

# Squirrel Cage 3-Phase Induction Motor



**NEMA STANDARD**

## **TS21DN ODP (WPI) SERIES**

Horizontal Foot-Mounted

3-Phase 60Hz / 2300V, 4000V, 4160V

Frame Size 504 ~ 6810 (NEMA / IMPERIAL)

ODP / WEATHER-PROTECTED TYPE I CONSTRUCTION

## STANDARD SPECIFICATIONS

- Output : 125HP ~ 2500HP
- Poles : 2P ~ 8P
- Frame size : 504 ~ 6810 (NEMA / IMPERIAL)
- Voltage : 2300V, 4000V, 4160V
- Frequency : 60Hz
- Enclosure : Weather-Protected Type I (WPI)
- Mounting : Horizontal Foot-Mounted
- Insulation : Class F
- Temperature rise : Class B at S.F. 1.0 / Class F at S.F. 1.15  
(By Resistance Method)
- Environment : Ambient Temperature 40°C or less
- Altitude : 3300 feet (1000 meters) or less

## PREMIUM FEATURES

- Extra Rugged Frame  
Made from quality cast iron for maximum strength and rigidity.
- Reliable Rotor Construction  
Compact design and precise balancing provide reliable operation. Improved arrangement of ventilation path inside rotor greatly raises cooling efficiency.
- Durable Bearing Construction  
Proper bearing selection and bearing life calculation ensure lasting operation. Grease inlet nipple and discharge pipe assure easy and safe maintenance.
- Large Size Terminal Box  
Large size terminal box made of high-grade cast iron or steel plate provides ample space and tough enclosure for cable connection.
- V.P.I. Stator Winding  
For medium voltage motors, stator winding with V.P.I. treatment meets class F insulation and gives high resistance to corona.

