

Squirrel Cage 3-Phase Induction Motor

TS21FV-II SERIES (Standard Series & High Thrust Series)

Vertical Solid Shaft P - Base Mounted

3-Phase / 50Hz, 60Hz / 3kV~11kV

Frame Size N315LL ~ N560LL (IEC / METRIC)

TEFC FIN FRAME CONSTRUCTION



IEC STANDARD



STANDARD SPECIFICATIONS

- ▶ **Output** : 150kW (200HP) - 2000kW (2500HP)
- ▶ **Poles** : 4P - 10P
- ▶ **Frame size** : N315LL - N560LL (IEC / METRIC)
- ▶ **Voltage** : 3kV-11kV
- ▶ **Frequency** : 50Hz, 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 or less
- ▶ **Altitude** : 1000 meters (3300 feet) or less
- ▶ **Thrust capability** : For high thrust series, maximum allowable thrust based on 5 years L-10 bearing life.
Thrust loads not available for standard series.

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.
- ▶ **Low Noise Construction**
Low noise construction meets or exceeds IEC 60034-9 standard. Low noise level is available upon request.

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 3000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1480	N315LL	36.2	235	968	100	200	95.0	94.5	93.0	84.0	81.0	73.5	6100
	980	N315LL	38.0	230	1462	90	200	95.0	94.5	93.0	80.0	76.0	67.0	7100
	735	N315LL	39.7	215	1949	80	200	95.0	95.0	93.5	76.5	71.5	61.0	7800
	588	N355LL	41.0	205	2436	80	200	94.5	94.5	93.0	74.5	68.5	57.5	7800
185	1480	N315LL	44.6	290	1194	100	200	95.0	94.5	93.0	84.0	81.0	73.5	6100
	980	N315LL	46.6	280	1803	90	200	95.0	94.5	93.0	80.5	76.5	67.5	7100
	735	N315LL	49.0	270	2403	80	200	95.0	95.0	93.5	76.5	71.5	61.0	7100
	588	N355LL	50.6	255	3004	80	200	94.5	94.5	93.5	74.5	68.5	57.5	7700
200	1480	N315LL	47.9	310	1290	100	200	95.0	94.5	93.0	84.5	82.0	75.0	6100
	980	N315LL	50.0	305	1949	90	200	95.0	94.5	93.0	81.0	77.0	68.0	7000
	735	N355LL	52.6	290	2598	80	200	95.0	95.0	93.5	77.0	72.0	61.5	7000
	588	N355LL	54.7	275	3248	80	200	94.5	94.5	93.5	74.5	68.5	57.5	7600
220	1480	N315LL	52.7	340	1419	100	200	95.0	94.5	93.0	84.5	82.0	75.0	6000
	980	N315LL	54.7	330	2144	90	200	95.0	94.5	93.0	81.5	77.5	68.5	7000
	735	N355LL	57.5	315	2858	80	200	95.0	95.0	93.5	77.5	74.5	66.0	6900
	588	N355LL	59.7	300	3573	80	200	94.5	94.5	93.5	75.0	69.0	58.0	7600
250	1480	N315LL	59.9	390	1613	100	200	95.0	94.5	93.0	84.5	82.0	75.0	6000
	985	N355LL	61.8	370	2424	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6100
	735	N355LL	64.9	355	3248	80	200	95.0	95.0	93.5	78.0	75.0	66.5	6800
	588	N400LL	67.4	335	4060	80	200	94.5	94.5	93.5	75.5	70.0	60.5	7300
280	1480	N355LL	67.1	435	1807	100	200	95.0	94.5	93.0	84.5	82.0	75.0	5000
	985	N355LL	69.2	415	2714	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6000
	735	N355LL	72.7	400	3638	80	200	95.0	95.0	93.5	78.0	75.0	66.5	6800
	588	N400LL	75.1	375	4547	80	200	95.0	95.0	94.0	75.5	70.0	60.5	7100
315	1480	N355LL	75.1	485	2032	100	200	95.0	94.5	93.0	85.0	82.5	75.5	5000
	985	N355LL	77.4	460	3054	90	200	95.0	94.5	93.0	82.5	78.5	69.5	5900
	735	N355LL	81.8	450	4092	80	200	95.0	95.0	93.5	78.0	75.0	66.5	6700
	590	N400LL	84.0	420	5098	80	200	95.0	95.0	94.0	76.0	70.5	61.0	7200
355	1480	N355LL	84.6	550	2290	100	200	95.0	94.5	93.0	85.0	82.5	75.5	4900
	985	N355LL	87.2	520	3442	90	200	95.0	95.0	93.5	82.5	79.5	70.5	5900
	735	N400LL	89.9	490	4612	80	200	95.0	95.0	93.5	80.0	76.0	67.0	6500
	590	N400LL	94.0	470	5746	80	200	95.0	95.0	94.0	76.5	71.0	61.5	7200
375	1480	N355LL	88.9	575	2420	100	200	95.0	94.5	93.0	85.5	83.0	76.0	4800
	985	N355LL	92.1	550	3635	90	200	95.0	95.0	93.5	82.5	79.5	70.5	5800
	740	N400LL	94.4	515	4839	80	200	95.0	95.0	94.0	80.5	76.5	67.5	6500
	592	N450LL	98.0	490	6049	80	200	95.0	95.0	94.0	77.5	73.0	62.5	7000
400	1480	N355LL	94.8	615	2581	100	200	95.0	95.0	93.5	85.5	83.0	76.0	4900
	985	N355LL	98.2	585	3878	90	200	95.0	95.0	94.0	82.5	79.5	70.5	5900
	740	N400LL	101	550	5162	80	200	95.0	95.0	94.0	80.5	76.5	67.5	6500
	592	N450LL	105	520	6452	80	200	95.0	95.0	94.0	77.5	73.0	62.5	7000
450	1485	N355LL	106	685	2894	100	200	95.5	95.0	93.5	85.5	83.0	76.0	4700
	985	N400LL	110	655	4362	90	200	95.0	95.0	93.5	83.0	80.0	71.0	5700
	740	N400LL	113	620	5807	80	200	95.0	95.0	94.0	80.5	76.5	67.5	6400
	592	N450LL	117	590	7259	80	200	95.0	95.0	94.0	78.0	73.5	62.5	6900
500	1485	N355LL	117	760	3215	90	200	95.5	95.0	93.5	86.0	83.5	76.5	4600
	985	N400LL	121	720	4847	90	200	95.5	95.0	94.0	83.5	81.0	73.5	5600
	740	N450LL	124	680	6452	80	200	95.5	95.0	94.0	81.0	77.0	68.0	6200
	592	N500LL	129	645	8065	80	200	95.2	95.0	94.0	78.5	74.0	64.0	8300
560	1485	N400LL	131	850	3601	90	200	95.5	95.0	93.5	86.0	84.5	80.0	4600
	985	N400LL	135	810	5429	90	200	95.5	95.0	94.0	83.5	81.0	73.5	5600
	740	N450LL	139	765	7226	80	200	95.5	95.0	94.0	81.0	77.0	68.0	6100
	592	N500LL	143	710	9033	80	200	95.2	95.0	94.0	79.0	75.0	65.0	8300
630	1485	N400LL	148	950	4051	90	200	95.5	95.0	94.0	86.0	84.5	79.0	4600
	990	N400LL	152	910	6077	90	200	95.5	95.0	94.0	83.5	81.0	73.5	5500
	740	N450LL	156	855	8130	80	200	95.5	95.0	94.0	81.5	77.5	68.5	6000
	593	N500LL	161	800	10145	80	200	95.2	95.0	94.0	79.0	75.0	65.0	8200
710	1486	N400LL	166	1070	4562	90	200	95.7	95.4	94.4	86.0	84.5	79.0	4300
	990	N450LL	169	1010	6848	90	200	95.5	95.0	94.0	84.5	82.5	76.0	5200
	740	N500LL	174	960	9162	80	200	95.5	95.0	94.0	82.0	79.0	71.5	7300
	593	N500LL	180	900	11433	80	200	95.5	95.5	94.5	79.5	75.5	65.5	8100
750	1486	N450LL	174	1120	4819	90	200	95.8	95.5	94.5	86.5	85.0	80.0	4200
	990	N450LL	178	1060	7234	90	200	95.6	95.0	94.0	85.0	83.0	76.5	5100
	740	N500LL	184	1010	9678	80	200	95.5	95.0	94.0	82.0	78.5	70.0	7200
	595	N560LL	189	945	12037	80	200	95.5	95.5	94.5	80.0	77.0	69.0	14100

