



Squirrel Cage 3-Phase Induction Motor

TS21FNV SERIES *(Standard & High thrust)*

Vertical Flange-Mounted

3-Phase / 60Hz / 460V, 575V, 2300V, 4160V, 6600V, 11000V

Frame Size N5009 ~ N8810 (NEMA / IMPERIAL)

TEFC FIN FRAME CONSTRUCTION



NEMA STANDARD

STANDARD SPECIFICATIONS

- **Output** : 150HP (110kW) ~ 2500HP (2000kW)
- **Poles** : 4P ~ 10P
- **Frame size** : 5009 ~ 8810 (NEMA / IMPERIAL)
- **Voltage** : 460V, 575V, 2300V, 4160V, 6600V, 11000V
- **Frequency** : 60Hz
- **Enclosure** : Totally Enclosed Fan Cooled (TEFC)
- **Mounting** : Vertical Flange-Mounted (“P” base)
- **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
- **Altitude** : 3300 feet (1000 meters) or less
- **Thrust capability** : Thrust load is not allowed for standard motors.
For high thrust motors, maximum allowable down thrust is based on 5 years L-10 bearing life.

PREMIUM FEATURES

- **Optimized Cast Iron Fin Frame**
Optimum fin design ensures efficient heat exchange.
- **Reliable Rotor Construction**
Compact design and precise balancing provide reliable operation. Improved arrangement of ventilation path inside rotor greatly increases cooling efficiency.
- **Durable Bearing Construction**
Proper bearing selection and bearing life calculation ensure lasting operation. Extra high thrust and long bearing life is available on request.
- **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 and high voltage motors, stator winding with V.P.I. treatment meets class F insulation and gives high resistance to corona.

For low voltage motors, stator winding with fine varnish treatment meets class F insulation and gives high reliability and long life.
- **Low Noise Construction**
Low noise construction meets or exceeds NEMA MG 1 standard. Low noise is available upon request.



LOW VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

3 Phase, 60Hz, 460V, 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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
400	1770	N5009	453	2950	164	100	210	95.0	94.5	93.5	87.0	83.0	76.5	12300
	1175	N5009	458	2950	247	100	210	95.0	94.5	92.8	86.0	82.0	74.0	14400
	885	N5810	470	2950	328	100	210	94.9	94.5	92.7	84.0	79.5	71.0	13800
	710	N5810	514	2950	409	100	200	94.7	94.3	93.0	77.0	71.5	59.5	15100
450	1770	N5009	514	3300	185	100	210	95.3	95.0	93.5	86.0	82.0	75.5	12300
	1180	N5810	517	3300	277	100	210	95.3	94.8	93.3	85.5	81.5	73.5	12100
	885	N5810	527	3300	369	100	210	95.2	94.7	93.2	84.0	79.5	71.0	13700
	710	N6310	569	3300	461	100	200	95.0	94.5	93.0	78.0	72.0	60.0	14700
500	1775	N5810	568	3650	205	100	210	95.3	95.0	93.5	86.5	82.5	76.0	9700
	1180	N5810	578	3650	308	100	210	95.3	94.8	93.3	85.0	81.0	73.0	11700
	885	N5810	585	3650	411	100	210	95.2	94.7	93.2	84.0	79.5	71.0	13300
	710	N6310	632	3650	512	100	200	95.0	94.5	93.0	78.0	72.0	60.0	14600
600	1775	N5810	684	4400	246	100	200	95.5	95.2	93.7	86.0	82.0	75.5	9400
	1180	N5810	691	4400	369	100	210	95.6	95.3	93.8	85.0	81.0	73.0	11400
	885	N6310	692	4350	493	100	210	95.5	95.2	93.7	85.0	81.0	73.0	13100
	710	N6310	753	4350	614	100	200	95.0	94.5	93.0	78.5	72.5	60.5	14400
700	1775	N5810	778	5000	287	100	210	95.7	95.5	94.5	88.0	84.0	78.0	9200
	1180	N6310	786	5000	431	100	210	95.8	95.5	94.0	87.0	83.0	77.0	11500
800	1780	N5810	884	5750	327	90	200	95.7	95.5	94.5	88.5	84.5	78.5	9000
	1180	N6310	899	5750	493	90	210	95.8	95.5	94.0	87.0	83.0	77.0	11300
900	1780	N6310	978	6300	367	90	200	95.7	95.5	94.5	90.0	87.5	80.0	9200

Note: (1) Above data are typical values and for reference only.

(2) Test method: Performance test per IEEE standard 112 method F1.

(3) Only for high thrust motors. The allowable maximum down thrust is based on 5 years L-10 bearing life.

(4) Non-reverse ratchet mechanism is available on request for high thrust motors.

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



LOW VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

3 Phase, 60Hz, 575V, 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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
400	1770	N5009	363	2350	164	100	210	95.0	94.5	93.0	87.0	83.0	76.5	12300
	1175	N5009	367	2310	247	100	210	95.0	94.6	92.8	86.0	82.0	74.0	14400
	885	N5810	376	2280	328	100	210	94.9	94.5	92.7	84.0	79.5	71.0	13800
	710	N5810	411	2280	409	100	200	94.7	94.3	92.5	77.0	71.5	59.5	15100
450	1770	N5009	411	2650	185	100	210	95.3	95.0	93.5	86.0	82.0	75.5	12300
	1180	N5810	414	2610	277	100	210	95.3	94.8	93.3	85.5	81.5	73.5	12100
	885	N5810	422	2550	369	100	210	95.2	94.7	93.2	84.0	79.5	71.0	13700
	710	N6310	455	2550	461	100	200	95.0	94.5	93.0	78.0	72.0	60.0	14700
500	1775	N5810	454	2930	205	100	210	95.3	95.0	93.5	86.5	82.5	76.0	9700
	1180	N5810	462	2900	308	100	210	95.3	94.8	93.3	85.0	81.0	73.0	11700
	885	N5810	468	2850	411	100	210	95.2	94.7	93.2	84.0	79.5	71.0	13300
	710	N6310	505	2850	512	100	200	95.0	94.5	93.0	78.0	72.0	60.0	14600
600	1775	N5810	544	3520	246	100	200	95.5	95.2	93.7	86.5	82.5	75.5	9400
	1180	N5810	553	3450	369	100	210	95.6	95.3	93.8	85.0	81.0	73.0	11400
	885	N6310	557	3400	493	100	210	95.5	95.2	93.7	84.5	81.5	73.0	13100
	710	N6310	603	3400	614	100	200	95.0	94.5	93.0	78.5	72.5	60.5	14400
700	1775	N5810	623	4050	287	100	210	95.7	95.5	94.5	88.0	84.0	78.0	9200
	1180	N6310	629	3960	431	100	210	95.8	95.5	94.0	87.0	83.0	77.0	11500
800	1780	N5810	708	4580	327	90	200	95.7	95.5	94.5	88.5	84.5	78.5	9000
	1180	N6310	719	4530	493	90	210	95.8	95.5	94.0	87.0	83.0	77.0	11300
900	1780	N6310	783	5070	367	90	200	95.7	95.5	94.5	90.0	87.5	80.0	9200

Note: (1) Above data are typical values and for reference only.