# Squirrel Cage 3-Phase Induction Motor



## MEDIUM VOLTAGE MOTOR

Weather-Protected Type I , Squirrel Cage

3 Phase , 60Hz , 2300V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

## PERFORMANCE DATA

OUTPUT HP	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR		
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (kg-m)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)
125	870	504	34.6	200	104	100	200	92.0	91.5	90.5	73.5	67.0	58.0
	1170	504	37.7	225	93	100	200	92.0	91.5	90.5	81.0	77.0	67.0
150	870	505	41.5	240	125	100	200	92.0	91.5	90.5	73.5	67.0	58.0
	3550	504	47.1	330	41	80	200	92.5	92.5	91.5	86.0	84.0	81.0
200	1770	504	49.4	320	82	100	200	92.5	92.5	91.5	82.0	78.0	68.0
	1170	505	50.0	310	124	100	200	92.5	92.5	92.0	81.0	77.0	67.0
	870	5007	54.7	310	167	100	200	92.5	92.0	91.0	74.0	67.5	58.5
250	3550	505	58.5	410	51	80	200	93.0	93.0	92.0	86.0	84.0	81.0
	1770	505	61.0	400	103	100	200	93.0	93.0	92.0	82.5	79.5	72.5
	1170	5007	61.4	380	155	100	200	93.0	92.5	91.5	82.0	78.5	68.5
	870	5807	67.1	380	209	100	200	93.0	92.5	91.5	75.0	68.5	59.5
300	3550	505	70.2	490	61	80	200	93.0	93.0	92.0	86.0	84.0	81.0
	1770	505	72.8	470	123	100	200	93.0	93.0	92.0	83.0	80.0	73.0
	1170	5007	73.7	460	186	100	200	93.0	92.5	91.5	82.0	78.5	68.5
	870	5807	80.5	460	251	100	200	93.0	92.5	91.5	75.0	68.5	60.0
350	3550	5007	81.0	565	72	80	200	93.0	93.0	92.5	87.0	85.0	82.5
	1770	5007	83.5	540	144	100	200	93.5	93.5	92.5	84.0	81.0	74.0
	1170	5807	84.0	520	217	100	200	93.5	93.5	92.5	83.5	80.0	72.0
	875	5807	92.2	520	291	100	200	93.5	93.0	92.0	76.0	69.5	61.0
400	3550	5007	92.1	640	82	80	200	93.5	93.5	93.0	87.0	85.0	82.5
	1770	5007	95.4	620	164	100	200	93.5	93.5	92.5	84.0	82.0	75.0
	1170	5807	95.4	590	248	100	200	93.5	93.5	92.5	84.0	81.0	73.5
	875	5810	104	600	332	100	200	93.5	93.5	92.5	77.0	70.5	62.0
450	3550	5807	102	710	92	80	200	94.0	94.0	93.5	88.0	86.0	83.5
	1770	5807	105	680	185	100	200	94.5	94.0	93.0	85.0	83.0	76.0
	1170	5807	106	650	279	100	200	94.5	94.0	93.0	84.0	81.0	73.5
	880	5810	115	650	372	100	200	94.5	94.0	93.0	77.5	71.0	62.5
500	3550	5807	113	785	102	80	200	94.0	94.0	93.5	88.0	86.0	83.5
	1770	5807	117	755	205	100	200	94.5	94.0	93.5	85.0	83.0	76.0
	1170	5810	118	730	311	100	200	94.5	94.0	93.5	84.0	81.0	73.5
	880	5810	128	730	413	100	200	94.5	94.0	93.5	77.5	71.0	62.5
600	3550	5810	135	945	123	75	200	94.5	94.0	94.0	88.0	86.0	83.5
	1770	5810	138	900	246	90	200	94.5	94.0	93.5	86.0	84.0	77.5
	1170	5810	141	870	373	90	200	94.5	94.0	93.5	84.5	81.5	74.0
	880	6310	153	870	495	90	200	94.5	94.5	93.5	77.5	71.0	62.5
700	3550	5810	158	1100	143	75	200	94.5	94.5	94.0	88.0	86.5	84.0
	1770	5810	161	1040	287	90	200	94.5	94.0	93.5	86.0	84.0	77.5
	1170	5810	164	1010	435	90	200	94.5	94.0	93.5	84.5	81.5	74.0
	880	6310	177	1010	578	90	200	94.5	94.0	93.5	78.5	73.5	65.5
800	3550	5810	178	1240	164	75	200	95.0	95.0	94.5	88.5	87.0	84.5
	1770	5810	183	1190	328	90	200	95.0	94.5	94.0	86.0	84.0	77.5
	1170	5810	187	1150	497	90	200	95.0	94.5	94.0	84.5	81.5	74.0
	880	6310	200	1150	661	90	200	95.0	94.5	94.0	79.0	75.0	66.0
900	3550	5810	200	1400	184	75	200	95.0	95.0	94.5	88.5	87.0	84.5
	1770	5810	206	1340	369	90	200	95.0	94.5	94.0	86.0	84.0	77.5
	1170	6310	209	1290	559	90	200	95.0	94.5	94.0	85.0	82.5	75.5
	880	6310	223	1290	743	90	200	95.0	94.5	94.0	79.5	75.5	66.5
1000	3560	5810	220	1540	204	70	200	95.5	95.5	95.0	89.0	87.5	85.0
	1775	5810	227	1470	409	80	200	95.5	95.0	94.0	86.5	84.5	78.0
	1175	6310	228	1410	618	80	200	95.5	95.0	94.0	86.0	83.5	76.5
	885	6810	244	1410	821	80	200	95.5	95.0	94.0	80.5	78.0	70.0