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 3000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1486	N450LL	185	1200	5141	90	200	95.8	95.5	94.5	87.0	85.5	80.5	4100
	990	N450LL	189	1130	7716	80	200	95.6	95.5	94.5	85.0	83.0	76.5	5000
	740	N500LL	195	1070	10323	80	200	95.5	95.0	94.0	82.5	79.5	70.5	7100
	595	N560LL	200	1000	12839	80	200	95.6	95.6	94.5	80.5	77.5	69.5	13900
900	1486	N450LL	207	1340	5783	90	200	95.8	95.5	94.5	87.5	86.0	81.0	4000
	990	N500LL	210	1260	8681	80	200	95.8	95.6	94.5	86.0	84.5	79.0	6200
	740	N500LL	219	1200	11614	70	200	95.8	95.3	94.0	82.5	79.5	70.5	7000
	595	N560LL	225	1120	14444	80	200	95.8	95.8	94.5	80.5	77.5	69.0	13700
1000	1488	N450LL	229	1480	6417	80	200	96.0	95.8	94.8	87.5	86.0	81.0	3900
	990	N500LL	230	1380	9645	80	200	96.0	95.8	94.6	87.0	85.5	80.0	6100
	740	N560LL	240	1320	12904	70	200	96.0	95.6	94.5	83.5	81.0	73.5	12400
	595	N560LL	247	1230	16049	70	200	96.0	95.6	94.5	81.0	78.0	70.0	13500
1120	1488	N500LL	253	1640	7187	80	200	96.2	96.0	95.0	88.5	87.5	83.0	(4)
	990	N500LL	258	1540	10803	70	200	96.2	96.0	95.0	87.0	85.5	80.0	10700
	740	N560LL	268	1470	14453	70	200	96.2	95.8	94.6	83.5	81.0	73.5	12100
1250	1488	N500LL	282	1830	8022	80	200	96.4	96.3	95.3	88.5	87.5	83.5	(4)
	990	N560LL	286	1710	12057	70	200	96.3	96.0	94.8	87.5	86.0	80.5	10600
	740	N560LL	299	1640	16130	70	200	96.3	96.0	94.8	83.5	81.0	73.5	12000
1400	1490	N500LL	314	2030	8972	70	200	96.5	96.3	95.5	89.0	88.0	84.0	(4)
	990	N560LL	319	1910	13504	70	200	96.5	96.3	94.8	87.5	86.0	80.5	10500
1500	1490	N560LL	334	2170	9613	70	200	96.6	96.4	95.5	89.5	88.5	85.5	(4)
	990	N560LL	342	2050	14468	70	200	96.5	96.3	94.8	87.5	86.0	80.5	10300
1600	1492	N560LL	356	2300	10240	70	200	96.6	96.5	95.8	89.5	88.5	85.5	(4)
1800	1492	N560LL	398	2580	11520	70	200	96.6	96.5	95.5	90.0	89.0	86.0	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 3300V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1480	N315LL	32.9	213	968	100	200	95.0	94.5	93.0	84.0	81.0	73.5	6100
	980	N315LL	34.5	205	1462	90	200	95.0	94.5	93.0	80.0	76.0	67.0	7100
	735	N315LL	36.1	198	1949	80	200	95.0	95.0	93.5	76.5	71.5	61.0	7800
	588	N355LL	37.3	186	2436	80	200	94.5	94.5	93.0	74.5	68.5	57.5	7800
185	1480	N315LL	40.6	262	1194	100	200	95.0	94.5	93.0	84.0	81.0	73.5	6100
	980	N315LL	42.3	255	1803	90	200	95.0	94.5	93.0	80.5	76.5	67.5	7100
	735	N315LL	44.5	245	2403	80	200	95.0	95.0	93.5	76.5	71.5	61.0	7100
	588	N355LL	46.0	230	3004	80	200	94.5	94.5	93.5	74.5	68.5	57.5	7700
200	1480	N315LL	43.6	285	1290	100	200	95.0	94.5	93.0	84.5	82.0	75.0	6100
	980	N315LL	45.5	275	1949	90	200	95.0	94.5	93.0	81.0	77.0	68.0	7000
	735	N355LL	47.8	265	2598	80	200	95.0	95.0	93.5	77.0	72.0	61.5	7000
	588	N355LL	49.7	255	3248	80	200	94.5	94.5	93.5	74.5	68.5	57.5	7600
220	1480	N315LL	47.9	310	1419	100	200	95.0	94.5	93.0	84.5	82.0	75.0	6000
	980	N315LL	49.7	298	2144	90	200	95.0	94.5	93.0	81.5	77.5	68.5	7000
	735	N355LL	52.3	288	2858	80	200	95.0	95.0	93.5	77.5	74.5	66.0	6900
	588	N355LL	54.3	272	3573	80	200	94.5	94.5	93.5	75.0	69.0	58.0	7600
250	1480	N315LL	54.5	355	1613	100	200	95.0	94.5	93.0	84.5	82.0	75.0	6000
	985	N355LL	56.1	335	2424	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6100
	735	N355LL	59.0	320	3248	80	200	95.0	95.0	93.5	78.0	75.0	66.5	6800
	588	N400LL	61.3	305	4060	80	200	94.5	94.5	93.5	75.5	70.0	60.5	7300
280	1480	N355LL	61.0	395	1807	100	200	95.0	94.5	93.0	84.5	82.0	75.0	5000
	985	N355LL	62.9	375	2714	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6000
	735	N355LL	66.1	360	3638	80	200	95.0	95.0	93.5	78.0	75.0	66.5	6800
	588	N400LL	68.3	340	4547	80	200	95.0	95.0	94.0	75.5	70.0	60.5	7100
315	1480	N355LL	68.3	440	2032	100	200	95.0	94.5	93.0	85.0	82.5	75.5	5000
	985	N355LL	70.3	420	3054	90	200	95.0	94.5	93.0	82.5	78.5	69.5	5900
	735	N355LL	74.4	410	4092	80	200	95.0	95.0	93.5	78.0	75.0	66.5	6700
	590	N400LL	76.3	385	5098	80	200	95.0	95.0	94.0	76.0	70.5	61.0	7200
355	1480	N355LL	76.9	500	2290	100	200	95.0	94.5	93.0	85.0	82.5	75.5	4900
	985	N355LL	79.2	475	3442	90	200	95.0	95.0	93.5	82.5	79.5	70.5	5900
	735	N400LL	81.7	450	4612	80	200	95.0	95.0	93.5	80.0	76.0	67.0	6500
	590	N400LL	85.5	430	5746	80	200	95.0	95.0	94.0	76.5	71.0	61.5	7200
375	1480	N355LL	80.8	525	2420	100	200	95.0	94.5	93.0	85.5	83.0	76.0	4800
	985	N355LL	83.7	500	3635	90	200	95.0	95.0	93.5	82.5	79.5	70.5	5800
	740	N400LL	85.8	470	4839	80	200	95.0	95.0	94.0	80.5	76.5	67.5	6500
	592	N450LL	89.1	445	6049	80	200	95.0	95.0	94.0	77.5	73.0	62.5	7000
400	1480	N355LL	86.2	560	2581	100	200	95.0	95.0	93.5	85.5	83.0	76.0	4900
	985	N355LL	89.3	530	3878	90	200	95.0	95.0	94.0	82.5	79.5	70.5	5900
	740	N400LL	91.5	500	5162	80	200	95.0	95.0	94.0	80.5	76.5	67.5	6500
	592	N450LL	95.1	475	6452	80	200	95.0	95.0	94.0	77.5	73.0	62.5	7000
450	1485	N355LL	96.4	625	2894	100	200	95.5	95.0	93.5	85.5	83.0	76.0	4700
	985	N400LL	99.9	595	4362	90	200	95.0	95.0	93.5	83.0	80.0	71.0	5700
	740	N400LL	103	565	5807	80	200	95.0	95.0	94.0	80.5	76.5	67.5	6400
	592	N450LL	106	535	7259	80	200	95.0	95.0	94.0	78.0	73.5	62.5	6900
500	1485	N355LL	107	690	3215	90	200	95.5	95.0	93.5	86.0	83.5	76.5	4600
	985	N400LL	110	655	4847	90	200	95.5	95.0	94.0	83.5	81.0	73.5	5600
	740	N450LL	113	620	6452	80	200	95.5	95.0	94.0	81.0	77.0	68.0	6200
	592	N500LL	117	590	8065	80	200	95.2	95.0	94.0	78.5	74.0	64.0	8300
560	1485	N400LL	119	775	3601	90	200	95.5	95.0	93.5	86.0	84.5	80.0	4600
	985	N400LL	123	735	5429	90	200	95.5	95.0	94.0	83.5	81.0	73.5	5600
	740	N450LL	127	695	7226	80	200	95.5	95.0	94.0	81.0	77.0	68.0	6100
	592	N500LL	130	650	9033	80	200	95.2	95.0	94.0	79.0	75.0	65.0	8300
630	1485	N400LL	134	870	4051	90	200	95.5	95.0	94.0	86.0	84.5	79.0	4600
	990	N400LL	138	830	6077	90	200	95.5	95.0	94.0	83.5	81.0	73.5	5500
	740	N450LL	142	775	8130	80	200	95.5	95.0	94.0	81.5	77.5	68.5	6000
	593	N500LL	147	735	10145	80	200	95.2	95.0	94.0	79.0	75.0	65.0	8200
710	1486	N400LL	151	980	4562	90	200	95.7	95.4	94.4	86.0	84.5	79.0	4300
	990	N450LL	154	920	6848	90	200	95.5	95.0	94.0	84.5	82.5	76.0	5200
	740	N500LL	159	870	9162	80	200	95.5	95.0	94.0	82.0	79.0	71.5	7300
	593	N500LL	164	825	11433	80	200	95.5	95.5	94.5	79.5	75.5	65.5	8100
750	1486	N450LL	158	1030	4819	90	200	95.8	95.5	94.5	86.5	85.0	80.0	4200
	990	N450LL	161	965	7234	90	200	95.6	95.0	94.0	85.0	83.0	76.5	5100
	740	N500LL	168	920	9678	80	200	95.5	95.0	94.0	82.0	78.5	70.0	7200
	595	N560LL	172	865	12037	80	200	95.5	95.5	94.5	80.0	77.0	69.0	14100

M152313

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 3300V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1486	N450LL	168	1090	5141	90	200	95.8	95.5	94.5	87.0	85.5	80.5	4100
	990	N450LL	172	1030	7716	80	200	95.6	95.5	94.5	85.0	83.0	76.5	5000
	740	N500LL	178	975	10323	80	200	95.5	95.0	94.0	82.5	79.5	70.5	7100
	595	N560LL	182	920	12839	80	200	95.6	95.6	94.5	80.5	77.5	69.5	13900
900	1486	N450LL	188	1220	5783	90	200	95.8	95.5	94.5	87.5	86.0	81.0	4000
	990	N500LL	191	1140	8681	80	200	95.8	95.6	94.5	86.0	84.5	79.0	6200
	740	N500LL	199	1090	11614	70	200	95.8	95.3	94.0	82.5	79.5	70.5	7000
	595	N560LL	204	1020	14444	80	200	95.8	95.8	94.5	80.5	77.5	69.0	13700
1000	1488	N450LL	208	1350	6417	80	200	96.0	95.8	94.8	87.5	86.0	81.0	3900
	990	N500LL	209	1250	9645	80	200	96.0	95.8	94.6	87.0	85.5	80.0	6100
	740	N560LL	218	1200	12904	70	200	96.0	95.6	94.5	83.5	81.0	73.5	12400
	595	N560LL	225	1120	16049	70	200	96.0	95.6	94.5	81.0	78.0	70.0	13500
1120	1488	N500LL	230	1490	7187	80	200	96.2	96.0	95.0	88.5	87.5	83.0	(4)
	990	N500LL	234	1400	10803	70	200	96.2	96.0	95.0	87.0	85.5	80.0	10700
	740	N560LL	244	1340	14453	70	200	96.2	95.8	94.6	83.5	81.0	73.5	12100
1250	1488	N500LL	256	1660	8022	80	200	96.4	96.3	95.3	88.5	87.5	83.5	(4)
	990	N560LL	260	1550	12057	70	200	96.3	96.0	94.8	87.5	86.0	80.5	10600
	740	N560LL	272	1490	16130	70	200	96.3	96.0	94.8	83.5	81.0	73.5	12000
1400	1490	N500LL	285	1850	8972	70	200	96.5	96.3	95.5	89.0	88.0	84.0	(4)
	990	N560LL	290	1740	13504	70	200	96.5	96.3	94.8	87.5	86.0	80.5	10500
1500	1490	N560LL	304	1970	9613	70	200	96.6	96.4	95.5	89.5	88.5	85.5	(4)
	990	N560LL	311	1860	14468	70	200	96.5	96.3	94.8	87.5	86.0	80.5	10300
1600	1492	N560LL	324	2100	10240	70	200	96.6	96.5	95.8	89.5	88.5	85.5	(4)
1800	1492	N560LL	362	2350	11520	70	200	96.6	96.5	95.5	90.0	89.0	86.0	(4)

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

M152313

(2) Performance tolerance is according to IEC 60034-1.

(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.

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 60Hz, 3300V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1775	N315LL	32.7	212	807	100	200	95.0	94.5	93.0	84.5	82.5	76.0	5700
	1180	N315LL	33.7	202	1214	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N315LL	35.0	192	1618	80	200	95.0	95.0	93.5	79.0	75.0	66.0	7300
	705	N355LL	36.8	185	2032	80	200	94.5	94.5	93.0	75.5	70.5	60.0	7200
185	1775	N315LL	40.1	260	995	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5700
	1180	N315LL	41.6	250	1497	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N315LL	42.6	235	1996	80	200	95.0	95.0	93.5	80.0	75.0	66.0	7300
	705	N355LL	44.8	225	2506	80	200	94.5	94.5	93.5	76.5	72.0	62.0	7200
200	1775	N315LL	43.3	280	1076	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5700
	1180	N315LL	44.9	270	1618	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N315LL	46.0	255	2158	80	200	95.0	95.0	93.5	80.0	75.0	66.0	7300
	705	N355LL	48.4	245	2709	80	200	94.5	94.5	93.5	76.5	72.0	62.0	7100
220	1775	N315LL	47.7	310	1184	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5600
	1180	N315LL	49.4	295	1780	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N355LL	50.6	280	2374	80	200	95.0	95.0	93.5	80.0	75.0	66.0	6400
	706	N355LL	52.9	265	2976	80	200	94.5	94.5	93.5	77.0	72.5	62.5	7000
250	1775	N315LL	54.2	350	1345	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5600
	1180	N315LL	55.8	335	2023	90	200	95.0	94.5	93.0	82.5	78.5	69.5	6500
	886	N355LL	57.4	315	2694	80	200	95.0	95.0	93.5	80.2	75.7	66.2	6400
	706	N355LL	59.7	300	3381	80	200	94.5	94.5	93.5	77.5	73.0	63.0	7000
280	1775	N315LL	60.7	390	1506	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5600
	1180	N355LL	62.5	375	2266	90	200	95.0	94.5	93.0	82.5	78.5	70.0	5600
	885	N355LL	64.1	350	3021	80	200	95.0	95.0	93.5	80.5	76.0	66.5	6300
	706	N400LL	66.1	330	3787	80	200	95.0	95.0	94.0	78.0	73.5	63.5	6800
315	1775	N355LL	67.9	440	1695	100	200	95.0	94.5	93.0	85.5	83.5	77.0	4600
	1182	N355LL	70.3	420	2545	90	200	95.0	94.5	93.0	82.5	78.5	70.0	5500
	886	N355LL	72.1	395	3395	80	200	95.0	95.0	93.5	80.5	76.5	67.0	6200
	706	N400LL	74.4	370	4261	80	200	95.0	95.0	94.0	78.0	73.5	63.5	6600
355	1775	N355LL	76.5	495	1910	100	200	95.0	94.5	93.0	85.5	83.5	77.0	4500
	1182	N355LL	78.8	470	2868	90	200	95.0	95.0	93.5	83.0	80.0	72.0	5400
	888	N355LL	80.7	440	3817	80	200	95.0	95.0	93.5	81.0	77.5	68.5	6100
	706	N400LL	83.8	415	4802	80	200	95.0	95.0	94.0	78.0	73.5	63.5	6600
375	1780	N355LL	80.8	525	2012	100	200	95.0	94.5	93.0	85.5	83.5	77.0	4400
	1182	N355LL	83.2	495	3030	90	200	95.0	95.0	93.5	83.0	80.0	72.0	5300
	888	N400LL	85.3	465	4033	80	200	95.0	95.0	94.0	81.0	77.5	68.5	6000
	708	N400LL	88.0	440	5058	80	200	95.0	95.0	94.0	78.5	74.0	64.0	6600
400	1780	N355LL	85.5	555	2146	100	200	95.2	95.0	93.5	86.0	84.0	79.0	4300
	1182	N355LL	88.8	525	3231	90	200	95.0	94.8	93.8	83.0	80.0	72.0	5200
	888	N400LL	90.9	500	4301	80	200	95.0	94.6	93.6	81.0	77.5	68.5	6000
	708	N450LL	93.2	465	5395	80	200	95.0	95.0	94.0	79.0	75.5	67.0	6400
450	1780	N355LL	96.2	625	2414	100	200	95.2	95.0	93.5	86.0	84.5	79.5	4300
	1182	N355LL	99.0	590	3635	90	200	95.2	95.0	94.0	83.5	80.5	72.0	5200
	888	N400LL	102	560	4839	80	200	95.2	95.0	94.0	81.0	77.5	68.5	5900
	708	N450LL	105	525	6069	80	200	95.2	95.0	94.0	79.0	74.5	64.5	6400
500	1780	N355LL	107	690	2682	100	200	95.5	95.0	93.5	86.0	84.5	79.0	4200
	1185	N400LL	109	650	4029	90	200	95.5	95.2	94.0	84.0	82.5	75.5	5200
	890	N400LL	113	615	5365	80	200	95.2	95.0	94.0	81.6	78.0	69.0	5900
	710	N450LL	116	575	6725	80	200	95.2	95.0	94.0	79.0	74.5	64.5	6300
560	1782	N355LL	119	770	3001	90	200	95.5	95.2	94.0	86.0	84.5	79.0	4100
	1185	N400LL	121	725	4513	90	200	95.5	95.5	94.5	84.5	83.0	76.0	5200
	890	N450LL	126	690	6008	80	200	95.5	95.5	94.5	81.7	78.0	69.0	5600
	710	N500LL	128	640	7532	80	200	95.5	95.5	94.5	80.0	76.0	67.0	7600
630	1782	N400LL	133	865	3376	90	200	95.5	95.2	94.0	86.5	85.0	80.0	4200
	1185	N400LL	136	815	5077	90	200	95.6	95.6	94.5	84.5	83.0	76.0	5100
	890	N450LL	141	775	6759	80	200	95.5	95.5	94.5	81.7	78.0	69.0	5600
	710	N500LL	144	720	8473	80	200	95.5	95.5	94.5	80.0	76.0	67.0	7500
710	1782	N400LL	150	975	3805	90	200	95.6	95.2	94.0	86.5	85.0	80.5	4200
	1188	N400LL	154	915	5707	90	200	95.7	95.5	94.5	84.5	82.5	76.0	4800
	892	N450LL	159	870	7601	80	200	95.5	95.5	94.5	82.0	78.5	70.0	5500
	710	N500LL	163	810	9549	80	200	95.5	95.5	94.5	80.0	77.0	68.0	7500
750	1785	N400LL	158	1020	4012	90	200	95.7	95.5	94.5	87.0	85.5	80.5	4100
	1188	N450LL	161	965	6028	90	200	95.7	95.5	94.5	85.0	83.0	76.5	4700
	892	N500LL	166	910	8029	80	200	95.6	95.6	94.6	82.5	79.0	70.5	6600
	712	N500LL	171	850	10059	80	200	95.6	95.6	94.6	80.5	77.5	69.5	7400