(2) Test method: Performance test per IEEE standard 112 method F1.

(3) Only for high thrust motors. The allowable maximum down thrust is based on 5 years L-10 bearing life.

(4) Non-reverse ratchet mechanism is available on request for high thrust motors.

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MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
150	880	N5009	40.2	241	124	100	200	93.2	92.7	90.7	75.0	68.0	56.0	16300
	705	N5009	41.1	240	155	100	210	93.0	92.5	90.5	73.5	65.5	54.0	17600
175	880	N5009	46.6	285	144	100	200	93.7	92.9	90.9	75.0	68.0	56.0	16300
	705	N5009	47.7	285	180	100	210	93.5	92.7	90.5	73.5	65.5	54.0	17600
200	1775	N5009	47.8	300	81.9	100	210	94.5	94.1	92.7	83.0	80.0	72.0	12600
	1180	N5009	50.7	300	123.2	100	210	94.8	94.3	92.8	78.0	73.0	64.0	14600
	880	N5009	53.3	305	165.1	100	220	93.7	92.9	90.7	75.0	68.0	56.5	16200
	705	N5810	54.1	305	206.1	100	210	93.5	92.7	90.5	74.0	66.0	54.5	17500
250	1775	N5009	59.3	380	102	100	210	94.5	94.1	92.7	83.5	80.5	72.5	12500
	1180	N5009	62.5	380	154	100	200	94.8	94.3	92.8	79.0	74.0	65.0	14600
	880	N5009	66.0	390	206	100	220	93.9	93.5	91.7	75.5	69.0	57.0	16200
	705	N5810	67.1	390	258	100	210	93.7	93.5	91.5	74.5	67.0	55.5	15700
300	1775	N5009	70.6	455	123	100	200	94.7	94.3	93.0	84.0	81.0	73.0	12400
	1180	N5009	74.1	455	185	100	200	94.8	94.3	92.8	80.0	75.0	66.0	14400
	885	N5810	78.2	455	246	100	210	93.9	93.5	91.7	76.5	70.0	58.0	14200
	705	N5810	80.5	455	309	100	210	93.7	93.3	91.7	74.5	67.5	55.5	15500
350	1775	N5009	81.9	530	143	100	200	94.7	94.3	93.0	84.5	81.5	73.5	12400
	1180	N5810	86.8	530	216	100	200	95.0	94.6	93.3	79.5	74.5	65.5	12400
	885	N5810	88.7	530	287	100	220	94.7	94.2	92.9	78.0	73.0	62.5	14000
	708	N6310	90.1	530	359	100	200	94.5	94.0	92.7	77.0	72.0	61.0	14800
400	1775	N5810	92.8	600	164	100	200	95.0	94.5	93.5	85.0	82.0	74.0	10300
	1180	N5810	99.2	600	246	100	200	95.0	94.6	93.3	79.5	74.5	65.5	12300
	885	N5810	101	600	328	100	220	94.7	94.2	92.9	78.0	73.0	62.5	13800
	708	N6310	103	600	411	100	210	94.5	94.0	92.7	77.0	72.0	61.0	14800
450	1775	N5810	105	670	184	100	200	95.0	94.5	93.5	84.5	81.5	73.5	10100
	1180	N5810	108	670	277	100	200	95.3	94.8	93.8	81.5	77.5	70.0	12100
	885	N5810	113	670	369	100	220	94.9	94.5	93.2	78.5	73.5	63.5	13700
	708	N6310	116	670	462	100	210	94.5	94.0	92.7	77.0	72.0	61.0	14700
500	1775	N5810	116	750	205	100	200	95.0	94.5	93.5	85.0	82.0	74.0	9700
	1180	N5810	121	750	308	100	200	95.3	94.8	93.8	81.5	77.5	70.0	11700
	885	N6310	124	740	411	100	210	94.9	94.5	93.2	79.5	74.5	64.5	13300
	708	N6310	128	740	513	100	210	94.5	94.0	93.0	77.5	72.5	61.5	14600
600	1775	N5810	136	880	246	100	220	95.0	94.9	93.9	87.0	84.5	77.0	9400
	1180	N5810	142	880	369	100	200	95.3	94.8	93.8	83.0	79.0	71.5	11400
	885	N6310	147	880	493	100	210	95.2	94.7	93.7	80.5	76.0	66.5	13100
	708	N6810	152	880	616	100	210	95.0	94.5	93.5	78.0	73.0	62.0	14000
700	1775	N5810	158	1020	287	100	200	95.0	94.9	93.9	87.5	85.0	77.5	9200
	1180	N6310	163	1020	431	100	200	95.3	95.2	94.2	84.5	80.5	73.0	11500
	885	N6810	168	1010	575	100	200	95.2	94.7	93.7	82.0	77.5	68.0	12600
	710	N7808	170	1010	716	100	200	95.0	94.5	93.5	81.0	76.0	66.0	17000
800	1780	N6310	179	1160	327	100	200	95.5	95.1	94.1	87.5	85.0	77.5	9400
	1180	N6310	186	1160	493	100	200	95.3	95.2	94.2	84.5	80.5	73.0	11400
	885	N6810	192	1150	657	100	200	95.2	94.7	93.7	82.0	77.5	68.0	12400
	710	N7808	195	1150	819	100	200	95.0	94.5	93.5	81.0	76.0	66.0	16800
900	1780	N6310	202	1300	367	100	200	95.5	95.1	94.1	87.5	85.0	77.5	9300
	1185	N6810	206	1300	552	100	200	95.8	95.4	94.4	85.5	81.0	73.5	10700
	890	N7808	210	1290	735	100	200	95.7	95.1	94.1	84.0	79.5	70.0	15000
	710	N7808	218	1290	921	100	200	95.5	94.5	93.5	81.0	76.0	66.0	16600



MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
1000	1780	N6810	224	1450	408	100	200	95.5	95.1	94.1	87.5	85.0	77.5	8400
	1185	N6810	230	1450	613	100	200	95.8	95.4	94.4	85.0	81.0	73.5	10400
	890	N7808	232	1440	816	100	200	95.7	95.1	94.1	84.5	80.0	70.5	14600
	710	N7808	242	1440	1023	100	200	95.5	94.5	93.5	81.0	76.0	66.0	16300
1250	1780	N6810	275	1780	510	90	200	95.5	95.3	94.5	89.0	87.0	81.0	8100
	1185	N7808	284	1780	766	90	200	95.8	95.6	94.6	86.0	83.4	76.0	12400
	890	N8810	286	1780	1021	90	200	95.7	95.0	94.1	85.5	81.0	71.5	25600
	710	N8810	299	1780	1279	90	200	95.5	95.0	94.0	82.0	78.0	67.0	28100
1500	1782	N7808	327	2120	612	90	200	95.5	95.5	94.5	90.0	88.0	82.0	(4)
	1185	N7808	341	2120	920	90	200	95.3	95.6	94.6	86.5	84.0	76.5	11900
	890	N8810	343	2120	1225	85	200	95.7	95.3	94.2	85.5	81.5	72.0	24800
	710	N8810	359	2120	1535	85	200	95.5	95.0	94.0	82.0	78.0	67.0	27200
1750	1782	N7808	379	2460	714	85	200	95.5	95.1	94.0	90.5	88.5	82.5	(4)
	1188	N8810	387	2450	1070	85	200	96.3	95.8	94.8	88.0	86.5	82.2	21600
	890	N8810	401	2450	1429	85	200	95.7	95.3	94.2	85.5	81.5	72.0	24500
2000	1785	N8810	433	2780	814	80	200	95.5	95.1	94.0	90.5	88.5	82.5	(4)
	1188	N8810	441	2780	1223	80	200	96.3	95.8	94.8	88.2	86.8	82.5	20800
2250	1785	N8810	482	3130	916	80	200	96.0	95.5	94.3	91.0	89.0	83.0	(4)
	1188	N8810	494	3130	1376	80	200	96.3	95.8	94.8	88.5	87.0	82.7	20400
2500	1788	N8810	533	3440	1016	80	200	96.0	95.5	94.5	91.5	89.5	83.5	(4)

Note: (1) Above data are typical values and for reference only.

(2) Test method: Performance test per IEEE standard 112 method F1.

(3) Only for high thrust motors. The allowable maximum down thrust is based on 5 years L-10 bearing life.

(4) High thrust motor is available on request.

(5) Non-reverse ratchet mechanism is available on request for high thrust motors.

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MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
150	880	N5009	22.2	135	124	100	200	93.2	92.7	90.7	75.0	68.5	56.0	16300
	705	N5009	22.9	135	155	100	200	93.0	92.5	90.5	73.0	65.5	54.0	17600
175	880	N5009	25.8	160	144	100	200	93.7	92.9	90.7	75.0	68.0	56.0	16300
	705	N5009	26.5	160	180	100	200	93.5	92.7	90.5	73.0	65.5	54.0	17600
200	1775	N5009	26.7	170	81.9	100	200	93.5	93.0	91.0	83.0	80.0	72.0	12600
	1180	N5009	28.3	170	123	100	200	93.8	93.3	91.8	78.0	73.0	64.0	14600
	880	N5009	29.5	170	165	100	200	93.7	92.9	90.7	75.0	68.0	56.5	16200
	705	N5810	30.1	170	206	100	200	93.5	92.7	90.7	73.5	66.0	54.5	15800
250	1775	N5009	32.8	210	102	100	200	93.5	93.0	91.5	84.5	81.5	73.5	12500
	1180	N5009	36.3	210	154	100	200	93.8	93.3	91.8	76.0	70.5	60.5	14600
	880	N5009	36.8	210	206	100	200	93.7	92.7	90.7	75.0	68.0	56.5	16200
	705	N5810	37.4	210	258	100	200	93.5	93.0	91.0	74.0	66.5	54.5	15700
300	1775	N5009	38.2	250	123	100	200	95.0	93.5	92.5	85.5	82.5	74.5	12400
	1180	N5009	43.1	250	185	100	200	94.3	93.8	92.3	76.5	71.5	61.5	14400
	885	N5810	43.7	250	246	100	200	94.2	93.7	92.2	75.5	68.5	57.0	14200
	705	N5810	44.7	250	309	100	200	94.0	93.5	92.0	74.0	66.5	54.5	15500
350	1775	N5009	45.4	295	143	100	200	94.5	94.3	93.0	84.5	81.5	73.5	12400
	1180	N5810	48.1	295	216	100	200	94.8	94.6	93.3	79.5	74.5	65.5	12400
	885	N5810	49.1	290	287	100	200	94.7	94.2	92.9	78.0	73.0	62.5	14000
	708	N6310	49.8	290	359	100	200	94.5	94.0	92.7	77.0	72.0	61.0	14800
400	1775	N5810	51.6	330	164	100	200	94.5	94.5	93.5	85.0	82.0	74.0	10300
	1180	N5810	55.0	330	246	100	200	94.8	94.6	93.3	79.5	74.5	65.5	12300
	885	N5810	56.1	330	328	100	200	94.7	94.2	92.9	78.0	73.0	62.5	13800
	708	N6310	56.9	330	411	100	200	94.5	94.0	92.7	77.0	72.0	61.0	14800
450	1775	N5810	58.0	370	184	100	200	95.0	94.5	93.5	84.5	81.5	73.5	10100
	1180	N5810	60.0	370	277	100	200	95.3	94.8	93.8	81.5	77.5	70.0	12100
	885	N5810	62.5	370	369	100	200	94.9	94.5	93.2	78.5	73.5	63.5	13700
	708	N6310	64.0	370	462	100	200	94.5	94.0	92.7	77.0	72.0	61.0	14700
500	1775	N5810	64.1	415	205	100	200	95.0	94.5	93.5	85.0	82.0	74.0	9700
	1180	N5810	66.7	415	308	100	200	95.3	94.8	93.8	81.5	77.5	70.0	11700
	885	N6310	68.6	410	411	100	200	94.9	94.5	93.2	79.5	74.5	64.5	13300
	708	N6310	70.7	410	513	100	200	94.5	94.0	92.7	77.5	72.5	61.5	14600
600	1775	N5810	74.9	485	246	100	200	95.3	94.9	93.9	87.0	84.5	77.0	9400
	1180	N5810	78.5	485	369	100	200	95.3	94.8	93.8	83.0	79.0	71.5	11400
	885	N6310	81.1	480	493	100	200	95.2	94.7	93.7	80.5	76.0	66.5	13100
	708	N6810	82.2	480	616	100	200	94.5	94.3	93.0	80.0	75.0	63.0	14000
700	1775	N5810	86.9	560	287	100	200	95.3	94.9	93.9	87.5	85.0	77.5	9200
	1180	N6310	89.7	560	431	100	200	95.6	95.2	94.2	84.5	80.5	73.0	11500
	885	N6810	92.8	550	575	100	200	95.2	94.7	93.7	82.0	77.5	68.0	12600
	710	N7808	94.7	550	716	100	200	94.5	94.5	93.5	81.0	76.0	66.0	17000
800	1780	N6310	100	640	327	100	200	95.0	95.1	94.1	87.5	85.0	77.5	9400
	1180	N6310	103	640	493	100	200	95.4	95.2	94.2	84.5	80.5	73.0	11400
	885	N6810	106	630	657	100	200	95.2	94.7	93.7	82.0	77.5	68.0	12400
	710	N7808	108	630	819	100	200	94.5	94.5	93.5	81.0	76.0	66.0	16800
900	1780	N6310	112	720	367	100	200	95.0	95.1	94.1	87.5	85.0	77.5	9300
	1185	N6810	114	720	552	100	200	95.6	95.4	94.4	85.5	81.0	73.5	10700
	890	N7808	117	720	735	100	200	95.2	95.1	94.1	84.0	79.5	70.0	15000
	710	N7808	122	720	921	100	200	94.5	94.5	93.5	81.0	76.0	66.0	16600



MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
1000	1780	N6810	125	805	408	100	200	95.0	95.1	94.1	87.5	85.0	77.5	8400
	1185	N6810	126	795	613	100	200	95.8	95.4	94.4	85.5	81.0	73.5	10400
	890	N7808	128	795	816	100	200	95.5	95.1	94.1	84.5	80.0	70.5	14600
	710	N7808	135	795	1023	100	200	95.0	94.5	93.5	81.0	76.0	66.0	16300
1250	1780	N6810	152	980	510	80	200	95.5	95.3	94.5	89.0	87.0	81.0	8100
	1185	N7808	156	980	766	90	200	95.8	95.6	94.8	86.5	83.5	76.5	12400
	890	N8810	159	980	1021	90	200	95.5	95.0	93.7	85.5	81.0	71.5	25600
	710	N8810	165	980	1279	90	200	95.5	95.0	94.0	82.0	78.0	68.0	28100
1500	1785	N7808	180	1165	611	80	200	96.0	95.5	94.5	90.0	88.0	82.0	⁽⁴⁾
	1185	N7808	187	1165	920	90	200	95.8	95.6	94.8	86.5	83.5	76.5	11900
	890	N8810	190	1165	1225	90	200	95.7	95.3	94.2	85.5	81.5	72.0	24800
	710	N8810	198	1165	1535	90	200	95.5	95.0	94.0	82.0	78.0	68.0	27200
1750	1785	N7808	210	1365	712	85	200	96.0	95.5	94.5	90.0	88.0	82.0	⁽⁴⁾
	1185	N8810	214	1365	1073	85	200	96.3	95.4	94.3	87.8	86.5	82.0	21600
	890	N8810	221	1365	1429	85	200	95.7	95.3	94.2	85.5	81.5	72.0	24500
2000	1785	N8810	238	1535	814	80	200	96.0	95.5	94.5	90.5	88.5	82.5	⁽⁴⁾
	1185	N8810	244	1535	1226	80	200	96.3	95.6	94.3	88.2	86.8	82.3	20800
2250	1785	N8810	267	1730	916	80	200	96.0	95.5	94.5	91.0	89.0	83.0	⁽⁴⁾
	1185	N8810	273	1730	1380	80	200	96.3	95.8	94.8	88.5	87.0	82.8	20400
2500	1788	N8810	296	1900	1016	80	200	96.0	95.5	94.5	91.0	89.0	83.0	⁽⁴⁾

Note: (1) Above data are typical values and for reference only.

(2) Test method: Performance test per IEEE standard 112 method F1.

(3) Only for high thrust motors. The allowable maximum down thrust is based on 5 years L-10 bearing life.

(4) High thrust motor is available on request.

(5) Non-reverse ratchet mechanism is available on request for high thrust motors.

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.