## MEDIUM VOLTAGE MOTOR

Weather-Protected Type I , Squirrel Cage

3 Phase , 60Hz , 2300V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

## PERFORMANCE DATA

OUTPUT HP	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR		
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (kg-m)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)
1250	3560	5810	274	1910	255	70	200	95.5	95.0	94.5	89.5	88.0	85.5
	1775	5810	283	1840	512	80	200	95.5	95.0	94.0	86.5	84.5	78.0
	1175	6310	285	1760	773	80	200	95.5	95.0	94.0	86.0	83.5	76.5
	885	6810	304	1760	1026	80	200	95.5	95.0	94.0	80.5	78.0	70.0
1500	3560	5810	329	2300	306	70	200	95.5	95.5	95.0	89.5	88.0	85.5
	1780	6310	336	2180	612	80	200	95.5	95.0	94.0	87.5	85.5	80.5
	1180	6810	338	2090	924	80	200	95.5	95.0	94.0	87.0	85.0	78.0
	885	6810	361	2090	1232	80	200	95.5	95.0	94.0	81.5	78.5	71.0
1750	3560	6310	381	2660	357	70	200	95.5	95.5	95.0	90.0	88.5	86.0
	1780	6310	390	2540	714	80	200	95.5	95.5	94.5	88.0	87.0	83.5
	1180	6810	392	2430	1078	80	200	95.5	95.5	94.5	87.5	85.0	80.0
2000	3560	6310	433	3030	408	65	200	95.5	95.5	95.0	90.5	89.0	86.5
	1780	6310	444	2900	816	80	200	95.8	95.5	94.5	88.0	87.0	83.5
	1180	6810	447	2750	1232	80	200	95.8	95.5	94.5	87.5	85.0	80.0
2250	3560	6810	488	3410	459	65	200	95.5	95.5	95.0	90.5	90.0	87.5
	1780	6810	497	3230	918	80	200	95.8	95.5	94.5	88.5	87.5	84.0
2500	3560	6810	542	3790	510	65	200	95.5	95.5	95.0	90.5	90.0	87.5
	1780	6810	552	3580	1021	80	200	95.8	95.5	94.5	88.5	87.5	84.0

Note:

- Above data are typical values and for reference only.
- (a) For motors 500HP and smaller, performance test per ANSI/IEEE standard 112 method B.  
(b) For motors above 500HP, performance test per ANSI/IEEE standard 112 method F1.