M152313

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 60Hz, 3300V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1785	N450LL	168	1090	4280	90	200	95.8	95.5	94.5	87.0	86.0	81.5	3700
	1188	N450LL	172	1030	6430	80	200	95.8	95.5	94.5	85.0	83.0	76.5	4600
	892	N500LL	177	970	8564	80	200	95.8	95.8	94.8	82.5	79.0	70.5	6600
	712	N560LL	181	905	10729	80	200	95.8	95.8	94.8	80.5	77.5	69.5	12900
900	1785	N450LL	188	1220	4815	90	200	95.8	95.5	94.5	87.5	86.5	82.0	3700
	1190	N450LL	192	1150	7222	80	200	95.8	95.8	94.8	85.5	83.5	77.0	4500
	892	N500LL	199	1090	9635	80	200	95.8	95.8	94.8	82.5	79.0	70.5	6500
	712	N560LL	203	1020	12070	80	200	95.8	95.8	94.8	81.0	78.0	69.5	12700
1000	1785	N450LL	209	1350	5350	80	200	95.8	95.5	94.5	87.5	86.5	82.0	3600
	1190	N500LL	212	1270	8024	80	200	95.8	95.8	94.8	86.0	84.5	79.5	5500
	892	N500LL	221	1210	10705	80	200	95.8	95.6	94.6	82.5	79.5	72.0	6400
	712	N560LL	225	1120	13412	80	200	96.0	96.0	95.0	81.0	78.0	70.0	12600
1120	1786	N450LL	232	1500	5988	80	200	96.0	95.8	94.8	88.0	87.0	82.5	3500
	1190	N500LL	237	1420	8987	80	200	96.0	96.0	95.0	86.0	84.5	79.5	5400
	892	N560LL	247	1350	11990	70	200	96.2	96.0	95.0	82.5	79.5	72.0	11200
	712	N560LL	252	1260	15021	80	200	96.0	96.0	95.0	81.0	78.0	70.0	12400
1250	1786	N500LL	255	1660	6683	80	200	96.2	96.0	95.0	89.0	88.0	85.0	(4)
	1192	N500LL	261	1560	10014	80	200	96.2	96.0	95.0	87.0	85.5	80.5	5400
	892	N560LL	274	1500	13381	70	200	96.3	96.0	95.0	83.0	80.0	72.5	11100
1400	1786	N500LL	286	1860	7485	80	200	96.2	96.0	95.0	89.0	88.5	85.0	(4)
	1192	N560LL	292	1750	11215	80	200	96.3	96.0	95.0	87.0	85.5	80.5	9600
	892	N560LL	306	1680	14987	70	200	96.3	96.0	95.0	83.0	80.0	72.5	10900
1500	1788	N500LL	306	1980	8011	80	200	96.5	96.2	95.2	89.0	88.5	85.0	(4)
	1192	N560LL	313	1870	12016	80	200	96.5	96.3	95.0	87.0	85.5	80.5	9400
1600	1788	N560LL	324	2100	8545	80	200	96.5	96.2	95.2	89.5	89.0	86.0	(4)
	1192	N560LL	333	2000	1307	80	200	96.5	96.3	95.0	87.0	85.5	80.5	9300
1800	1788	N560LL	365	2370	9613	70	200	96.5	96.2	95.2	89.5	89.0	86.0	(4)
2000	1788	N560LL	403	2610	10681	70	200	96.5	96.2	95.2	90.0	89.5	86.5	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

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

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1775	N315LL	25.9	168	807	100	200	95.0	94.5	93.0	84.5	82.5	76.0	5700
	1180	N315LL	26.7	160	1214	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N315LL	27.7	152	1618	80	200	95.0	95.0	93.5	79.0	75.0	66.0	7300
	705	N355LL	29.2	146	2032	80	200	94.5	94.5	93.0	75.5	70.5	60.0	7200
185	1775	N315LL	31.8	205	995	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5700
	1180	N315LL	33.0	198	1497	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N315LL	33.8	185	1996	80	200	95.0	95.0	93.5	80.0	75.0	66.0	7300
	705	N355LL	35.5	176	2506	80	200	94.5	94.5	93.5	76.5	72.0	62.0	7200
200	1775	N315LL	34.4	222	1076	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5700
	1180	N315LL	35.6	215	1618	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N315LL	36.5	200	2158	80	200	95.0	95.0	93.5	80.0	75.0	66.0	7300
	705	N355LL	38.4	190	2709	80	200	94.5	94.5	93.5	76.5	72.0	62.0	7100
220	1775	N315LL	37.8	245	1184	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5600
	1180	N315LL	39.2	235	1780	90	200	95.0	94.5	93.0	82.0	78.0	69.0	6600
	885	N355LL	40.2	220	2374	80	200	95.0	95.0	93.5	80.0	75.0	66.0	6400
	706	N355LL	42.0	210	2976	80	200	94.5	94.5	93.5	77.0	72.5	62.5	7000
250	1775	N315LL	43.0	278	1345	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5600
	1180	N315LL	44.3	265	2023	90	200	95.0	94.5	93.0	82.5	78.5	69.5	6500
	886	N355LL	45.5	250	2694	80	200	95.0	95.0	93.5	80.2	75.7	66.2	6400
	706	N355LL	47.4	235	3381	80	200	94.5	94.5	93.5	77.5	73.0	63.0	7000
280	1775	N315LL	48.1	310	1506	100	200	95.0	94.5	93.0	85.0	83.0	76.5	5600
	1180	N355LL	49.6	295	2266	90	200	95.0	94.5	93.0	82.5	78.5	70.0	5600
	885	N355LL	50.8	275	3021	80	200	95.0	95.0	93.5	80.5	76.0	66.5	6300
	706	N400LL	52.4	260	3787	80	200	95.0	95.0	94.0	78.0	73.5	63.5	6800
315	1775	N355LL	53.8	350	1695	100	200	95.0	94.5	93.0	85.5	83.5	77.0	4600
	1182	N355LL	55.8	335	2545	90	200	95.0	94.5	93.0	82.5	78.5	70.0	5500
	886	N355LL	57.2	315	3395	80	200	95.0	95.0	93.5	80.5	76.5	67.0	6200
	706	N400LL	59.0	295	4261	80	200	95.0	95.0	94.0	78.0	73.5	63.5	6600
355	1775	N355LL	60.7	390	1910	100	200	95.0	94.5	93.0	85.5	83.5	77.0	4500
	1182	N355LL	62.5	375	2868	90	200	95.0	95.0	93.5	83.0	80.0	72.0	5400
	888	N355LL	64.0	350	3817	80	200	95.0	95.0	93.5	81.0	77.5	68.5	6100
	706	N400LL	66.5	330	4802	80	200	95.0	95.0	94.0	78.0	73.5	63.5	6600
375	1780	N355LL	64.1	415	2012	100	200	95.0	94.5	93.0	85.5	83.5	77.0	4400
	1182	N355LL	66.0	395	3030	90	200	95.0	95.0	93.5	83.0	80.0	72.0	5300
	888	N400LL	67.6	370	4033	80	200	95.0	95.0	94.0	81.0	77.5	68.5	6000
	708	N400LL	69.8	345	5058	80	200	95.0	95.0	94.0	78.5	74.0	64.0	6600
400	1780	N355LL	67.8	440	2146	100	200	95.2	95.0	93.5	86.0	84.0	79.0	4300
	1182	N355LL	70.4	420	3231	90	200	95.0	94.8	93.8	83.0	80.0	72.0	5200
	888	N400LL	72.1	395	4301	80	200	95.0	94.6	93.6	81.0	77.5	68.5	6000
	708	N450LL	74.0	370	5395	80	200	95.0	95.0	94.0	79.0	75.5	67.0	6400
450	1780	N355LL	76.3	495	2414	100	200	95.2	95.0	93.5	86.0	84.5	79.5	4300
	1182	N355LL	78.6	470	3635	90	200	95.2	95.0	94.0	83.5	80.5	72.0	5200
	888	N400LL	81.0	445	4839	80	200	95.2	95.0	94.0	81.0	77.5	68.5	5900
	708	N450LL	83.0	415	6069	80	200	95.2	95.0	94.0	79.0	74.5	64.5	6400
500	1780	N355LL	84.5	545	2682	100	200	95.5	95.0	93.5	86.0	84.5	79.0	4200
	1185	N400LL	86.5	515	4029	90	200	95.5	95.2	94.0	84.0	82.5	75.5	5200
	890	N400LL	89.3	490	5365	80	200	95.2	95.0	94.0	81.6	78.0	69.0	5900
	710	N450LL	92.3	460	6725	80	200	95.2	95.0	94.0	79.0	74.5	64.5	6300
560	1782	N355LL	94.6	610	3001	90	200	95.5	95.2	94.0	86.0	84.5	79.0	4100
	1185	N400LL	96.3	575	4513	90	200	95.5	95.5	94.5	84.5	83.0	76.0	5200
	890	N450LL	99.6	545	6008	80	200	95.5	95.5	94.5	81.7	78.0	69.0	5600
	710	N500LL	102	505	7532	80	200	95.5	95.5	94.5	80.0	76.0	67.0	7600
630	1782	N400LL	106	685	3376	90	200	95.5	95.2	94.0	86.5	85.0	80.0	4200
	1185	N400LL	108	645	5077	90	200	95.6	95.6	94.5	84.5	83.0	76.0	5100
	890	N450LL	112	615	6759	80	200	95.5	95.5	94.5	81.7	78.0	69.0	5600
	710	N500LL	114	570	8473	80	200	95.5	95.5	94.5	80.0	76.0	67.0	7500
710	1782	N400LL	119	770	3805	90	200	95.6	95.2	94.0	86.5	85.0	80.5	4200
	1188	N400LL	122	730	5707	90	200	95.7	95.5	94.5	84.5	82.5	76.0	4800
	892	N450LL	126	690	7601	80	200	95.5	95.5	94.5	82.0	78.5	70.0	5500
	710	N500LL	129	645	9549	80	200	95.5	95.5	94.5	80.0	77.0	68.0	7500
750	1785	N400LL	125	810	4012	90	200	95.7	95.5	94.5	87.0	85.5	80.5	4100
	1188	N450LL	128	765	6028	90	200	95.7	95.5	94.5	85.0	83.0	76.5	4700
	892	N500LL	132	725	8029	80	200	95.6	95.6	94.6	82.5	79.0	70.5	6600
	712	N500LL	135	675	10059	80	200	95.6	95.6	94.6	80.5	77.5	69.5	7400