HIGH VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

3 Phase, 60Hz, 6600V, 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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
200	1775	N5009	16.6	110	81.9	100	200	93.5	93.0	92.0	84.0	81.0	73.0	12600
	1180	N5009	17.8	110	123	100	200	93.8	93.3	91.8	78.0	73.0	63.0	14600
	880	N5810	18.9	110	165	100	200	93.2	91.7	89.7	74.0	68.0	54.0	14500
	705	N5810	19.4	110	206	100	200	93.0	92.5	90.5	72.5	65.0	53.0	15800
250	1775	N5009	20.6	135	102	100	200	93.5	93.0	92.0	84.5	81.5	73.5	12500
	1180	N5009	22.3	135	154	100	200	93.8	93.3	91.8	78.0	73.0	63.0	14600
	880	N5810	23.7	135	206	100	200	93.2	91.9	89.7	74.0	69.0	56.0	14400
	705	N5810	24.0	135	258	100	200	93.0	92.5	90.5	73.0	65.5	53.5	15700
300	1775	N5009	24.6	160	123	100	200	93.5	93.0	92.0	85.0	82.0	74.0	12400
	1180	N5810	26.8	160	185	100	200	93.8	93.3	91.8	78.0	73.0	63.0	12600
	880	N5810	27.9	160	248	100	200	93.7	93.2	91.7	75.0	70.0	57.0	14200
	708	N6310	28.3	160	308	100	200	93.5	93.0	91.5	74.0	66.5	54.5	15300
350	1780	N5810	28.9	190	143	100	200	94.0	93.5	92.5	84.0	81.0	73.0	10400
	1180	N5810	29.6	185	216	100	200	94.8	93.8	92.8	81.5	78.5	70.0	12400
	880	N5810	32.1	185	289	100	200	93.7	93.4	91.9	76.0	71.0	58.0	14000
	708	N6310	32.8	185	359	100	200	93.5	93.2	91.7	74.5	67.5	55.5	15100
400	1780	N5810	32.9	210	163	100	200	94.0	93.5	92.5	84.5	81.5	73.5	10200
	1180	N5810	33.6	210	246	100	200	94.8	93.8	92.8	82.0	79.0	70.5	12300
	885	N6310	36.4	210	328	100	200	93.7	93.4	91.9	76.5	71.5	58.5	13500
	708	N6310	37.2	210	411	100	200	93.5	93.2	91.7	75.0	68.0	56.0	14800
450	1780	N5810	35.9	230	184	100	200	94.5	93.9	92.5	86.5	83.5	76.0	10100
	1180	N5810	37.8	230	277	100	200	94.8	93.8	92.8	82.0	79.0	70.5	12100
	885	N6310	40.8	230	369	100	200	94.2	93.7	92.2	76.5	71.5	58.5	13400
	710	N6810	40.1	230	461	100	200	94.0	93.5	92.0	78.0	71.0	60.0	14700
500	1780	N5810	39.9	260	204	100	200	94.5	93.9	92.5	86.5	83.5	76.0	9900
	1180	N5810	42.0	260	308	100	200	94.8	94.3	93.3	82.0	79.0	70.5	11900
	885	N6310	43.3	260	411	100	200	94.2	93.7	92.2	80.0	75.0	65.0	13300
	710	N6810	44.5	260	512	100	200	94.0	93.5	92.0	78.0	72.0	60.0	14600
600	1780	N5810	47.4	305	245	100	200	94.5	94.3	93.0	87.5	84.5	77.0	9400
	1185	N6310	48.6	305	368	100	200	94.8	94.5	93.0	85.0	81.0	72.0	11500
	885	N6810	49.8	305	493	100	200	94.7	94.1	92.7	83.0	78.0	68.0	12700
	710	N7808	51.8	305	614	100	200	94.5	93.9	92.5	80.0	74.0	62.0	17200
700	1780	N6310	55.1	355	286	100	200	94.7	94.3	93.5	87.5	84.5	77.0	9400
	1185	N6810	55.9	350	429	100	200	95.0	94.6	93.8	86.0	82.0	74.0	11000
	890	N7808	58.0	350	571	100	200	94.9	94.5	93.7	83.0	78.0	68.0	15400
	710	N7808	60.4	350	716	100	200	94.5	93.9	92.5	80.0	74.0	62.0	17000
800	1785	N6810	62.5	405	326	100	200	95.5	94.5	93.5	87.5	84.0	77.0	8800
	1185	N6810	63.9	405	491	100	200	95.0	94.6	93.8	86.0	82.0	74.0	10800
	890	N7808	64.7	400	653	100	200	94.9	94.5	93.7	85.0	80.0	70.0	15200
	710	N7808	69.1	400	819	100	200	94.5	94.0	93.5	80.0	74.0	62.0	16800
900	1785	N6810	70.3	455	366	90	200	95.0	94.5	93.7	88.0	85.0	78.0	8700
	1185	N7808	71.7	450	552	100	200	95.3	94.8	94.0	86.0	82.0	74.0	13100
	890	N7808	72.6	450	735	100	200	95.2	94.5	93.7	85.0	80.0	70.0	15000
	710	N8810	76.3	450	921	100	200	95.0	94.0	93.5	81.0	75.0	65.0	29600
1000	1785	N6810	77.6	500	407	90	200	95.0	94.5	93.7	88.5	85.5	78.5	8400
	1185	N7808	79.6	500	613	90	200	95.3	94.8	94.0	86.0	82.0	74.0	12700
	890	N7808	80.6	490	816	90	200	95.2	94.5	93.7	85.0	80.0	70.0	14600
	710	N8810	84.8	490	1023	90	200	95.0	94.5	93.5	81.0	75.0	65.0	28800



HIGH VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

3 Phase, 60Hz, 6600V, 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			Maximum Down Thrust ⁽³⁾ (lb)
			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	1785	N7808	96.2	620	509	90	200	95.3	94.8	94.0	89.0	86.0	79.0	(4)
	1185	N8810	99.5	620	766	90	200	95.3	94.8	94.0	86.0	82.0	74.0	22700
	890	N8810	100	620	1021	90	200	95.2	94.7	94.2	85.5	80.5	70.5	25600
	710	N8810	106	620	1279	90	200	95.0	94.5	93.5	81.0	75.0	65.0	28100
1500	1785	N7808	115	750	611	90	200	95.3	95.0	94.0	89.0	86.0	79.0	(4)
	1185	N8810	119	750	920	90	200	95.8	95.3	94.3	86.0	82.0	74.0	21900
	890	N8810	120	750	1225	90	200	95.2	94.7	94.2	85.5	80.5	70.5	24800
1750	1785	N8810	132	860	712	80	200	96.0	95.5	94.5	90.0	87.0	80.0	(4)
	1185	N8810	138	860	1073	80	200	95.8	95.3	94.8	86.5	82.5	74.5	21600
2000	1785	N8810	151	980	814	80	200	96.0	95.5	94.5	90.0	87.0	80.0	(4)
2250	1785	N8810	170	980	916	80	200	96.0	95.5	94.5	90.0	87.0	80.0	(4)

Note: (1) Above data are typical values and for reference only.

(2) Test method: Performance test per IEEE standard 112 method F1.

(3) Only for high thrust motors. The allowable maximum down thrust is based on 5 years L-10 bearing life.

(4) High thrust motor is available on request.

(5) Non-reverse ratchet mechanism is available on request for high thrust motors.