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



## MEDIUM VOLTAGE MOTOR

Weather-Protected Type I , Squirrel Cage

3 Phase , 60Hz , 4000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

## PERFORMANCE DATA

OUTPUT HP	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR		
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (kg-m)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)
125	870	504	19.9	106	104	95	200	92.0	91.5	90.5	73.5	67.0	58.0
	1170	504	21.7	125	93	95	200	92.0	91.5	90.5	81.0	77.0	67.0
150	870	505	23.9	125	125	95	200	92.0	91.5	90.5	73.5	67.0	58.0
	3550	504	27.1	175	41	75	200	92.5	92.5	91.5	86.0	84.0	81.0
200	1770	504	28.4	170	82	95	200	92.5	92.5	91.5	82.0	78.0	68.0
	1170	505	28.7	165	124	95	200	92.5	92.5	92.0	81.0	77.0	67.0
	870	5007	31.5	165	167	95	200	92.5	92.0	91.0	74.0	67.5	58.5
250	3550	505	33.7	220	51	75	200	93.0	93.0	92.0	86.0	84.0	81.0
	1770	505	35.1	210	103	95	200	93.0	93.0	92.0	82.5	79.5	72.5
	1170	5007	35.3	205	155	95	200	93.0	92.5	91.5	82.0	78.5	68.5
	870	5807	38.6	205	209	95	200	93.0	92.5	91.5	75.0	68.5	59.5
300	3550	505	40.4	260	61	75	200	93.0	93.0	92.0	86.0	84.0	81.0
	1770	505	41.8	255	123	95	200	93.0	93.0	92.0	83.0	80.0	73.0
	1170	5007	42.4	245	186	95	200	93.0	92.5	91.5	82.0	78.5	68.5
	870	5807	46.3	245	251	95	200	93.0	92.5	91.5	75.0	68.5	60.0
350	3550	5007	46.6	300	72	75	200	93.0	93.0	92.5	87.0	85.0	82.5
	1770	5007	48.0	290	144	95	200	93.5	93.5	92.5	84.0	81.0	74.0
	1170	5807	48.3	280	217	95	200	93.5	93.5	92.5	83.5	80.0	72.0
	875	5807	53.0	280	291	95	200	93.5	93.0	92.0	76.0	69.5	61.0
400	3550	5007	52.9	345	82	75	200	93.5	93.5	93.0	87.0	85.0	82.5
	1770	5007	54.8	330	164	95	200	93.5	93.5	92.5	84.0	82.0	75.0
	1170	5807	54.8	320	248	95	200	93.5	93.5	92.5	84.0	81.0	73.5
	875	5810	59.8	320	332	95	200	93.5	93.5	92.5	77.0	70.5	62.0
450	3550	5807	58.6	380	92	75	200	94.0	94.0	93.5	88.0	86.0	83.5
	1770	5807	60.3	365	185	95	200	94.5	94.0	93.0	85.0	83.0	76.0
	1170	5807	61.0	355	279	95	200	94.5	94.0	93.0	84.0	81.0	73.5
	880	5810	66.2	350	372	95	200	94.5	94.0	93.0	77.5	71.0	62.5
500	3550	5807	65.1	420	102	75	200	94.0	94.0	93.5	88.0	86.0	83.5
	1770	5807	67.0	410	205	95	200	94.5	94.0	93.5	85.0	83.0	76.0
	1170	5810	67.8	395	311	95	200	94.5	94.0	93.5	84.0	81.0	73.5
	880	5810	73.5	390	413	95	200	94.5	94.0	93.5	77.5	71.0	62.5
600	3550	5810	77.7	505	123	70	200	94.5	94.0	94.0	88.0	86.0	83.5
	1770	5810	79.5	485	246	85	200	94.5	94.0	93.5	86.0	84.0	77.5
	1170	5810	80.9	470	373	85	200	94.5	94.0	93.5	84.5	81.5	74.0
	880	6310	88.2	465	495	85	200	94.5	94.5	93.5	77.5	71.0	62.5
700	3550	5810	90.6	585	143	70	200	94.5	94.5	94.0	88.0	86.5	84.0
	1770	5810	92.7	560	287	85	200	94.5	94.0	93.5	86.0	84.0	77.5
	1170	5810	94.4	545	435	85	200	94.5	94.0	93.5	84.5	81.5	74.0
	880	6310	102	540	578	85	200	94.5	94.0	93.5	78.5	73.5	65.5
800	3550	5810	103	655	164	70	200	95.0	95.0	94.5	88.5	87.0	84.5
	1770	5810	105	635	328	85	200	95.0	94.5	94.0	86.0	84.0	77.5
	1170	5810	107	620	497	85	200	95.0	94.5	94.0	84.5	81.5	74.0
	880	6310	115	610	661	85	200	95.0	94.5	94.0	79.0	75.0	66.0
900	3550	5810	115	740	184	70	200	95.0	95.0	94.5	88.5	87.0	84.5
	1770	5810	119	720	369	85	200	95.0	94.5	94.0	86.0	84.0	77.5
	1170	6310	120	695	559	85	200	95.0	94.5	94.0	85.0	82.5	75.5
	880	6310	128	685	743	85	200	95.0	94.5	94.0	79.5	75.5	66.5
1000	3560	5810	127	810	204	65	200	95.5	95.5	95.0	89.0	87.5	85.0
	1775	5810	130	780	409	75	200	95.5	95.0	94.0	86.5	84.5	78.0
	1175	6310	131	755	618	75	200	95.5	95.0	94.0	86.0	83.5	76.5
	885	6810	140	745	821	75	200	95.5	95.0	94.0	80.5	78.0	70.0



## MEDIUM VOLTAGE MOTOR

Weather-Protected Type I , Squirrel Cage

3 Phase , 60Hz , 4000V , S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

## PERFORMANCE DATA

OUTPUT HP	FULL LOAD RPM	FRAME SIZE	CURRENT			TORQUE			EFFICIENCY			POWER FACTOR		
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (kg-m)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	
1250	3560	5810	157	1010	255	65	200	95.5	95.0	94.5	89.5	88.0	85.5	
	1775	5810	163	980	512	75	200	95.5	95.0	94.0	86.5	84.5	78.0	
	1175	6310	164	960	773	75	200	95.5	95.0	94.0	86.0	83.5	76.5	
	885	6810	175	940	1026	75	200	95.5	95.0	94.0	80.5	78.0	70.0	
1500	3560	5810	189	1210	306	65	200	95.5	95.5	95.0	89.5	88.0	85.5	
	1780	6310	193	1160	612	75	200	95.5	95.0	94.0	87.5	85.5	80.5	
	1180	6810	194	1120	924	75	200	95.5	95.0	94.0	87.0	85.0	78.0	
	885	6810	208	1100	1232	75	200	95.5	95.0	94.0	81.5	78.5	71.0	
1750	3560	6310	219	1400	357	65	200	95.5	95.5	95.0	90.0	88.5	86.0	
	1780	6310	224	1340	714	75	200	95.5	95.5	94.5	88.0	87.0	83.5	
	1180	6810	226	1300	1078	75	200	95.5	95.5	94.5	87.5	85.0	80.0	
2000	3560	6310	249	1590	408	60	200	95.5	95.5	95.0	90.5	89.0	86.5	
	1780	6310	255	1520	816	75	200	95.8	95.5	94.5	88.0	87.0	83.5	
	1180	6810	257	1490	1232	75	200	95.8	95.5	94.5	87.5	85.0	80.0	
2250	3560	6810	280	1780	459	60	200	95.5	95.5	95.0	90.5	90.0	87.5	
	1780	6810	286	1700	918	75	200	95.8	95.5	94.5	88.5	87.5	84.0	
2500	3560	6810	311	1990	510	60	200	95.5	95.5	95.0	90.5	90.0	87.5	
	1780	6810	318	1880	1021	75	200	95.8	95.5	94.5	88.5	87.5	84.0	