M152313

PERFORMANCE DATA

MEDIUM VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

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

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1785	N450LL	133	865	4280	90	200	95.8	95.5	94.5	87.0	86.0	81.5	3700
	1188	N450LL	136	815	6430	80	200	95.8	95.5	94.5	85.0	83.0	76.5	4600
	892	N500LL	140	770	8564	80	200	95.8	95.8	94.8	82.5	79.0	70.5	6600
	712	N560LL	144	720	10729	80	200	95.8	95.8	94.8	80.5	77.5	69.5	12900
900	1785	N450LL	149	965	4815	90	200	95.8	95.5	94.5	87.5	86.5	82.0	3700
	1190	N450LL	152	915	7222	80	200	95.8	95.8	94.8	85.5	83.5	77.0	4500
	892	N500LL	158	865	9635	80	200	95.8	95.8	94.8	82.5	79.0	70.5	6500
	712	N560LL	161	805	12070	80	200	95.8	95.8	94.8	81.0	78.0	69.5	12700
1000	1785	N450LL	166	1070	5350	80	200	95.8	95.5	94.5	87.5	86.5	82.0	3600
	1190	N500LL	168	1010	8024	80	200	95.8	95.8	94.8	86.0	84.5	79.5	5500
	892	N500LL	176	965	10705	80	200	95.8	95.6	94.6	82.5	79.5	72.0	6400
	712	N560LL	178	890	13412	80	200	96.0	96.0	95.0	81.0	78.0	70.0	12600
1120	1786	N450LL	184	1190	5988	80	200	96.0	95.8	94.8	88.0	87.0	82.5	3500
	1190	N500LL	188	1120	8987	80	200	96.0	96.0	95.0	86.0	84.5	79.5	5400
	892	N560LL	196	1070	11990	70	200	96.2	96.0	95.0	82.5	79.5	72.0	11200
	712	N560LL	200	1000	15021	80	200	96.0	96.0	95.0	81.0	78.0	70.0	12400
1250	1786	N500LL	203	1310	6683	80	200	96.2	96.0	95.0	89.0	88.0	85.0	(4)
	1192	N500LL	207	1240	10014	80	200	96.2	96.0	95.0	87.0	85.5	80.5	5400
	892	N560LL	217	1190	13381	70	200	96.3	96.0	95.0	83.0	80.0	72.5	11100
1400	1786	N500LL	227	1460	7485	80	200	96.2	96.0	95.0	89.0	88.5	85.0	(4)
	1192	N560LL	232	1390	11215	80	200	96.3	96.0	95.0	87.0	85.5	80.5	9600
	892	N560LL	243	1330	14987	70	200	96.3	96.0	95.0	83.0	80.0	72.5	10900
1500	1788	N500LL	242	1570	8011	80	200	96.5	96.2	95.2	89.0	88.5	85.0	(4)
	1192	N560LL	248	1480	12016	80	200	96.5	96.3	95.0	87.0	85.5	80.5	9400
1600	1788	N560LL	257	1660	8545	80	200	96.5	96.2	95.2	89.5	89.0	86.0	(4)
	1192	N560LL	265	1580	1307	80	200	96.5	96.3	95.0	87.0	85.5	80.5	9300
1800	1788	N560LL	289	1860	9613	70	200	96.5	96.2	95.2	89.5	89.0	86.0	(4)
2000	1788	N560LL	320	2060	10681	70	200	96.5	96.2	95.2	90.0	89.5	86.5	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 6000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1480	N315LL	18.3	119	968	100	200	93.8	93.5	92.0	84.0	81.0	74.0	6100
	980	N315LL	19.3	114	1462	90	200	93.5	93.0	91.5	80.0	76.0	67.0	7100
	735	N355LL	20.0	110	1949	80	200	93.5	93.5	93.0	77.0	73.5	64.0	7100
	588	N355LL	20.9	103	2436	80	200	93.5	93.0	92.0	74.0	68.5	56.5	7700
185	1480	N315LL	22.6	146	1194	100	200	93.8	93.5	92.0	84.0	81.0	74.0	6100
	980	N315LL	23.8	142	1803	90	200	93.5	93.0	91.5	80.0	76.0	67.0	7100
	735	N355LL	24.6	135	2403	80	200	93.5	94.0	93.5	77.5	74.0	64.5	7100
	588	N355LL	25.7	129	3004	80	200	93.5	93.0	92.0	74.0	68.5	56.5	7700
200	1480	N315LL	24.4	158	1290	100	200	94.0	93.8	92.5	84.0	81.0	74.0	6100
	980	N355LL	25.0	150	1949	90	200	94.0	93.3	93.0	82.0	79.5	71.5	6200
	735	N355LL	26.6	146	2598	80	200	93.5	94.0	93.5	77.5	74.0	64.5	7000
	588	N355LL	27.8	140	3248	80	200	93.5	93.0	92.0	74.0	68.5	56.5	7400
220	1480	N315LL	26.8	173	1419	100	200	94.2	94.0	92.5	84.0	81.0	74.0	5200
	980	N355LL	27.5	164	2144	90	200	94.0	93.3	93.0	82.0	79.5	71.5	6200
	735	N355LL	29.1	159	2858	80	200	94.0	94.0	93.5	77.5	74.0	64.5	6900
	588	N400LL	30.2	150	3573	80	200	94.0	94.0	93.0	74.5	69.5	58.5	7300
250	1480	N355LL	30.1	195	1613	100	200	94.5	94.3	92.5	84.5	82.5	74.0	5100
	985	N355LL	30.9	185	2424	90	200	94.5	94.5	93.5	82.5	80.0	72.0	6100
	735	N355LL	32.8	180	3248	80	200	94.0	94.0	93.5	78.0	74.5	65.0	6600
	588	N400LL	34.1	170	4060	80	200	94.0	94.0	93.0	75.0	70.0	59.0	7300
280	1480	N355LL	33.7	219	1807	100	200	94.5	94.3	92.5	84.5	82.5	74.0	5000
	985	N355LL	34.6	205	2714	90	200	94.5	94.5	93.5	82.5	80.0	72.0	6000
	735	N355LL	36.6	200	3638	80	200	94.5	94.0	93.0	78.0	74.5	65.0	6600
	588	N400LL	38.2	190	4547	80	200	94.0	94.0	93.0	75.0	70.0	59.0	7300
315	1480	N355LL	37.5	244	2032	100	200	95.0	94.8	93.0	85.0	83.0	76.0	5000
	985	N355LL	38.9	232	3054	90	200	94.5	94.5	93.5	82.5	80.0	72.0	5900
	735	N400LL	40.1	220	4092	80	200	94.5	94.0	93.5	80.0	77.0	68.0	6500
	590	N400LL	42.4	210	5098	80	200	94.0	94.0	93.0	76.0	71.0	60.0	7100
355	1480	N355LL	42.3	275	2290	100	200	95.0	94.8	93.0	85.0	83.0	76.0	4900
	985	N355LL	43.8	260	3442	90	200	94.6	94.5	93.5	82.5	80.0	72.0	5800
	735	N400LL	45.1	248	4612	80	200	94.6	94.0	93.5	80.0	77.0	68.0	6500
	590	N450LL	47.6	235	5746	80	200	94.5	94.0	92.5	76.0	71.0	60.0	7100
375	1480	N355LL	44.7	290	2420	100	200	95.0	94.8	93.0	85.0	83.0	76.0	4800
	985	N355LL	45.8	272	3635	90	200	95.0	94.8	93.5	83.0	80.5	72.5	5700
	740	N400LL	47.5	260	4839	80	200	95.0	94.5	94.0	80.0	77.0	68.0	6400
	592	N450LL	49.6	250	6049	80	200	94.5	94.0	92.5	77.0	72.0	61.0	7000
400	1480	N355LL	47.7	308	2581	100	200	95.0	94.8	93.5	85.0	83.0	76.0	4700
	985	N400LL	48.5	290	3878	90	200	95.0	95.0	93.5	83.5	81.0	73.5	5700
	740	N400LL	50.6	278	5162	80	200	95.0	94.5	94.0	80.0	77.0	68.0	6300
	592	N450LL	52.9	262	6452	80	200	94.5	94.0	92.5	77.0	72.0	61.0	8500
450	1485	N355LL	53.3	345	2894	100	200	95.5	95.0	93.5	85.0	83.0	76.0	4700
	985	N400LL	54.6	325	4362	90	200	95.0	95.0	93.5	83.5	81.0	73.5	5700
	740	N450LL	56.3	310	5807	80	200	95.0	95.0	94.0	81.0	77.5	69.0	6200
	592	N500LL	58.4	290	7259	80	200	95.0	95.0	94.0	78.0	73.0	63.0	8400
500	1485	N400LL	58.9	380	3215	90	200	95.5	95.0	93.5	85.5	83.5	77.0	4700
	985	N400LL	60.0	355	4847	90	200	95.5	95.0	94.0	84.0	81.5	74.0	5400
	740	N450LL	62.2	340	6452	80	200	95.5	95.0	94.0	81.0	77.5	69.0	6100
	592	N500LL	64.9	325	8065	80	200	95.0	95.0	94.0	78.0	73.0	63.0	8300
560	1485	N400LL	66.0	425	3601	90	200	95.5	95.0	93.5	85.5	83.5	77.0	4400
	985	N400LL	67.2	400	5429	90	200	95.5	95.0	94.0	84.0	81.5	74.0	5400
	740	N450LL	69.7	380	7226	80	200	95.5	95.0	94.0	81.0	77.5	69.0	6000
	592	N500LL	72.1	360	9033	80	200	95.2	95.0	94.0	78.5	73.5	63.5	8300
630	1485	N400LL	74.2	480	4051	90	200	95.5	95.0	94.0	85.5	83.5	77.0	4300
	990	N450LL	74.7	445	6077	90	200	95.5	95.5	94.5	85.0	83.0	76.0	6500
	740	N500LL	77.4	425	8130	80	200	95.5	95.5	94.5	82.0	78.5	70.0	7400
	593	N500LL	80.6	400	10145	80	200	95.2	95.0	94.0	79.0	74.0	64.0	8200
710	1486	N450LL	83.0	535	4562	90	200	95.7	95.4	94.4	86.0	84.0	77.5	4300
	990	N450LL	85.2	510	6848	90	200	95.5	95.0	94.0	84.0	82.5	75.5	6400
	740	N500LL	87.8	480	9162	80	200	95.5	95.0	94.5	81.5	78.0	69.0	7300
	593	N560LL	89.4	445	11433	80	200	95.5	95.5	94.5	80.0	76.0	67.0	14200
750	1486	N450LL	87.6	565	4819	90	200	95.8	95.5	94.5	86.0	84.0	77.5	4300
	990	N450LL	89.5	535	7234	90	200	96.0	95.5	94.5	84.0	82.5	75.5	6300
	740	N500LL	92.7	510	9678	80	200	95.5	95.0	94.5	81.5	78.0	69.0	7300
	595	N560LL	94.5	470	12037	80	200	95.5	95.5	94.5	80.0	76.0	67.0	14000