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HIGH VOLTAGE MOTOR

TEFC, Vertical Flange-Mounted

3 Phase, 60Hz, 11000V, 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			Maximum Down Thrust ⁽³⁾ (lb)
			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 (%)	
350	880	N6310	18.8	103	289	100	200	93.7	93.2	92.2	78.0	74.5	65.0	13600
400	1180	N6310	20.2	122	246	100	200	93.8	93.3	92.8	82.5	77.5	68.5	11900
	880	N6310	21.3	117	330	100	200	93.7	93.2	92.2	78.5	74.5	65.5	13500
450	1780	N6310	21.9	142	184	100	200	94.3	93.5	92.0	85.5	83.0	75.5	9800
	1180	N6310	22.5	135	277	100	200	94.3	93.8	92.3	83.0	78.0	69.0	11900
	885	N6310	23.9	132	369	100	200	93.9	93.2	92.2	78.5	75.0	65.5	13400
500	1780	N6310	24.3	157	204	100	200	94.3	93.5	92.0	85.5	83.0	75.5	9700
	1180	N6310	24.7	148	308	100	200	94.3	93.8	92.3	84.0	80.0	72.5	11700
	885	N6810	26.5	145	411	100	200	94.2	93.7	92.7	78.5	75.0	65.5	13000
600	1780	N6310	29.1	188	245	100	200	94.5	94.0	92.0	85.5	83.0	75.5	9500
	1185	N6810	29.4	176	368	100	200	94.6	94.3	92.8	84.5	80.5	72.5	11100
	885	N6810	31.1	170	493	100	200	94.5	94.2	92.7	80.0	76.5	67.0	12700
700	1780	N6810	33.4	216	286	100	200	94.8	94.5	93.0	86.5	84.0	77.0	9000
	1185	N6810	34.0	204	429	100	200	94.8	94.3	93.3	85.0	81.0	73.5	11000
	890	N7808	35.3	194	571	100	200	94.7	94.2	93.2	82.0	78.5	70.5	15400
800	1785	N6810	38.1	247	326	100	200	95.0	94.5	93.0	86.5	84.0	77.0	8800
	1185	N7808	38.8	233	491	100	200	95.0	94.8	93.8	85.0	81.0	73.5	13300
	890	N7808	40.3	222	653	100	200	94.7	94.2	93.2	82.0	78.5	70.5	15200
900	1785	N6810	42.9	277	366	100	200	95.0	94.5	93.5	86.5	84.0	77.0	8700
	1185	N7808	43.3	260	552	100	200	95.1	94.8	93.8	85.5	81.5	73.5	13100
	890	N7808	45.3	248	735	100	200	94.9	94.4	93.7	82.0	78.5	70.5	15000
1000	1785	N7808	47.1	305	407	90	200	95.1	94.5	93.5	87.5	86.5	82.0	(4)
	1185	N7808	47.8	286	613	100	200	95.3	94.8	93.8	86.0	82.0	74.5	12700
	890	N8810	49.3	270	816	100	200	95.2	94.7	93.7	83.5	80.5	71.5	26300
1250	1785	N7808	58.8	380	509	90	200	95.2	95.0	94.0	87.5	86.5	82.0	(4)
	1185	N8810	59.7	357	766	100	200	95.4	94.8	93.8	86.0	82.5	74.5	22700
	890	N8810	61.5	337	1021	100	200	95.3	94.7	93.7	83.5	80.5	71.5	25600
1350	1785	N7808	63.4	410	550	90	200	95.3	95.0	94.0	87.5	86.5	82.0	(4)
	1185	N8810	63.9	383	828	100	200	95.6	95.0	93.8	86.5	82.5	75.0	22300
	890	N8810	66.3	364	1102	100	200	95.5	95.0	93.7	83.5	80.5	71.0	25200
1500	1785	N8810	70.3	455	611	90	200	95.5	95.0	94.0	87.5	86.5	82.0	(4)
	1185	N8810	71.0	425	920	90	200	95.6	95.3	94.3	86.5	82.5	75.0	21900
1750	1785	N8810	80.2	518	712	90	200	95.5	95.0	94.0	89.5	87.5	84.0	(4)
	1185	N8810	82.2	492	1073	90	200	95.8	95.3	94.3	87.0	83.0	75.5	21600
2000	1785	N8810	91.6	592	814	90	200	95.5	95.0	94.0	89.5	87.5	84.0	(4)
2250	1785	N8810	103	667	916	90	200	95.5	95.0	94.0	89.5	87.5	84.0	(4)

Note: (1) Above data are typical values and for reference only.

(2) Test method: Performance test per IEEE standard 112 method F1.

(3) Only for high thrust motors. The allowable maximum down thrust is based on 5 years L-10 bearing life.

(4) High thrust motor is available on request.

(5) Non-reverse ratchet mechanism is available on request for high thrust motors.

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TATUNG HIGH THRUST VERTICAL MOTOR OUTLINE DRAWING AND DIMENSION SHEET

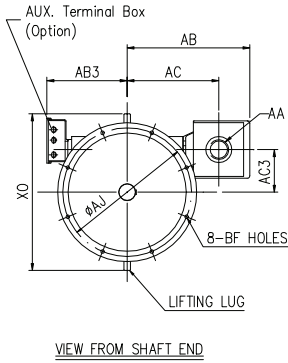
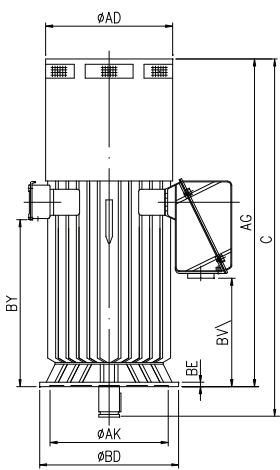


FIG. 1

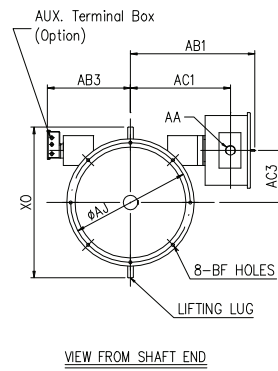
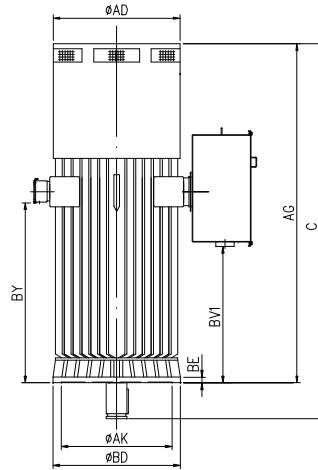