**Note:**

- Above data are typical values and for reference only.
- (a) For motors 500HP and smaller, performance test per ANSI/IEEE standard 112 method B.  
(b) For motors above 500HP, performance test per ANSI/IEEE standard 112 method F1.

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



## MEDIUM VOLTAGE MOTOR

Weather-Protected Type I , Squirrel Cage

3 Phase , 60Hz , 4160V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

## PERFORMANCE DATA

OUTPUT HP	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR		
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (kg-m)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)
125	870	504	19.1	110	104	100	200	92.0	91.5	90.5	73.5	67.0	58.0
	1170	504	20.8	130	93	100	200	92.0	91.5	90.5	81.0	77.0	67.0
150	870	505	23.0	130	125	100	200	92.0	91.5	90.5	73.5	67.0	58.0
	3550	504	26.0	180	41	80	200	92.5	92.5	91.5	86.0	84.0	81.0
200	1770	504	27.3	175	82	100	200	92.5	92.5	91.5	82.0	78.0	68.0
	1170	505	27.6	170	124	100	200	92.5	92.5	92.0	81.0	77.0	67.0
	870	5007	30.3	170	167	100	200	92.5	92.0	91.0	74.0	67.5	58.5
250	3550	505	32.4	225	51	80	200	93.0	93.0	92.0	86.0	84.0	81.0
	1770	505	33.7	215	103	100	200	93.0	93.0	92.0	82.5	79.5	72.5
	1170	5007	33.9	210	155	100	200	93.0	92.5	91.5	82.0	78.5	68.5
	870	5807	37.1	210	209	100	200	93.0	92.5	91.5	75.0	68.5	59.5
300	3550	505	38.8	270	61	80	200	93.0	93.0	92.0	86.0	84.0	81.0
	1770	505	40.2	260	123	100	200	93.0	93.0	92.0	83.0	80.0	73.0
	1170	5007	40.7	250	186	100	200	93.0	92.5	91.5	82.0	78.5	68.5
	870	5807	44.5	250	251	100	200	93.0	92.5	91.5	75.0	68.5	60.0
350	3550	5007	44.8	310	72	80	200	93.0	93.0	92.5	87.0	85.0	82.5
	1770	5007	46.1	300	144	100	200	93.5	93.5	92.5	84.0	81.0	74.0
	1170	5807	46.4	290	217	100	200	93.5	93.5	92.5	83.5	80.0	72.0
	875	5807	51.0	290	291	100	200	93.5	93.0	92.0	76.0	69.5	61.0
400	3550	5007	50.9	355	82	80	200	93.5	93.5	93.0	87.0	85.0	82.5
	1770	5007	52.7	340	164	100	200	93.5	93.5	92.5	84.0	82.0	75.0
	1170	5807	52.7	330	248	100	200	93.5	93.5	92.5	84.0	81.0	73.5
	875	5810	57.5	330	332	100	200	93.5	93.5	92.5	77.0	70.5	62.0
450	3550	5807	56.3	390	92	80	200	94.0	94.0	93.5	88.0	86.0	83.5
	1770	5807	58.0	375	185	100	200	94.5	94.0	93.0	85.0	83.0	76.0
	1170	5807	58.7	365	279	100	200	94.5	94.0	93.0	84.0	81.0	73.5
	880	5810	63.6	360	372	100	200	94.5	94.0	93.0	77.5	71.0	62.5
500	3550	5807	62.6	435	102	80	200	94.0	94.0	93.5	88.0	86.0	83.5
	1770	5807	64.4	420	205	100	200	94.5	94.0	93.5	85.0	83.0	76.0
	1170	5810	65.2	410	311	100	200	94.5	94.0	93.5	84.0	81.0	73.5
	880	5810	70.7	405	413	100	200	94.5	94.0	93.5	77.5	71.0	62.5
600	3550	5810	74.7	520	123	75	200	94.5	94.0	94.0	88.0	86.0	83.5
