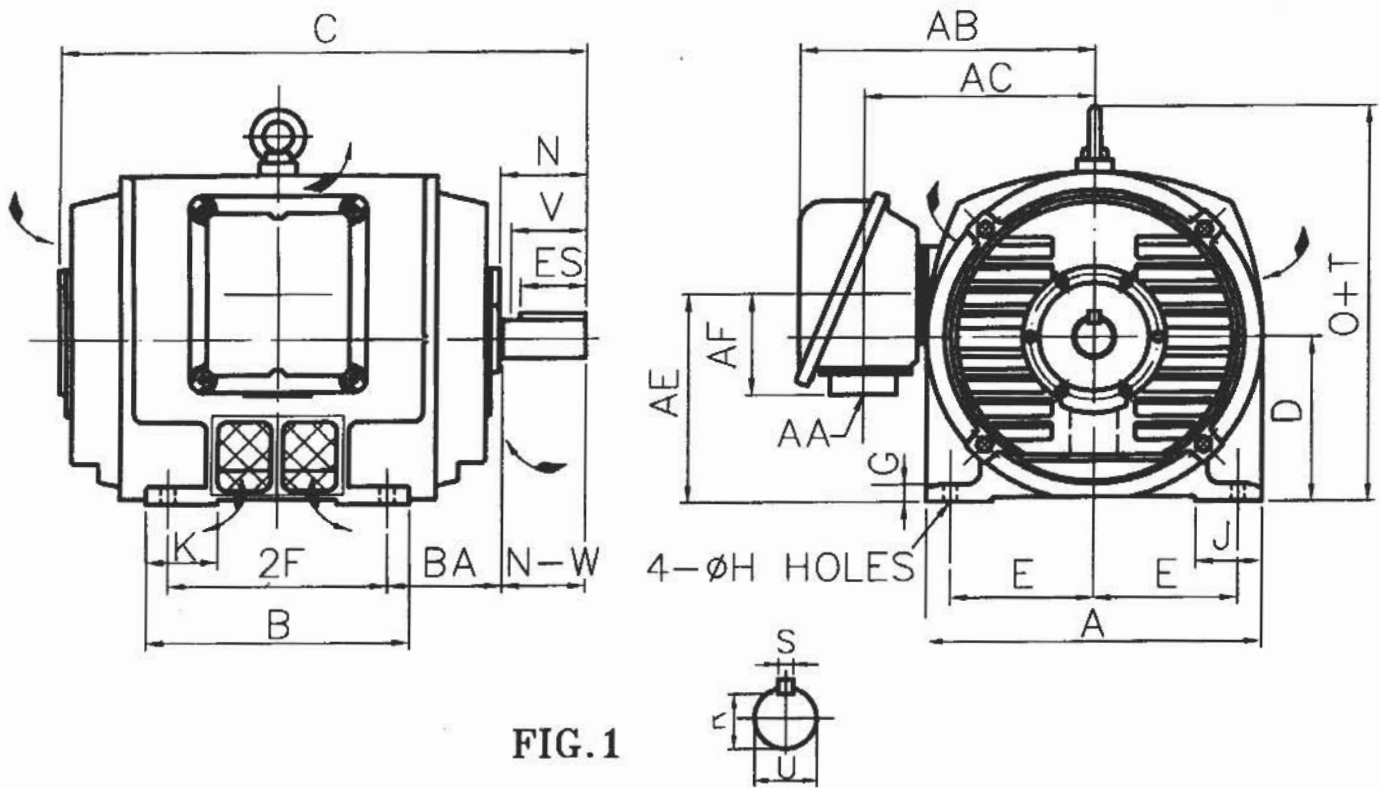
a. For motors 500HP and under per ANSI/IEEE standard 112 method B and reduced voltage measuring starting performance.

b. For motors above 500HP per ANSI/IEEE standard 112 method E and reduced voltage measuring starting performance.