M152313

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 6000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1486	N450LL	93.4	605	5141	90	200	95.8	95.5	94.5	86.0	84.0	77.5	4200
	990	N500LL	94.6	565	7716	80	200	95.7	95.5	94.5	85.0	83.0	76.0	6200
	740	N500LL	98.9	540	10323	80	200	95.5	95.0	94.0	81.5	78.0	69.0	7200
	595	N560LL	101	500	12839	80	200	95.6	95.6	94.5	80.0	76.0	67.0	13900
900	1486	N450LL	105	680	5783	90	200	95.8	95.5	94.5	86.0	84.0	77.5	4200
	990	N500LL	106	635	8681	80	200	95.8	95.6	94.5	85.0	83.0	76.0	6100
	740	N560LL	110	605	11614	70	200	95.8	95.3	94.0	82.0	78.5	69.5	12500
	595	N560LL	112	560	14444	80	200	95.8	95.8	94.5	80.5	76.5	67.5	13800
1000	1488	N500LL	114	740	6417	80	200	96.0	95.8	94.8	88.0	86.5	82.5	(4)
	990	N500LL	117	695	9645	80	200	96.0	95.8	94.6	86.0	84.0	77.0	6000
	740	N560LL	121	665	12904	70	200	96.0	95.6	94.5	82.5	79.0	70.0	12400
1120	1488	N500LL	127	825	7187	80	200	96.2	96.0	95.0	88.0	86.5	82.5	(4)
	990	N560LL	129	770	10803	70	200	96.2	96.0	95.0	87.0	85.0	78.0	10700
	740	N560LL	136	745	14453	70	200	96.2	95.8	94.6	82.5	79.0	70.0	12300
1250	1488	N500LL	142	920	8022	80	200	96.4	96.3	95.3	88.0	86.5	82.5	(4)
	990	N560LL	143	855	12057	70	200	96.3	96.0	94.8	87.5	85.5	79.5	10600
1400	1490	N560LL	157	1020	8972	70	200	96.5	96.3	95.5	89.0	87.5	84.0	(4)
	990	N560LL	160	955	13504	70	200	96.5	96.3	94.8	87.5	85.5	79.5	10500
1500	1490	N560LL	168	1090	9613	70	200	96.6	96.4	95.5	89.0	87.5	84.0	(4)
1600	1492	N560LL	179	1150	10240	70	200	96.6	96.5	95.8	89.0	87.5	84.0	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 6600V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1480	N315LL	16.7	108	968	100	200	93.8	93.5	92.0	84.0	81.0	74.0	6100
	980	N315LL	17.5	104	1462	90	200	93.5	93.0	91.5	80.0	76.0	67.0	7100
	735	N355LL	18.2	108	1949	80	200	93.5	93.5	93.0	77.0	73.5	64.0	7100
	588	N355LL	19.0	95.0	2436	80	200	93.5	93.0	92.0	74.0	68.5	56.5	7700
185	1480	N315LL	20.5	132	1194	100	200	93.8	93.5	92.0	84.0	81.0	74.0	6100
	980	N315LL	21.6	129	1803	90	200	93.5	93.0	91.5	80.0	76.0	67.0	7100
	735	N355LL	22.5	123	2403	80	200	93.5	93.5	93.0	77.0	73.5	64.0	7100
	588	N355LL	23.4	118	3004	80	200	93.5	93.0	92.0	74.0	68.5	56.5	7700
200	1480	N315LL	22.2	144	1290	100	200	94.0	93.8	92.5	84.0	81.0	74.0	6100
	980	N355LL	22.7	136	1949	90	200	94.0	93.8	92.3	82.0	79.0	70.0	6200
	735	N355LL	24.1	132	2598	80	200	93.5	94.0	93.5	77.5	74.0	64.5	7000
	588	N355LL	25.3	126	3248	80	200	93.5	93.0	92.0	74.0	68.5	56.5	7400
220	1480	N315LL	24.3	158	1419	100	200	94.2	94.0	92.5	84.0	81.0	74.0	5200
	980	N355LL	25.0	149	2144	90	200	94.0	93.8	92.3	82.0	79.0	70.0	6200
	735	N355LL	26.4	145	2858	80	200	94.0	94.0	93.5	77.5	74.0	64.5	6900
	588	N400LL	27.5	138	3573	80	200	94.0	94.0	93.0	74.5	69.5	58.5	7300
250	1480	N355LL	27.4	177	1613	100	200	94.5	94.3	92.8	84.5	81.5	74.5	5100
	985	N355LL	28.4	168	2424	90	200	94.0	93.8	92.3	82.0	79.0	70.0	6100
	735	N355LL	29.8	164	3248	80	200	94.0	94.0	93.5	78.0	74.5	65.0	6600
	588	N400LL	31.0	155	4060	80	200	94.0	94.0	93.0	75.0	70.0	59.0	7300
280	1480	N355LL	30.7	198	1807	100	200	94.5	94.3	92.8	84.5	81.5	74.5	5000
	985	N355LL	31.4	188	2714	90	200	94.5	94.5	93.5	82.5	80.0	72.0	6000
	735	N355LL	33.2	182	3638	80	200	94.5	94.0	93.0	78.0	74.5	65.0	6600
	588	N400LL	34.7	175	4547	80	200	94.0	94.0	93.0	75.0	70.0	59.0	7300
315	1480	N355LL	34.5	223	2032	100	200	94.5	94.3	92.8	84.5	81.5	74.5	5000
	985	N355LL	35.3	210	3054	90	200	94.5	94.5	93.5	82.5	80.0	72.0	5900
	735	N400LL	36.4	200	4092	80	200	94.5	94.0	93.5	80.0	77.0	68.0	6500
	590	N400LL	38.6	194	5098	80	200	94.0	94.0	93.0	76.0	71.0	60.0	7100
355	1480	N355LL	38.5	250	2290	100	200	95.0	94.8	93.0	85.0	83.0	76.0	4900
	985	N355LL	39.8	238	3442	90	200	94.6	94.5	93.5	82.5	80.0	72.0	5800
	735	N400LL	41.0	225	4612	80	200	94.6	94.0	93.5	80.0	77.0	68.0	6500
	590	N450LL	43.2	218	5746	80	200	94.5	94.0	92.5	76.0	71.0	60.0	7100
375	1480	N355LL	40.6	263	2420	100	200	95.0	94.8	93.0	85.0	83.0	76.0	4800
	985	N355LL	41.6	248	3635	90	200	95.0	94.8	93.5	83.0	80.5	72.5	5700
	740	N400LL	43.2	237	4839	80	200	95.0	94.5	94.0	80.0	77.0	68.0	6400
	592	N450LL	45.1	227	6049	80	200	94.5	94.0	92.5	77.0	72.0	61.0	7000
400	1480	N355LL	43.3	280	2581	100	200	95.0	94.8	93.5	85.0	83.0	76.0	4700
	985	N400LL	44.1	262	3878	90	200	95.0	95.0	93.5	83.5	81.0	73.5	5700
	740	N400LL	46.0	253	5162	80	200	95.0	94.5	94.0	80.0	77.0	68.0	6300
	592	N450LL	48.1	242	6452	80	200	94.5	94.0	92.5	77.0	72.0	61.0	8500
450	1485	N355LL	48.5	315	2894	100	200	95.5	95.0	93.5	85.0	83.0	76.0	4700
	985	N400LL	49.6	295	4362	90	200	95.0	95.0	93.5	83.5	81.0	73.5	5700
	740	N450LL	51.2	280	5807	80	200	95.0	95.0	94.0	81.0	77.5	69.0	6200
	592	N500LL	53.1	268	7259	80	200	95.0	95.0	94.0	78.0	73.0	63.0	8400
500	1485	N400LL	53.6	348	3215	90	200	95.5	95.0	93.5	85.5	83.5	77.0	4700
	985	N400LL	54.5	327	4847	90	200	95.5	95.0	94.0	84.0	81.5	74.0	5400
	740	N450LL	56.5	311	6452	80	200	95.5	95.0	94.0	81.0	77.5	69.0	6100
	592	N500LL	59.0	297	8065	80	200	95.0	95.0	94.0	78.0	73.0	63.0	8300
560	1485	N400LL	60.0	390	3601	90	200	95.5	95.0	93.5	85.5	83.5	77.0	4400
	985	N400LL	61.1	367	5429	90	200	95.5	95.0	94.0	84.0	81.5	74.0	5400
	740	N450LL	63.3	348	7226	80	200	95.5	95.0	94.0	81.0	77.5	69.0	6000
	592	N500LL	65.6	330	9033	80	200	95.2	95.0	94.0	78.5	73.5	63.5	8300
630	1485	N400LL	67.5	438	4051	90	200	95.5	95.0	94.0	85.5	83.5	77.0	4300
	990	N450LL	67.9	407	6077	90	200	95.5	95.5	94.5	85.0	83.0	76.0	6500
	740	N500LL	70.4	387	8130	80	200	95.5	95.5	94.5	82.0	78.5	70.0	7400
	593	N500LL	73.3	370	10145	80	200	95.2	95.0	94.0	79.0	74.0	64.0	8200
710	1486	N450LL	75.5	490	4562	90	200	95.7	95.4	94.4	86.0	84.0	77.5	4300
	990	N450LL	77.4	464	6848	90	200	95.5	95.0	94.0	84.0	82.5	75.5	6400
	740	N500LL	79.8	439	9162	80	200	95.5	95.0	94.5	81.5	78.0	69.0	7300
	593	N560LL	81.3	410	11433	80	200	95.5	95.5	94.5	80.0	76.0	67.0	14200
750	1486	N450LL	79.6	515	4819	90	200	95.8	95.5	94.5	86.0	84.0	77.5	4300
	990	N450LL	81.4	488	7234	90	200	96.0	95.5	94.5	84.0	82.5	75.5	6300
	740	N500LL	84.3	464	9678	80	200	95.5	95.0	94.5	81.5	78.0	69.0	7300
	595	N560LL	85.9	430	12037	80	200	95.5	95.5	94.5	80.0	76.0	67.0	14000