	1770	5810	76.4	500	246	90	200	94.5	94.0	93.5	86.0	84.0	77.5
	1170	5810	77.8	485	373	90	200	94.5	94.0	93.5	84.5	81.5	74.0
	880	6310	84.8	480	495	90	200	94.5	94.5	93.5	77.5	71.0	62.5
700	3550	5810	87.2	605	143	75	200	94.5	94.5	94.0	88.0	86.5	84.0
	1770	5810	89.2	580	287	90	200	94.5	94.0	93.5	86.0	84.0	77.5
	1170	5810	90.8	565	435	90	200	94.5	94.0	93.5	84.5	81.5	74.0
	880	6310	97.7	560	578	90	200	94.5	94.0	93.5	78.5	73.5	65.5
800	3550	5810	98.5	680	164	75	200	95.0	95.0	94.5	88.5	87.0	84.5
	1770	5810	101	660	328	90	200	95.0	94.5	94.0	86.0	84.0	77.5
	1170	5810	103	640	497	90	200	95.0	94.5	94.0	84.5	81.5	74.0
	880	6310	110	630	661	90	200	95.0	94.5	94.0	79.0	75.0	66.0
900	3550	5810	111	765	184	75	200	95.0	95.0	94.5	88.5	87.0	84.5
	1770	5810	114	740	369	90	200	95.0	94.5	94.0	86.0	84.0	77.5
	1170	6310	115	720	559	90	200	95.0	94.5	94.0	85.0	82.5	75.5
	880	6310	123	710	743	90	200	95.0	94.5	94.0	79.5	75.5	66.5
1000	3560	5810	122	840	204	70	200	95.5	95.5	95.0	89.0	87.5	85.0
	1775	5810	125	810	409	80	200	95.5	95.0	94.0	86.5	84.5	78.0
	1175	6310	126	780	618	80	200	95.5	95.0	94.0	86.0	83.5	76.5
	885	6810	135	770	821	80	200	95.5	95.0	94.0	80.5	78.0	70.0



## MEDIUM VOLTAGE MOTOR

Weather-Protected Type I , Squirrel Cage

3 Phase , 60Hz , 4160V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

## PERFORMANCE DATA

OUTPUT HP	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR		
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (kg-m)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)	FULL LOAD (%)	3 / 4 LOAD (%)	1 / 2 LOAD (%)
1250	3560	5810	151	1040	255	70	200	95.5	95.0	94.5	89.5	88.0	85.5
	1775	5810	157	1010	512	80	200	95.5	95.0	94.0	86.5	84.5	78.0
	1175	6310	158	990	773	80	200	95.5	95.0	94.0	86.0	83.5	76.5
	885	6810	168	970	1026	80	200	95.5	95.0	94.0	80.5	78.0	70.0
1500	3560	5810	182	1250	306	70	200	95.5	95.5	95.0	89.5	88.0	85.5
	1780	6310	186	1200	612	80	200	95.5	95.0	94.0	87.5	85.5	80.5
	1180	6810	187	1160	924	80	200	95.5	95.0	94.0	87.0	85.0	78.0
	885	6810	200	1140	1232	80	200	95.5	95.0	94.0	81.5	78.5	71.0
1750	3560	6310	211	1450	357	70	200	95.5	95.5	95.0	90.0	88.5	86.0
	1780	6310	216	1390	714	80	200	95.5	95.5	94.5	88.0	87.0	83.5
	1180	6810	217	1350	1078	80	200	95.5	95.5	94.5	87.5	85.0	80.0
2000	3560	6310	240	1650	408	65	200	95.5	95.5	95.0	90.5	89.0	86.5
	1780	6310	246	1580	816	80	200	95.8	95.5	94.5	88.0	87.0	83.5
	1180	6810	247	1540	1232	80	200	95.8	95.5	94.5	87.5	85.0	80.0
2250	3560	6810	270	1850	459	65	200	95.5	95.5	95.0	90.5	90.0	87.5
	1780	6810	275	1760	918	80	200	95.8	95.5	94.5	88.5	87.5	84.0
2500	3560	6810	299	2060	510	65	200	95.5	95.5	95.0	90.5	90.0	87.5
	1780	6810	305	1950	1021	80	200	95.8	95.5	94.5	88.5	87.5	84.0