3. Design C motors also available on request.

4. All motor with 3600 RPM are unidirectional. Please specify direction of rotation when ordering.

**ALL DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.**



FRAME	FIG	A	B	C	D	E	2F	G	H	J	K	O+T	AA
444TS	1	22.00	17.30	34.05	11.00	9.00	14.50	1.18	0.94	4.33	4.72	26.37	NPT4"
444T		22.00	17.30	37.80	11.00	9.00	14.50	1.18	0.94	4.33	4.72	26.37	NPT4"
445TS		22.00	19.30	36.05	11.00	9.00	16.50	1.18	0.94	4.33	4.72	26.37	NPT4"
445T		22.00	19.30	39.80	11.00	9.00	16.50	1.18	0.94	4.33	4.72	26.37	NPT4"
504TS		25.00	18.90	38.06	12.50	10.00	16.00	1.37	1.10	5.50	4.72	30.25	NPT4"
504T		25.00	18.90	42.99	12.50	10.00	16.00	1.37	1.10	5.50	4.72	30.25	NPT4"
505TS		25.00	20.90	40.06	12.50	10.00	18.00	1.37	1.10	5.50	4.72	30.25	NPT4"
505T		25.00	20.90	44.99	12.50	10.00	18.00	1.37	1.10	5.50	4.72	30.25	NPT4"
5007NS		25.00	24.90	44.21	12.50	10.00	22.00	1.37	1.10	5.50	4.92	30.25	NPT4"
5007N		25.00	24.90	49.04	12.50	10.00	22.00	1.37	1.10	5.50	4.92	30.25	NPT4"
5807NS	2	28.00	29.50	50.15	14.50	11.50	25.00	1.60	1.10	6.30	9.80	28.07	NPT4"
5807N		28.00	29.50	54.98	14.50	11.50	25.00	1.60	1.10	6.30	9.80	28.07	NPT4"
5810NS		28.00	40.15	60.70	14.50	11.50	36.00	1.60	1.10	6.30	9.80	28.07	NPT4"
5810N		28.00	40.15	60.83	14.50	11.50	36.00	1.60	1.10	6.30	9.80	28.07	NPT4"
6808N		36.20	49.30	70.58	17.00	13.50	36.00	1.57	1.65	9.45	14.50	36.00	NPT4"
6810N		36.20	58.30	79.58	17.00	13.50	45.00	1.57	1.65	9.45	14.50	36.00	NPT4"

- Note: 1. Dimension D tolerance: +0.00 inch, -0.06 inch.  
 2. Dimension U tolerance: +0.000 inch, -0.001 inch..  
 3. Dimension R tolerance: +0.000 inch, -0.015 inch.  
 4. Dimension V is the length of straight part of shaft.