M152313

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 6600V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1486	N450LL	84.9	550	5141	90	200	95.8	95.5	94.5	86.0	84.0	77.5	4200
	990	N500LL	86.0	515	7716	80	200	95.7	95.5	94.5	85.0	83.0	76.0	6200
	740	N500LL	89.9	493	10323	80	200	95.5	95.0	94.0	81.5	78.0	69.0	7200
	595	N560LL	91.5	460	12839	80	200	95.6	95.6	94.5	80.0	76.0	67.0	13900
900	1486	N450LL	95.6	620	5783	90	200	95.8	95.5	94.5	86.0	84.0	77.5	4200
	990	N500LL	96.7	580	8681	80	200	95.8	95.6	94.5	85.0	83.0	76.0	6100
	740	N560LL	100	550	11614	70	200	95.8	95.3	94.0	82.0	78.5	69.5	12500
	595	N560LL	102	515	14444	80	200	95.8	95.8	94.5	80.5	76.5	67.5	13800
1000	1488	N500LL	104	670	6417	80	200	96.0	95.8	94.8	88.0	86.5	82.5	(4)
	990	N500LL	106	635	9645	80	200	96.0	95.8	94.6	86.0	84.0	77.0	6000
	740	N560LL	110	608	12904	70	200	96.0	95.6	94.5	82.5	79.0	70.0	12400
1120	1488	N500LL	116	750	7187	80	200	96.2	96.0	95.0	88.0	86.5	82.5	(4)
	990	N560LL	117	700	10803	70	200	96.2	96.0	95.0	87.0	85.0	78.0	10700
	740	N560LL	123	675	14453	70	200	96.2	95.8	94.6	82.5	79.0	70.0	12300
1250	1488	N500LL	129	835	8022	80	200	96.4	96.3	95.3	88.0	86.5	82.5	(4)
	990	N560LL	130	780	12057	70	200	96.3	96.0	94.8	87.5	85.5	79.5	10600
1400	1490	N560LL	143	925	8972	70	200	96.5	96.3	95.5	89.0	87.5	84.0	(4)
	990	N560LL	145	870	13504	70	200	96.5	96.3	94.8	87.5	85.5	79.5	10500
1500	1490	N560LL	153	990	9613	70	200	96.6	96.4	95.5	89.0	87.5	84.0	(4)
1600	1492	N560LL	163	1050	10240	70	200	96.6	96.5	95.8	89.0	87.5	84.0	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 60Hz, 6600V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
150	1775	N315LL	16.6	107	807	100	200	93.8	93.5	92.5	84.5	82.5	76.5	5700
	1180	N315LL	17.5	105	1214	90	200	93.5	93.0	92.0	80.0	75.5	66.0	6600
	885	N355LL	17.7	97	1618	80	200	93.5	93.5	92.5	79.5	75.0	65.5	6600
	705	N355LL	18.6	93	2032	80	200	93.5	93.5	92.5	75.5	69.0	58.0	7200
185	1775	N315LL	20.3	132	995	100	200	93.8	93.5	92.5	85.0	83.0	77.0	5700
	1180	N315LL	21.6	130	1497	90	200	93.5	93.2	92.0	80.0	75.5	66.0	6600
	885	N355LL	21.8	120	1996	80	200	93.5	93.5	92.5	79.5	75.0	65.5	6600
	705	N355LL	22.8	115	2506	80	200	93.5	93.5	92.5	76.0	69.5	58.0	7200
200	1775	N315LL	21.9	142	1076	100	200	94.0	93.8	92.8	85.0	83.0	77.0	5700
	1180	N315LL	23.4	140	1618	90	200	93.6	93.2	92.0	80.0	75.5	66.0	6600
	885	N355LL	23.3	128	2158	80	200	94.0	94.0	93.0	80.0	75.5	66.0	6500
	705	N355LL	24.6	124	2709	80	200	93.5	93.5	92.5	76.0	69.5	58.0	7100
220	1775	N315LL	24.0	156	1184	100	200	94.2	94.0	92.8	85.0	83.0	77.0	5600
	1180	N355LL	24.6	148	1780	90	200	94.2	94.0	92.5	83.0	78.0	71.0	5700
	885	N355LL	25.6	140	2374	80	200	94.0	94.0	93.0	80.0	75.5	66.0	6400
	706	N355LL	27.0	135	2976	80	200	93.8	93.8	92.8	76.0	69.5	58.0	6800
250	1775	N315LL	27.3	177	1345	100	200	94.2	94.0	93.0	85.0	83.0	77.0	4700
	1180	N355LL	28.0	168	2023	90	200	94.2	94.0	92.5	83.0	78.0	71.0	5600
	886	N355LL	29.1	160	2694	80	200	94.0	94.0	93.0	80.0	75.5	66.0	6400
	706	N400LL	30.2	150	3381	80	200	94.0	94.0	93.0	77.0	72.5	62.5	6700
280	1775	N355LL	30.2	195	1506	100	200	94.8	94.6	93.2	85.5	83.5	78.0	4600
	1180	N355LL	31.2	185	2266	90	200	94.5	94.2	93.0	83.2	80.2	72.5	5600
	885	N355LL	32.3	175	3021	80	200	94.2	94.2	93.2	80.5	76.0	66.5	6300
	706	N400LL	33.6	165	3787	80	200	94.2	94.2	93.2	77.5	73.0	63.0	6700
315	1775	N355LL	34.0	220	1695	100	200	94.8	94.6	93.2	85.5	83.5	78.0	4600
	1182	N355LL	34.9	210	2545	90	200	94.8	94.5	93.5	83.2	80.2	72.5	5500
	886	N355LL	36.2	198	3395	80	200	94.5	94.5	93.5	80.5	76.5	67.0	6000
	706	N400LL	37.4	185	4261	80	200	94.5	94.5	93.5	78.0	73.5	63.5	6600
355	1775	N355LL	38.0	245	1910	100	200	95.0	95.0	93.5	86.0	84.0	78.5	4500
	1182	N355LL	39.4	235	2868	90	200	94.8	94.5	93.5	83.2	80.2	72.5	5400
	888	N400LL	40.6	220	3817	80	200	94.5	94.2	93.2	81.0	77.0	68.0	6100
	706	N400LL	41.9	210	4802	80	200	94.5	94.5	93.5	78.5	74.0	64.0	6600
375	1780	N355LL	40.2	260	2012	100	200	95.0	95.0	93.5	86.0	84.0	78.5	4400
	1182	N355LL	41.6	250	3030	90	200	94.8	94.5	93.5	83.2	80.2	72.5	5300
	888	N400LL	42.7	235	4033	80	200	94.8	94.5	93.5	81.0	77.0	68.0	6000
	708	N450LL	44.2	220	5058	80	200	94.6	94.6	93.5	78.5	74.5	64.5	6500
400	1780	N355LL	42.8	275	2146	100	200	95.0	95.0	93.5	86.0	84.0	78.5	4300
	1182	N355LL	44.1	265	3231	90	200	95.0	94.8	93.8	83.5	80.5	73.0	5300
	888	N400LL	45.5	250	4301	80	200	95.0	94.6	93.6	81.0	77.5	68.5	6000
	708	N450LL	47.1	235	5395	80	200	94.6	94.6	93.5	78.5	74.5	64.5	6400
450	1780	N355LL	47.8	310	2414	100	200	95.2	95.0	93.5	86.5	84.5	79.0	4300
	1182	N400LL	49.2	295	3635	90	200	95.2	95.2	94.3	84.0	82.5	77.0	5200
	888	N400LL	51.1	280	4839	80	200	95.1	94.7	93.7	81.0	77.5	69.0	5800
	708	N450LL	52.7	260	6069	80	200	94.6	94.6	93.5	79.0	75.0	65.0	6300
500	1780	N355LL	52.8	340	2682	100	200	95.3	95.0	93.5	87.0	85.0	79.5	4300
	1185	N400LL	54.5	325	4029	90	200	95.5	95.5	94.5	84.0	82.5	77.0	5200
	890	N450LL	56.3	310	5365	80	200	95.3	95.3	94.3	81.5	78.0	69.0	5700
	710	N500LL	57.8	285	6725	80	200	95.2	95.2	94.5	79.5	76.5	67.5	7700
560	1782	N400LL	59.0	380	3001	90	200	95.5	95.2	94.0	87.0	85.5	79.5	4200
	1185	N400LL	60.7	360	4513	90	200	95.5	95.5	94.5	84.5	83.0	77.5	4900
	890	N450LL	62.9	345	6008	80	200	95.5	95.5	94.5	81.5	78.0	69.0	5600
	710	N500LL	64.5	320	7532	80	200	95.5	95.5	95.0	79.5	76.5	67.5	7600
630	1782	N400LL	66.3	430	3376	90	200	95.5	95.2	94.0	87.0	85.5	79.5	3900
	1185	N400LL	68.2	405	5077	90	200	95.6	95.6	94.5	84.5	83.0	77.5	4800
	890	N450LL	70.8	388	6759	80	200	95.5	95.5	94.5	81.5	78.0	69.0	5500
	710	N500LL	72.1	360	8473	80	200	95.5	95.5	95.0	80.0	77.0	68.0	7500
710	1782	N400LL	74.7	485	3805	90	200	95.6	95.2	94.0	87.0	85.5	79.5	3900
	1188	N450LL	76.4	455	5707	90	200	95.7	95.5	94.5	85.0	83.5	78.0	4700
	892	N500LL	79.3	435	7601	80	200	95.5	95.5	94.5	82.0	78.5	70.5	6700
	710	N500LL	80.8	400	9549	80	200	95.5	95.5	95.0	80.5	77.5	68.5	7400
750	1785	N450LL	78.8	510	4012	90	200	95.7	95.5	94.5	87.0	85.5	80.0	3800
	1188	N450LL	80.7	480	6028	90	200	95.7	95.5	94.5	85.0	83.5	78.0	5800
	892	N500LL	83.7	460	8029	80	200	95.6	95.6	94.6	82.0	78.5	70.5	6600
	712	N560LL	85.3	425	10059	80	200	95.6	95.6	94.6	80.5	78.0	70.5	13100

M152313

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 60Hz, 6600V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
800	1785	N450LL	84.0	545	4280	90	200	95.8	95.5	94.5	87.0	85.5	80.0	3700
	1188	N450LL	85.9	515	6430	80	200	95.8	95.5	94.5	85.0	83.5	78.0	5700
	892	N500LL	88.5	485	8564	80	200	95.8	95.8	94.8	82.5	79.0	71.0	6500
	712	N560LL	90.7	450	10729	80	200	95.8	95.8	94.8	80.5	78.0	70.5	12900
900	1785	N450LL	93.9	610	4815	90	200	95.8	95.5	94.5	87.5	85.0	80.0	3600
	1190	N500LL	96.1	575	7222	80	200	95.8	95.8	94.8	85.5	84.0	79.0	5600
	892	N500LL	99.6	545	9635	80	200	95.8	95.8	94.8	82.5	79.0	71.0	6400
	712	N560LL	102	510	12070	80	200	95.8	95.8	94.8	80.5	78.0	70.5	12700
1000	1785	N450LL	104	675	5350	80	200	95.8	95.5	94.5	87.5	85.0	80.0	3500
	1190	N500LL	106	635	8024	80	200	95.8	95.8	94.8	86.0	84.5	79.5	10100
	892	N560LL	110	605	10705	80	200	95.8	95.6	94.6	83.0	80.0	72.5	11400
	712	N560LL	112	560	13412	80	200	96.0	96.0	95.0	81.0	78.5	71.0	12600
1120	1786	N500LL	116	750	5988	80	200	96.0	95.8	94.8	88.0	87.0	83.0	(4)
	1190	N500LL	119	710	8987	80	200	96.0	96.0	95.0	86.0	84.5	79.5	9900
	892	N560LL	123	675	11990	70	200	96.0	96.0	95.0	83.0	80.0	72.5	11200
1250	1786	N500LL	129	840	6683	80	200	96.2	96.0	95.0	88.0	87.0	83.0	(4)
	1192	N560LL	131	780	10014	80	200	96.2	96.0	95.0	87.0	85.5	80.5	9800
	892	N560LL	136	745	13381	70	200	96.2	96.0	95.0	83.5	80.5	73.0	11100
1400	1786	N500LL	144	935	7485	80	200	96.2	96.0	95.0	88.5	87.5	83.5	(4)
	1192	N560LL	146	875	11215	80	200	96.3	96.0	95.0	87.0	85.5	80.5	9600
1500	1788	N560LL	153	990	8011	80	200	96.5	96.2	95.2	89.0	88.0	85.0	(4)
	1192	N560LL	156	935	12016	80	200	96.5	96.3	95.0	87.0	85.5	80.5	9500
1600	1788	N560LL	163	1050	8545	80	200	96.5	96.2	95.2	89.0	88.0	85.0	(4)
1800	1788	N560LL	182	1180	9613	70	200	96.5	96.2	95.2	89.5	88.5	85.5	(4)

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

M152313

(2) Performance tolerance is according to IEC 60034-1.

(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.