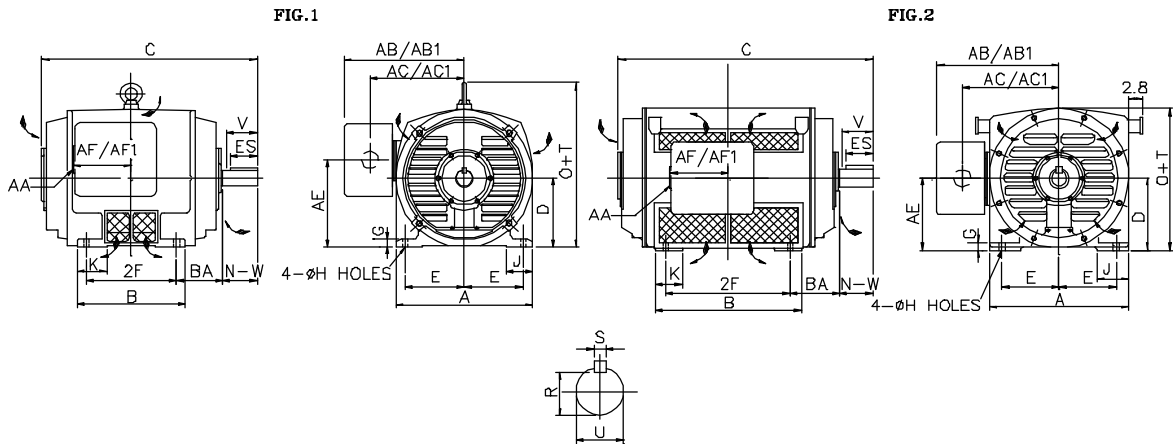
**Note:**

- Above data are typical values and for reference only.
- (a) For motors 500HP and smaller, performance test per ANSI/IEEE standard 112 method B.  
(b) For motors above 500HP, performance test per ANSI/IEEE standard 112 method F1.

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



# OUTLINE DRAWING AND DIMENSION SHEET



FRAME NO.	POLES	FIG. NO.	A	B	C	D	E	2F	G	H	J	K	O+T	AA	AE	BA
504	2	1	25.0	18.90	38.20	12.50	10.00	16.00	1.37	1.10	5.50	4.72	30.25	NPT4"	15.55	8.50
	4~8	1	25.0	18.90	39.40	12.50	10.00	16.00	1.37	1.10	5.50	4.72	30.25	NPT4"	15.55	8.50
505	2	1	25.0	20.90	40.20	12.50	10.00	18.00	1.37	1.10	5.50	4.72	30.25	NPT4"	15.55	8.50
	4~8	1	25.0	20.90	41.40	12.50	10.00	18.00	1.37	1.10	5.50	4.72	30.25	NPT4"	15.55	8.50
5007	2	1	25.0	24.90	44.30	12.50	10.00	22.00	1.37	1.10	5.50	4.92	30.25	NPT4"	15.55	8.50
	4~8	1	25.0	24.90	45.50	12.50	10.00	22.00	1.37	1.10	5.50	4.92	30.25	NPT4"	15.55	8.50
5807	2	2	28.0	29.50	50.20	14.50	11.50	25.00	1.6	1.10	6.30	9.84	28.07	NPT4"	14.50	10.00
	4~8	2	28.0	29.50	53.00	14.50	11.50	25.00	1.6	1.10	6.30	9.84	28.07	NPT4"	14.50	10.00
5810	2	2	28.0	40.15	61.00	14.50	11.50	36.00	1.6	1.10	6.30	9.84	28.07	NPT4"	14.50	10.00
	4~8	2	28.0	40.15	63.82	14.50	11.50	36.00	1.6	1.10	6.30	9.84	28.07	NPT4"	14.50	10.00
6310	2	2	31.5	45.28	68.17	15.75	13.50	40.00	1.8	1.38	6.50	9.84	32.00	NPT4"	17.30	11.00
	4~8	2	31.5	45.28	69.77	15.75	13.50	40.00	1.8	1.38	6.50	9.84	32.00	NPT4"	17.30	11.00
6810	2	2	36.2	57.50	75.62	17.00	13.50	45.00	1.8	1.65	9.45	14.50	36.00	NPT4"	17.00	11.50
	4~8	2	36.2	57.50	79.91	17.00	13.50	45.00	1.8	1.65	9.45	14.50	36.00	NPT4"	17.00	11.50