FIG. 2

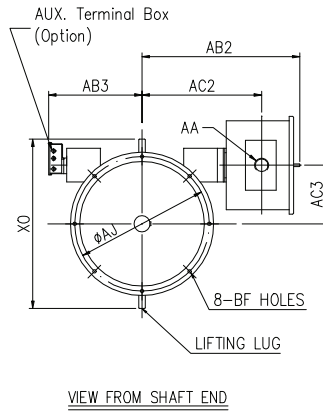
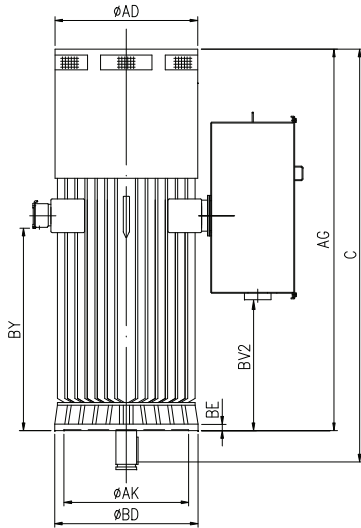
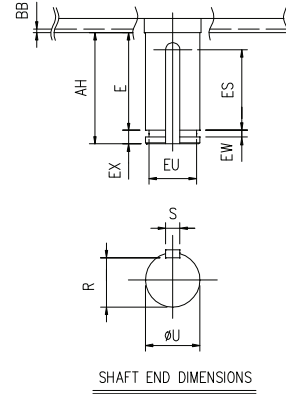


FIG. 3



FRAME NO.	POLES	FIG. NO. ⁹⁾	FLANGE							AA	AB ⁹⁾	AB1 ⁹⁾	AB2 ⁹⁾	AB3	AC	AC1 ⁹⁾	AC2 ⁹⁾	AC3 ⁹⁾	AD	AG
			AJ	AK	BB	BD	BE	BF												
N5009	4~10	1or2	29.13	26.772	0.23	31.50	0.98	0.95	NPT4"	27.80	32.80	—	18.19	20.79	23.62	—	9.65	28.74	78.19	
N5810	4~10	1or2	37.01	34.646	0.23	39.37	1.38	1.10	NPT4"	29.76	34.76	—	20.24	22.76	25.59	—	12.60	30.71	88.98	
N6310	4~10	1or2or3	37.01	34.646	0.23	39.37	1.50	1.10	NPT4"	33.07	36.61	48.90	23.39	26.06	27.44	37.76	13.78	35.43	99.21	
N6810	4~10	2or3	37.01	34.646	0.23	39.37	1.50	1.10	NPT4"	—	37.80	50.08	24.57	—	28.62	38.94	14.96	36.61	107.48	
N7808	6~10	2or3	42.52	39.37	0.23	45.28	1.97	1.10	NPT4"	—	41.06	52.05	26.54	—	31.89	40.91	16.93	40.75	124.02	
N8810	6~10	2or3	42.52	39.37	0.23	45.28	1.97	1.10	NPT4"	—	42.72	55.00	29.49	—	33.54	43.86	18.50	45.08	123.23	

FRAME NO.	POLES	FIG. NO. ⁹⁾	C	BV ⁹⁾	BV1 ⁹⁾	BV2 ⁹⁾	BY	XO	SHAFT END								BEARING		APPROX. WEIGHT (lb)	
									U	E	S	R	EU	EW	ES	EX	AH	D.E. ⁷⁾		N.D.E. ⁸⁾
N5009	4~10	1or2	85.83	24.57	25.75	—	37.83	35.47	3.75	6.70	0.875	3.261	3.27	0.50	5.50	1.0	7.64	6320C3	29330+6028	5510
N5810	4~10	1or2	98.43	34.80	35.98	—	48.07	38.58	4.375	8.27	1.00	3.817	3.875	0.50	7.09	1.0	9.27	6224C3	29330+6028	7700
N6310	4~10	1or2or3	108.66	36.10	37.28	14.76	49.37	43.15	4.375	8.27	1.00	3.817	3.875	0.50	7.09	1.0	9.27	6224C3	29330+6028	10800
N6810	4~10	2or3	116.93	—	42.00	19.49	54.09	45.91	4.75	8.27	1.25	4.041	4.00	0.75	7.09	1.5	9.27	6226C3	29330+6028	13670
N7808	6~10	2or3	135.04	—	47.48	24.96	59.57	49.29	5.00	10.00	1.25	4.296	4.25	0.75	8.00	1.5	11.50	6228C3	29334+6032	17160
N8810	6~10	2or3	136.61	—	51.81	29.29	63.90	53.54	6.30	11.81	1.50	5.459	5.55	0.75	9.84	1.5	13.38	6034C3	29340+6038	22000

Unit: inch

Note:

- 1) Diameter U tolerance : +0.00 inch ~ -0.001 inch.
- 2) Dimension R tolerance : +0.00 inch ~ -0.015 inch.
- 3) Diameter EU tolerance : +0.00 inch ~ -0.010 inch for N5009~N6310.
Diameter EU tolerance : +0.00 inch ~ -0.015 inch for N6810~N8810.
- 4) Dimension AK tolerance : +0.002 inch ~ +0.00 inch for N5009.
Dimension AK tolerance : +0.003 inch ~ +0.00 inch for N5810~N8810.
- 5) Dimensions C, AB, AB1, AB2, AB3, AD, AG, BD, BV, BV1, BV2, BY, XO are approximate values.
- 6) C dimension may be extended to meet low noise level.
- 7) Grease lubricated.
- 8) Oil lubricated.
- 9) Fig.1 for 4160 volts and below for N5009, N5810 and N6310.
Fig.2 for 6600 volts for all frames and for 4160 volts and below for N6810, N7808 and N8810.
Fig.3 for 11000 volts for N6310, N6810, N7808 and N8810.