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 10000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
315	590	N450LL	26.0	125	5098	80	200	94.0	94.0	93.0	74.5	69.5	59.5	7100
355	590	N450LL	29.1	145	5746	80	200	94.0	94.0	93.0	75.0	70.0	60.0	7100
375	985	N400LL	27.6	165	3635	80	200	95.0	95.0	93.5	82.5	79.0	70.5	5700
	740	N450LL	28.5	155	4839	80	200	95.0	94.5	94.0	80.0	76.5	68.0	6400
	592	N450LL	30.5	150	6049	80	200	94.5	94.5	93.5	75.0	70.0	60.0	7000
400	1480	N400LL	28.9	185	2581	100	200	95.0	94.8	93.5	84.0	82.0	75.0	4700
	985	N400LL	29.3	175	3878	90	200	95.0	95.0	93.5	83.0	79.5	71.0	5700
	740	N450LL	30.4	165	5162	80	200	95.0	94.5	94.0	80.0	76.5	68.0	6300
	592	N500LL	32.2	160	6452	80	200	95.0	95.0	94.0	75.5	70.5	60.5	8500
450	1485	N400LL	32.4	210	2894	100	200	95.5	95.0	93.5	84.0	82.0	75.0	4700
	985	N400LL	33.0	195	4362	90	200	95.0	95.0	93.5	83.0	79.5	71.0	5700
	740	N450LL	34.0	185	5807	80	200	95.0	95.0	94.0	80.5	77.0	68.5	6200
	592	N500LL	36.2	180	7259	80	200	95.0	95.0	94.0	75.5	70.5	60.5	8400
500	1485	N400LL	36.0	230	3215	90	200	95.5	95.0	93.5	84.0	82.0	75.0	4700
	985	N450LL	36.2	215	4847	90	200	95.5	95.0	94.0	83.5	81.0	73.0	5400
	740	N450LL	37.7	205	6452	80	200	95.0	95.0	94.0	80.5	77.0	68.5	7600
	592	N500LL	40.0	195	8065	80	200	95.0	95.0	94.0	76.0	71.0	61.0	8300
560	1485	N450LL	40.1	260	3601	90	200	95.5	95.0	93.5	84.5	82.5	76.5	4400
	985	N450LL	40.3	240	5429	90	200	95.5	95.0	94.0	84.0	81.5	73.5	5400
	740	N500LL	41.8	225	7226	80	200	95.5	95.0	94.0	81.0	77.5	69.0	7500
	592	N560LL	44.1	220	9033	80	200	95.2	95.0	94.0	77.0	73.0	64.0	8300
630	1485	N450LL	45.1	290	4051	90	200	95.5	95.0	94.0	84.5	82.5	76.5	4300
	990	N450LL	45.3	270	6077	90	200	95.5	95.5	94.5	84.0	81.5	73.5	6400
	740	N500LL	46.7	255	8130	80	200	95.5	95.5	94.5	81.5	78.0	69.5	7400
	593	N560LL	49.3	245	10145	80	200	95.2	95.0	94.0	77.5	73.5	64.5	14400
710	1486	N450LL	50.4	325	4562	90	200	95.7	95.4	94.4	85.0	83.0	77.0	4300
	990	N500LL	50.8	300	6848	90	200	95.5	95.0	94.0	84.5	82.5	75.5	6400
	740	N500LL	52.7	285	9162	80	200	95.5	95.0	94.5	81.5	78.0	69.5	7300
	593	N560LL	55.0	275	11433	80	200	95.5	95.5	94.5	78.0	74.0	65.0	14200
750	1486	N450LL	53.2	345	4819	90	200	95.8	95.5	94.5	85.0	83.0	77.0	4200
	990	N500LL	53.4	320	7234	90	200	96.0	95.5	94.5	84.5	82.5	75.5	6300
	740	N500LL	55.6	305	9678	80	200	95.5	95.0	94.5	81.5	78.0	69.5	7200
	595	N560LL	58.1	290	12037	80	200	95.5	95.5	94.5	78.0	74.0	65.0	14000
800	1486	N500LL	56.1	360	5141	90	200	95.8	95.5	94.5	86.0	84.0	77.5	(4)
	990	N500LL	56.8	340	7716	80	200	95.7	95.5	94.5	85.0	83.0	76.0	6200
	740	N560LL	59.0	320	10323	80	200	95.5	95.0	94.0	82.0	78.5	70.0	12700
900	1486	N500LL	62.3	405	5783	90	200	95.8	95.5	94.5	87.0	85.0	78.5	(4)
	990	N500LL	63.8	380	8681	80	200	95.8	95.6	94.5	85.0	83.0	76.0	6100
	740	N560LL	66.1	360	11614	70	200	95.8	95.3	94.0	82.0	78.5	70.0	12500
1000	1488	N500LL	69.1	445	6417	80	200	96.0	95.8	94.8	87.0	86.0	82.0	(4)
	990	N560LL	69.5	415	9645	80	200	96.0	95.8	94.6	86.5	84.5	76.5	10900
	740	N560LL	73.3	400	12904	70	200	96.0	95.5	94.5	82.0	78.5	70.0	12400
1120	1488	N560LL	76.4	495	7187	80	200	96.2	96.0	95.0	88.0	87.0	83.5	(4)
	990	N560LL	77.3	460	10803	70	200	96.2	96.0	95.0	87.0	85.0	77.0	10700
1250	1488	N560LL	85.1	550	8022	80	200	96.4	96.3	95.3	88.0	87.0	83.5	(4)
	990	N560LL	86.1	515	12057	70	200	96.3	96.0	94.8	87.0	85.0	77.0	10600
1400	1490	N560LL	94.6	615	8972	70	200	96.5	96.3	95.5	88.5	87.5	84.0	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 50Hz, 11000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
315	590	N450LL	23.6	118	5098	80	200	94.0	94.0	93.0	74.5	69.5	59.5	7100
355	590	N450LL	26.4	145	5746	80	200	94.0	94.0	93.0	75.0	70.0	60.0	7100
375	985	N400LL	25.1	149	3635	80	200	95.0	95.0	93.5	82.5	79.0	70.5	5700
	740	N450LL	25.9	141	4839	80	200	95.0	94.5	94.0	80.0	76.5	68.0	6400
	592	N450LL	27.8	141	6049	80	200	94.5	94.5	93.5	75.0	70.0	60.0	7000
400	1480	N400LL	26.3	169	2581	100	200	95.0	94.8	93.5	84.0	82.0	75.0	4700
	985	N400LL	26.6	158	3878	90	200	95.0	95.0	93.5	83.0	79.5	71.0	5700
	740	N450LL	27.6	150	5162	80	200	95.0	94.5	94.0	80.0	76.5	68.0	6300
	592	N500LL	29.3	149	6452	80	200	95.0	95.0	94.0	75.5	70.5	60.5	8500
450	1485	N400LL	29.4	189	2894	100	200	95.5	95.0	93.5	84.0	82.0	75.0	4700
	985	N400LL	30.0	179	4362	90	200	95.0	95.0	93.5	83.0	79.5	71.0	5700
	740	N450LL	30.9	168	5807	80	200	95.0	95.0	94.0	80.5	77.0	68.5	6200
	592	N500LL	32.9	167	7259	80	200	95.0	95.0	94.0	75.5	70.5	60.5	8400
500	1485	N400LL	32.7	211	3215	90	200	95.5	95.0	93.5	84.0	82.0	75.0	4700
	985	N450LL	32.9	197	4847	90	200	95.5	95.0	94.0	83.5	81.0	73.0	5400
	740	N450LL	34.3	189	6452	80	200	95.0	95.0	94.0	80.5	77.0	68.5	7600
	592	N500LL	36.3	184	8065	80	200	95.0	95.0	94.0	76.0	71.0	61.0	8300
560	1485	N450LL	36.4	235	3601	90	200	95.5	95.0	93.5	84.5	82.5	76.5	4400
	985	N450LL	36.6	220	5429	90	200	95.5	95.0	94.0	84.0	81.5	73.5	5400
	740	N500LL	38.0	209	7226	80	200	95.5	95.0	94.0	81.0	77.5	69.0	7500
	592	N560LL	40.1	203	9033	80	200	95.2	95.0	94.0	77.0	73.0	64.0	8300
630	1485	N450LL	41.0	264	4051	90	200	95.5	95.0	94.0	84.5	82.5	76.5	4300
	990	N450LL	41.2	247	6077	90	200	95.5	95.5	94.5	84.0	81.5	73.5	6400
	740	N500LL	42.5	234	8130	80	200	95.5	95.5	94.5	81.5	78.0	69.5	7400
	593	N560LL	44.8	227	10145	80	200	95.2	95.0	94.0	77.5	73.5	64.5	14400
710	1486	N450LL	45.8	295	4562	90	200	95.7	95.4	94.4	85.0	83.0	77.0	4300
	990	N500LL	46.2	277	6848	90	200	95.5	95.0	94.0	84.5	82.5	75.5	6400
	740	N500LL	47.9	263	9162	80	200	95.5	95.0	94.5	81.5	78.0	69.5	7300
	593	N560LL	50.0	254	11433	80	200	95.5	95.5	94.5	78.0	74.0	65.0	14200
750	1486	N450LL	48.3	312	4819	90	200	95.8	95.5	94.5	85.0	83.0	77.0	4200
	990	N500LL	48.5	291	7234	90	200	96.0	95.5	94.5	84.5	82.5	75.5	6300
	740	N500LL	50.6	278	9678	80	200	95.5	95.0	94.5	81.5	78.0	69.5	7200
	595	N560LL	52.8	268	12037	80	200	95.5	95.5	94.5	78.0	74.0	65.0	14000
800	1486	N500LL	51.0	329	5141	90	200	95.8	95.5	94.5	86.0	84.0	77.5	(4)
	990	N500LL	51.6	310	7716	80	200	95.7	95.5	94.5	85.0	83.0	76.0	6200
	740	N560LL	53.6	295	10323	80	200	95.5	95.0	94.0	82.0	78.5	70.0	12700
900	1486	N500LL	56.7	366	5783	90	200	95.8	95.5	94.5	87.0	85.0	78.5	(4)
	990	N500LL	58.0	348	8681	80	200	95.8	95.6	94.5	85.0	83.0	76.0	6100
	740	N560LL	60.1	331	11614	70	200	95.8	95.3	94.0	82.0	78.5	70.0	12500
1000	1488	N500LL	62.8	405	6417	80	200	96.0	95.8	94.8	87.0	86.0	82.0	(4)
	990	N560LL	63.2	379	9645	80	200	96.0	95.8	94.6	86.5	84.5	76.5	10900
	740	N560LL	66.7	367	12904	70	200	96.0	95.5	94.5	82.0	78.5	70.0	12400
1120	1488	N560LL	69.4	448	7187	80	200	96.2	96.0	95.0	88.0	87.0	83.5	(4)
	990	N560LL	70.2	421	10803	70	200	96.2	96.0	95.0	87.0	85.0	77.0	10700
1250	1488	N560LL	77.3	499	8022	80	200	96.4	96.3	95.3	88.0	87.0	83.5	(4)
	990	N560LL	78.3	470	12057	70	200	96.3	96.0	94.8	87.0	85.0	77.0	10600
1400	1490	N560LL	86.0	555	8972	70	200	96.5	96.3	95.5	88.5	87.5	84.0	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

(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.

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

PERFORMANCE DATA

HIGH VOLTAGE MOTOR

TEFC, Vertical Flange Mounted

3 Phase, 60Hz, 11000V, S.F. 1.0

Class F Insulation, 40°C Ambient, Continuous Duty

OUTPUT kW	FULL LOAD RPM	FRAME SIZE	CURRENT		TORQUE			EFFICIENCY			POWER FACTOR			Maximum Down Thrust ⁽³⁾ (kg)
			FULL LOAD (A)	LOCKED ROTOR (A)	FULL LOAD (Nm)	LOCKED ROTOR (%)	BREAK DOWN (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	FULL LOAD (%)	3/4 LOAD (%)	1/2 LOAD (%)	
355	706	N450LL	25.9	130	4802	80	200	94.5	94.5	93.5	76.0	71.0	60.5	6600
375	708	N450LL	27.4	135	5058	80	200	94.5	94.5	93.0	76.0	71.0	60.5	6500
400	1182	N400LL	26.5	155	3231	90	200	95.0	95.0	93.8	83.5	81.0	73.0	5300
	888	N450LL	27.6	150	4301	80	200	95.0	94.8	93.8	80.0	76.0	67.5	5800
	708	N450LL	29.2	145	5395	80	200	94.5	94.5	93.0	76.0	71.0	60.5	6400
450	1780	N400LL	29.0	185	2414	100	200	95.2	95.0	93.5	85.5	83.5	77.0	4400
	1182	N400LL	29.5	175	3635	90	200	95.2	95.2	94.0	84.0	81.5	74.0	5200
	888	N450LL	31.1	170	4839	80	200	95.0	94.8	93.8	80.0	76.0	67.5	5700
	708	N500LL	31.9	160	6069	80	200	94.8	94.8	94.0	78.0	74.5	65.5	7800
500	1780	N400LL	32.2	205	2682	100	200	95.3	95.0	93.5	85.5	83.5	77.0	4300
	1185	N400LL	32.7	195	4029	90	200	95.4	95.4	94.0	84.0	81.5	74.0	5200
	890	N450LL	34.2	185	5365	80	200	95.3	95.0	94.0	80.5	76.5	68.0	5700
	710	N500LL	35.2	175	6725	80	200	95.0	95.0	94.5	78.5	75.0	66.0	7700
560	1782	N400LL	36.0	230	3001	90	200	95.5	95.2	94.0	85.5	83.5	77.0	4200
	1185	N450LL	36.2	215	4513	90	200	95.5	95.5	94.5	85.0	83.0	75.0	4900
	890	N450LL	38.2	210	6008	80	200	95.5	95.0	94.0	80.5	76.5	68.0	5600
	710	N500LL	39.4	195	7532	80	200	95.0	95.0	94.5	78.5	75.0	66.0	7600
630	1782	N450LL	40.3	260	3376	90	200	95.5	95.2	94.0	86.0	84.0	78.0	3900
	1185	N450LL	40.5	240	5077	90	200	95.6	95.6	94.5	85.5	83.5	75.5	4800
	890	N500LL	42.2	230	6759	80	200	95.5	95.5	94.5	82.0	79.0	70.5	6800
	710	N560LL	43.7	215	8473	80	200	95.2	95.2	94.2	79.5	76.5	67.5	7500
710	1782	N450LL	45.1	290	3805	90	200	95.6	95.2	94.0	86.5	84.5	78.5	3900
	1188	N450LL	45.5	270	5707	90	200	95.7	95.5	94.5	85.5	83.5	75.5	4700
	892	N500LL	47.6	260	7601	80	200	95.5	95.5	94.5	82.0	79.0	70.5	6700
	710	N560LL	49.2	245	9549	80	200	95.3	95.3	94.3	79.5	76.5	67.5	13200
750	1785	N450LL	47.6	305	4012	90	200	95.7	95.5	94.5	86.5	84.5	78.5	3800
	1188	N500LL	47.8	285	6028	90	200	95.7	95.5	94.5	86.0	84.0	76.0	5800
	892	N500LL	49.9	275	8029	80	200	95.6	95.6	94.6	82.5	79.5	71.0	6600
	712	N560LL	51.5	255	10059	80	200	95.5	95.5	94.5	80.0	77.0	68.0	13100
800	1785	N450LL	50.7	325	4280	90	200	95.8	95.5	94.5	86.5	84.5	78.5	3700
	1188	N500LL	51.0	305	6430	80	200	95.8	95.5	94.5	86.0	84.0	76.0	5700
	892	N500LL	53.1	290	8564	80	200	95.8	95.5	94.5	82.5	79.5	71.0	6500
	712	N560LL	55.0	275	10729	80	200	95.5	95.5	94.5	80.0	77.0	68.0	12900
900	1785	N500LL	56.4	365	4815	90	200	95.8	95.5	94.5	87.5	86.0	82.0	(4)
	1190	N500LL	57.3	340	7222	80	200	95.8	95.8	94.8	86.0	84.0	76.0	5600
	892	N560LL	59.4	325	9635	80	200	95.8	95.6	94.6	83.0	80.0	72.5	11600
1000	1785	N500LL	62.3	405	5350	80	200	95.8	95.5	94.5	88.0	86.5	82.5	(4)
	1190	N500LL	63.7	380	8024	80	200	95.8	95.8	94.8	86.0	84.0	76.0	5500
	892	N560LL	66.0	360	10705	80	200	95.8	95.6	94.6	83.0	80.0	72.5	11400
1120	1786	N500LL	69.6	450	5988	80	200	96.0	95.8	94.8	88.0	86.5	82.5	(4)
	1190	N560LL	70.8	425	8987	80	200	96.0	96.0	95.0	86.5	85.0	77.5	9900
	892	N560LL	73.8	405	11990	70	200	96.0	95.8	94.7	83.0	80.0	72.5	11200
1250	1786	N560LL	77.1	500	6683	80	200	96.2	96.0	95.0	88.5	87.0	83.0	(4)
	1192	N560LL	77.9	465	10014	80	200	96.2	96.0	95.0	87.5	85.5	78.0	9800
1400	1786	N560LL	86.3	560	7485	80	200	96.2	96.0	95.0	88.5	87.0	83.0	(4)
	1192	N560LL	87.3	520	11215	80	200	96.2	96.0	95.0	87.5	85.5	78.0	9600
1500	1787	N560LL	92.4	600	8015	80	200	96.3	96.0	95.0	88.5	87.0	83.0	(4)

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

(2) Performance tolerance is according to IEC 60034-1.