FRAME	POLES	FIG. NO.	AB	AB1	AC	AC1	AF	AF1	SHAFT END					BEARING		APPROX. WEIGHT(LBS)	
									N-W	ES	V <sup>4)</sup>	U	R	S	D.E.		O.D.E.
504	2	1	28	—	20.2	—	17.2	—	5.50	4.75	5.30	2.375	2.021	0.625	6314C3	6314C3	2090
	4~8	1	28	—	20.2	—	17.2	—	6.70	5.50	6.50	3.750	3.261	0.875	6320	6320	2090
505	2	1	28	—	20.2	—	17.2	—	5.50	4.75	5.30	2.375	2.021	0.625	6314C3	6314C3	2500
	4~8	1	28	—	20.2	—	17.2	—	6.70	5.50	6.50	3.750	3.261	0.875	6320	6320	2500
5007	2	1	28	—	20.2	—	17.2	—	5.50	4.75	5.30	2.625	2.275	0.625	6314C3	6314C3	3400
	4~8	1	28	—	20.2	—	17.2	—	6.70	5.50	6.50	3.875	3.309	1.00	6224C3	6224C3	3400
5807	2	2	30	—	23.3	—	17.2	—	5.50	4.75	5.30	2.875	2.450	0.75	6218C3	6218C3	3500
	4~8	2	30	—	23.3	—	17.2	—	8.30	6.70	8.10	4.375	3.817	1.00	6224C3	6224C3	3500
5810	2	2	32.4	36.5	25.6	27.3	17.2	16.4	5.50	4.75	5.30	2.875	2.450	0.75	6218C3	6218C3	4400
	4~8	2	32.4	36.5	25.6	27.3	17.2	16.4	8.30	6.70	8.10	4.375	3.817	1.00	6224C3	6224C3	4400
6310	2	2	33.8	38	27	28.7	17.2	16.4	6.70	5.50	6.50	3.125	2.704	0.75	6218C3	6218C3	7500
	4~8	2	33.8	38	27	28.7	17.2	16.4	8.30	6.70	8.10	4.375	3.817	1.00	6224C3	6224C3	7500
6810	2	2	36.2	40.3	29.4	31	17.2	16.4	6.70	5.50	6.50	3.375	2.880	0.875	6318C3	6318C3	8580
	4~8	2	36.2	40.3	29.4	31	17.2	16.4	9.85	8.66	9.60	5.000	4.296	1.25	6228C3	6224C3	8580

Unit: inch

Note:

- 1) Dimension D tolerance : +0.00 inch ~ -0.06 inch.
- 2) Dimension U tolerance : +0.00 inch ~ -0.001 inch.
- 3) Dimension R tolerance : +0.00 inch ~ -0.015 inch.
- 4) Dimension V = Length of shaft available for coupling.
- 5) Dimensions A, B, C, G, AB, AB1, AC, AC1, AF, AF1, O+T, are approximate values.

- 6) For direct coupled. Data for belt drive on request.
- 7) Dimensions AB, AB1, AC, AC1, AF, AF1, meet NEMA Type I standard with maximum full-load current and voltage.