**DIMENSIONS ARE FOR REFERENCE ONLY.**

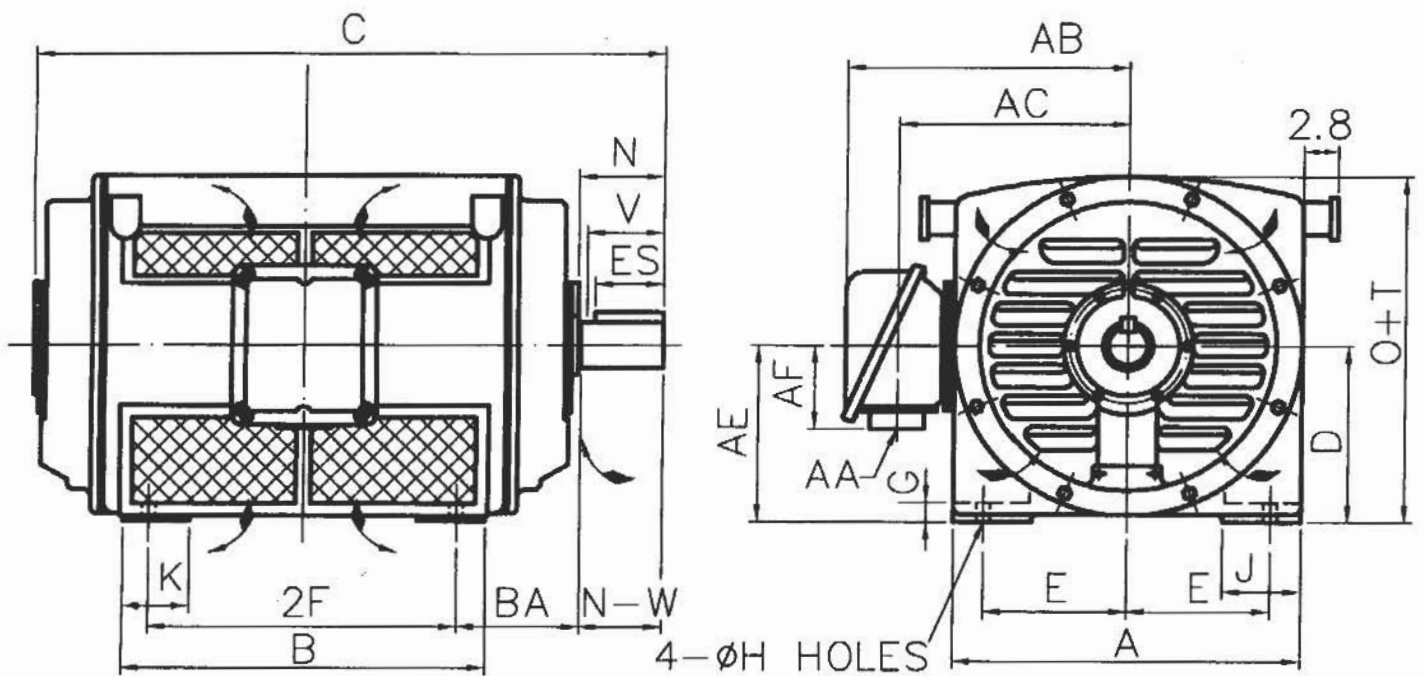


FIG.3

3RD ANGLE PROJECTION  
DIMENSIONS IN INCHES

AB	AC	AE	AF	BA	SHAFT END							APPROX. WEIGHT (LBS)
					N	N-W	U	V	R	S	ES	
20.58	15.73	14.15	11.02	7.50	4.95	4.75	2.375	4.70	2.021	0.625	3.03	1600
20.58	15.73	14.15	11.02	7.50	8.70	8.50	3.375	8.40	2.880	0.875	6.91	1600
20.58	15.73	14.15	11.02	7.50	4.95	4.75	2.375	4.70	2.021	0.625	3.03	1700
20.58	15.73	14.15	11.02	7.50	8.70	8.50	3.375	8.40	2.880	0.875	6.91	1700
22.08	17.23	15.65	11.02	8.50	5.70	5.50	2.375	5.20	2.021	0.625	4.75	2090
22.08	17.23	15.65	11.02	8.50	10.425	10.125	3.750	9.875	3.261	0.875	8.50	2090
22.08	17.23	15.65	11.02	8.50	5.70	5.50	2.375	5.20	2.021	0.625	4.75	2500
22.08	17.23	15.65	11.02	8.50	10.425	10.125	3.750	9.875	3.261	0.875	8.50	2500
26.42	20.03	15.65	10.82	8.50	5.95	5.75	2.625	5.50	2.275	0.625	4.75	3400
26.42	20.03	15.65	10.82	8.50	11.93	11.63	3.875	11.35	3.309	1.000	10.00	3400
30.12	23.70	14.50	10.82	10.00	5.95	5.75	2.625	5.50	2.275	0.625	4.75	3500
30.12	23.70	14.50	10.82	10.00	11.93	11.63	3.875	11.35	3.309	1.000	10.0	3500
30.12	23.70	14.50	10.82	10.00	5.95	5.75	3.000	5.50	2.577	0.750	4.75	4400
30.12	23.70	14.50	10.82	10.00	11.93	11.88	4.875	11.60	4.169	1.250	10.0	4400
34.42	28.03	17.00	10.82	11.50	12.23	11.88	4.875	11.60	4.169	1.250	10.0	7480
34.42	28.03	17.00	10.82	11.50	12.23	11.88	4.875	11.60	4.169	1.250	10.0	8580

All 2-pole motors are used for direct coupling drive only.