STANDARD VERTICAL MOTOR OUTLINE DRAWING AND DIMENSION SHEET

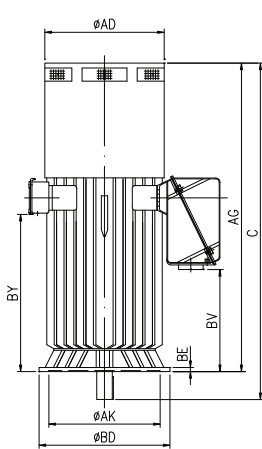
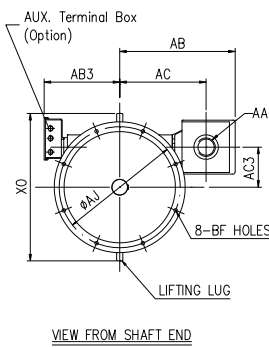


FIG.1



VIEW FROM SHAFT END

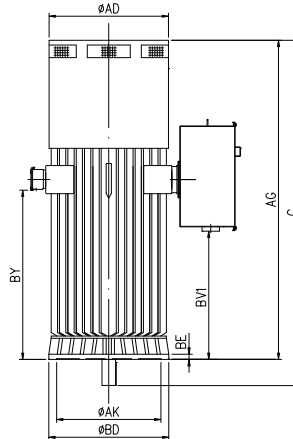
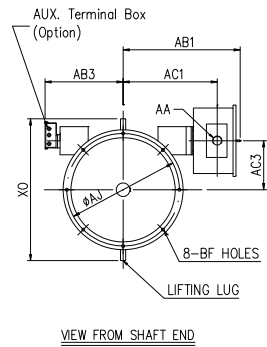


FIG.2



VIEW FROM SHAFT END

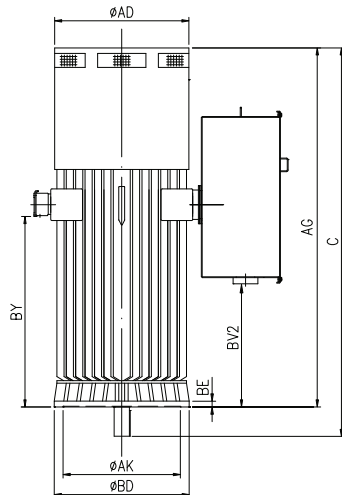
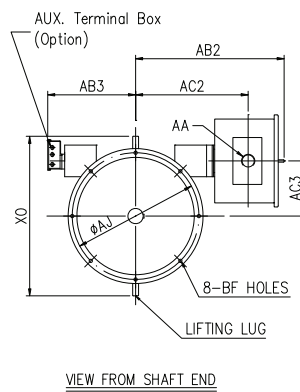
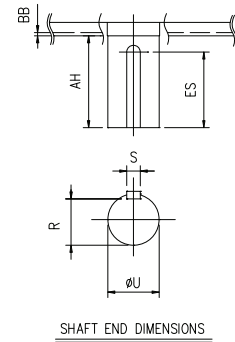


FIG.3



VIEW FROM SHAFT END



SHAFT END DIMENSIONS

FRAME NO.	POLES	FIG. NO. ⁷⁾	FLANGE							AA	AB ⁷⁾	AB1 ⁷⁾	AB2 ⁷⁾	AB3	AC ⁷⁾	AC1 ⁷⁾	AC2 ⁷⁾	AC3	AD
			AJ	AK	BB	BD	BE	BF											
N5009	4~10	1or2	29.13	26.772	0.23	31.50	0.98	0.95	NPT4"	27.80	32.80	—	18.19	20.79	23.62	—	9.65	28.35	
N5810	4~10	1or2	37.01	34.646	0.23	39.37	1.38	1.10	NPT4"	29.76	34.76	—	20.24	22.76	25.59	—	12.60	30.71	
N6310	4~10	1or2or3	37.01	34.646	0.23	39.37	1.50	1.10	NPT4"	33.07	36.61	48.90	23.39	26.06	27.44	37.76	13.78	34.25	
N6810	4~10	2or3	37.01	34.646	0.23	39.37	1.50	1.10	NPT4"	—	37.80	50.08	24.57	—	28.62	38.94	14.96	36.61	
N7808	4~10	2or3	42.52	39.37	0.23	45.28	1.97	1.10	NPT4"	—	41.06	52.05	26.54	—	31.89	40.91	16.93	40.55	
N8810	4~10	2or3	42.52	39.37	0.23	45.28	1.97	1.10	NPT4"	—	42.72	55.00	29.49	—	33.54	43.86	18.50	45.08	

FRAME NO.	POLES	FIG. NO. ⁷⁾	AG	C	BV ⁷⁾	BV1 ⁷⁾	BV2 ⁷⁾	BY	XO	SHAFT END					BEARING		APPROX. WEIGHT (lb)
										U	S	R	ES	AH	D.E. ⁶⁾	N.D.E. ⁶⁾	
N5009	4~10	1or2	72.05	78.74	24.57	25.75	—	37.83	35.47	3.75	0.875	3.261	5.50	6.70	6320C3	7320B	4850
N5810	4~10	1or2	82.28	90.55	34.80	35.98	—	48.07	38.58	4.375	1.00	3.817	6.70	8.30	6224C3	7320B	7930
N6310	4~10	1or2or3	86.22	94.49	36.10	37.28	14.76	49.37	43.15	4.375	1.00	3.817	6.70	8.30	6224C3	7324B	10350
N6810	4~10	2or3	93.31	101.57	—	42.00	19.49	54.09	45.91	4.75	1.25	4.041	6.70	8.30	6226C3	7324B	12555
N7808	4~10	2or3	102.36	112.20	—	47.48	24.96	59.57	49.29	5.00	1.25	4.296	8.66	9.85	6228C3	7324B	16100
N8810	4~10	2or3	109.84	121.65	—	51.81	29.29	63.90	53.54	6.30	1.50	5.459	9.84	11.81	6034C3	7330B	20700

Unit: inch

Note:

- 1) Diameter U tolerance : +0.00 inch ~ -0.001 inch.
- 2) Dimension R tolerance : +0.00 inch ~ -0.015 inch.
- 3) Dimension AK tolerance : +0.002 inch ~ +0.00 inch for N5009.
+0.003 inch ~ +0.00 inch for N5810~N8810.
- 4) Dimensions C, AB, AB1, AB2, AB3, AD, AG, BD, BV, BV1, BV2, BY, XO are approximate values.

- 5) C dimension may be extended to meet low noise level.
- 6) Grease lubricated.

- 7) Fig.1 for 4160 volts and below for N5009, N5810 and N6310.
Fig.2 for 6600 volts for all frames and for 4160 volts and below for N6810, N7808 and N8810.
Fig.3 for 11000 volts for N6310, N6810, N7808 and N8810.