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

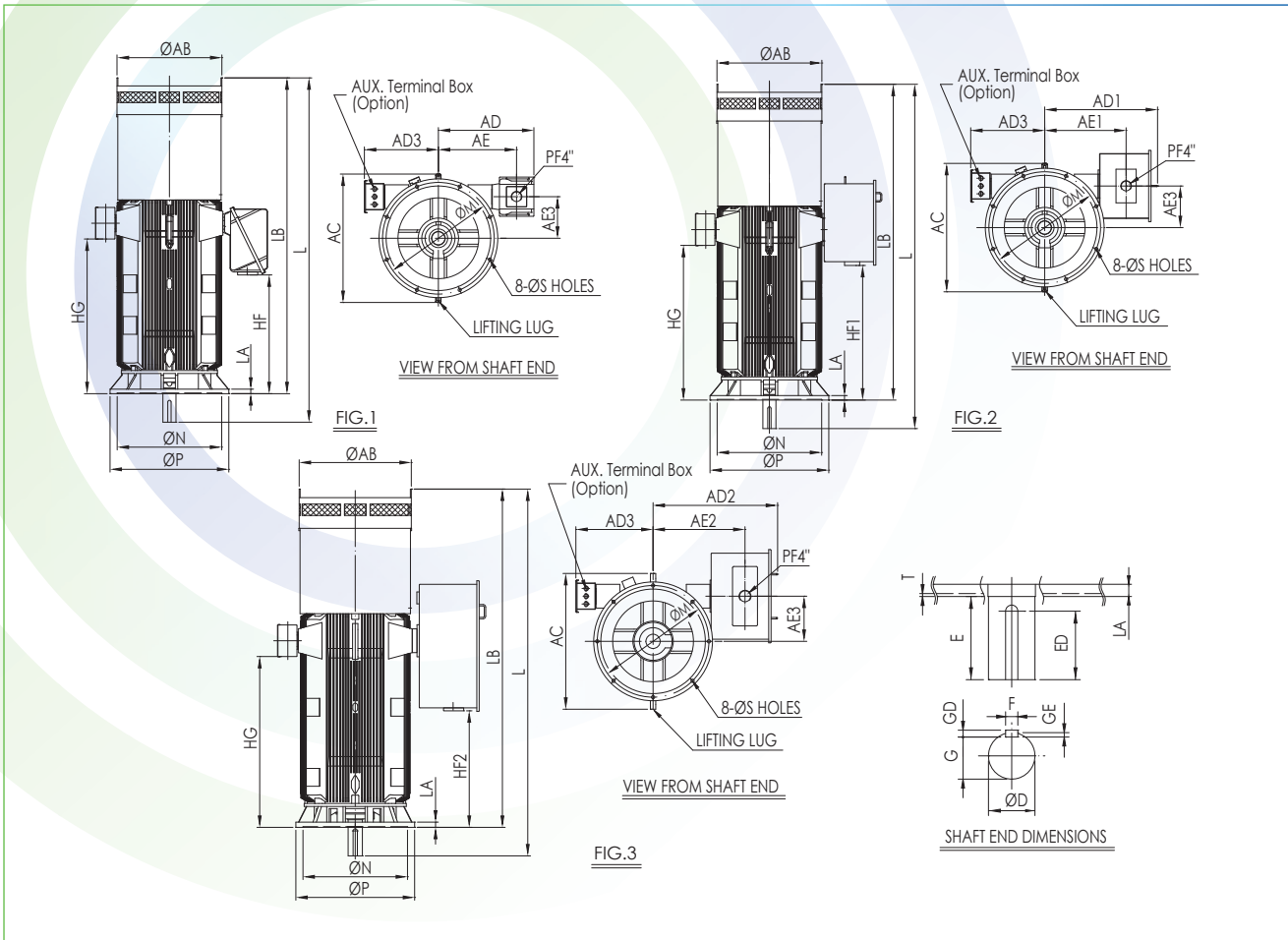
(4) High thrust motor is available on request.

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

M152313

ALL DATA ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

STANDARD VERTICAL MOTOR OUTLINE DRAWING AND DIMENSION SHEET



Unit : mm

FRAME NO.	POLES	FIG NO. ⁸⁾	FLANGE							AB	AC	AD ⁸⁾	AD1 ⁸⁾	AD2 ⁸⁾	AD3	AE ⁸⁾	AE1 ⁸⁾	AE2 ⁸⁾	AE3	HF ⁸⁾
			LA	M	N	P	S	T												
N315LL	4 ~ 10	1 or 2	25	740	680	800	24	6	720	901	753	880	—	509	575	647	—	275	572	
N355LL	4 ~ 10	1 or 2	35	940	880	1000	28	6	790	980	789	897	—	580	643	670	—	295	842	
N400LL	4 ~ 10	1 or 2 or 3	38	940	880	1000	28	6	890	1081	840	930	1018	594	662	697	959	350	882	
N450LL	4 ~ 10	2 or 3	38	940	880	1000	28	6	930	1143	—	980	1048	650	—	727	989	380	—	
N500LL	4 ~ 10	2 or 3	50	1080	1000	1150	28	6	1040	1252	—	1043	1322	674	—	810	1039	430	—	
N560LL	4 ~ 10	2 or 3	50	1080	1000	1150	28	6	1150	1360	—	1085	1397	749	—	852	1114	470	—	

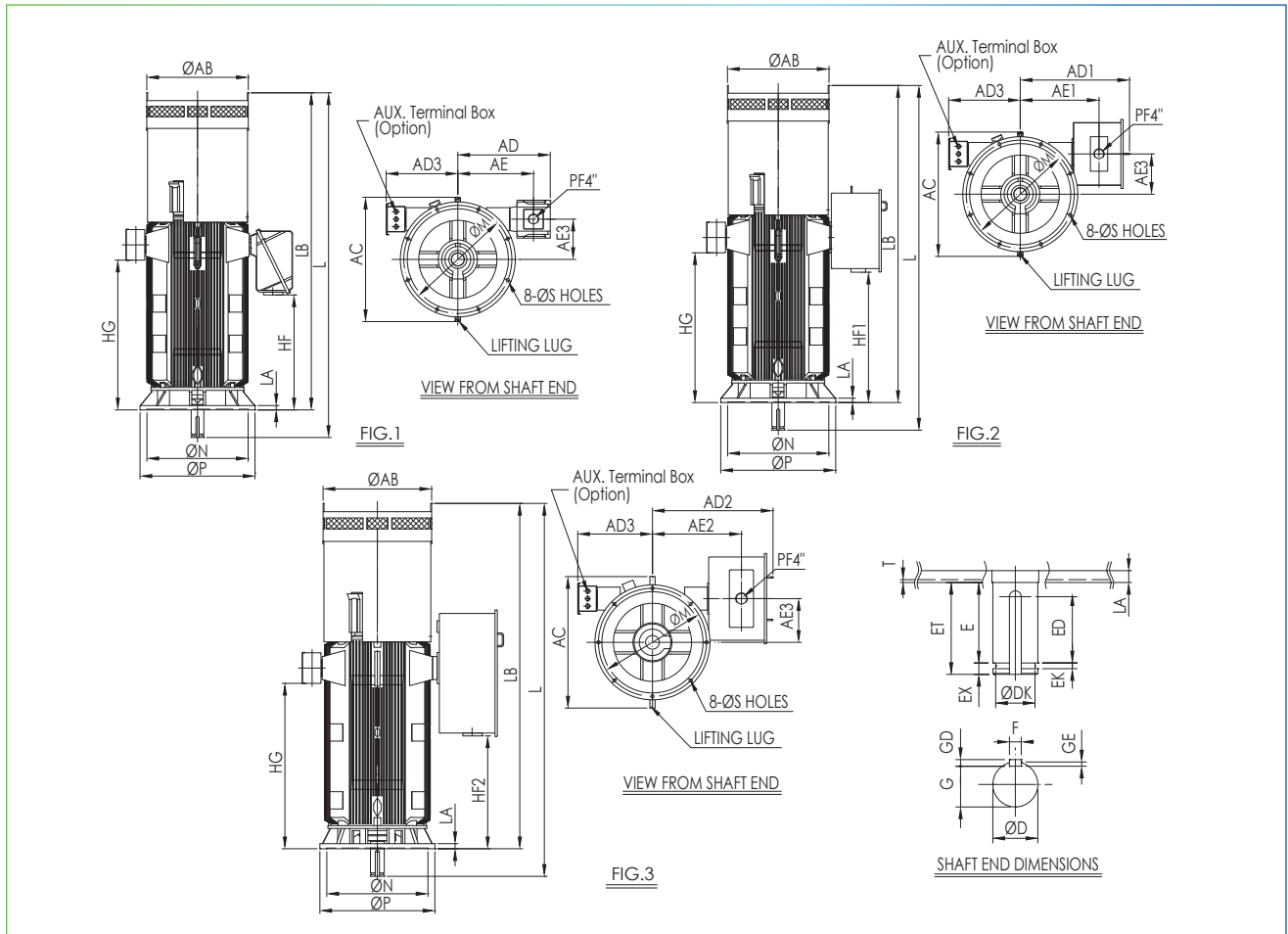
FRAME NO.	POLES	FIG NO. ⁸⁾	HF1 ⁸⁾	HF2 ⁸⁾	HG	L	LB	SHAFT END							BEARING		APPROX. WEIGHT (kg)
								D	E	F	G	GD	GE	ED	D.E. ⁷⁾	N.D.E. ⁷⁾	
N315LL	4 ~ 10	1 or 2	713	—	897	2100	1930	95	170	25	86	14	9	140	6220C3	6320C3	2000
N355LL	4 ~ 10	1 or 2	982	—	1166	2450	2240	110	210	28	100	16	10	180	6224C3	7320B +6220C3	3200
N400LL	4 ~ 10	1 or 2 or 3	1140	845	1302	2670	2460	110	210	28	100	16	10	180	6224C3	7324B +6224C3	4800
N450LL	4 ~ 10	2 or 3	1276	981	1438	2890	2680	120	210	32	109	18	11	180	6226C3	7324B +6224C3	5300
N500LL	4 ~ 10	2 or 3	1206	634	1513	3150	2900	130	250	32	119	18	11	220	6228C3	7324B +6224C3	7300
N560LL	4 ~ 10	2 or 3	1316	744	1623	3180	2880	160	300	40	147	22	13	250	6034C3	7330B +6230C3	9400

Note:

- 1) Tolerance of diameter D : m6.
- 2) Tolerance of diameter N : H7.
- 3) Tolerance of key width F : h9, height GD : h11.
- 4) Dimensions L, AB, AC, AD, AD1, AD2, AD3, AE, AE1, AE2, AE3, HF1, HF2, HG, LB are approximate values.
- 5) For direct coupled.
- 6) Dimension L may be extended to meet low noise level.
- 7) Grease lubricated.
- 8) Fig. 1 for 4160 volts and below for N315LL, N355LL and N400LL.
Fig. 2 for 6000 volts and 6600 volts for all frames and for 4160 volts and below for N450LL, N500LL and N560LL.
Fig. 3 for 10000 volts and above for N400LL, N450LL, N500LL and N560LL.

D34-17809

HIGH THRUST VERTICAL MOTOR OUTLINE DRAWING AND DIMENSION SHEET



Unit : mm

FRAME NO.	POLES	FIG NO. ⁹⁾	FLANGE							AB	AC	AD ⁹⁾	AD1 ⁹⁾	AD2 ⁹⁾	AD3	AE ⁹⁾	AE1 ⁹⁾	AE2 ⁹⁾	AE3	HF ⁹⁾
			LA	M	N	P	S	T												
N315LL	4 ~ 10	1 or 2	25	740	680	800	24	6	720	901	753	880	---	509	575	647	---	275	572	
N355LL	4 ~ 10	1 or 2	35	940	880	1000	28	6	790	980	789	897	---	580	643	670	---	295	842	
N400LL	4 ~ 10	1 or 2 or 3	38	940	880	1000	28	6	890	1081	840	930	1018	594	662	697	959	350	882	
N450LL	4 ~ 10	2 or 3	38	940	880	1000	28	6	930	1143	---	980	1048	650	---	727	989	380	---	
N500LL	6 ~ 10	2 or 3	50	1080	1000	1150	28	6	1040	1252	---	1043	1322	674	---	810	1039	430	---	
N560LL	6 ~ 10	2 or 3	50	1080	1000	1150	28	6	1150	1360	---	1085	1397	749	---	852	1114	470	---	

FRAME NO.	POLES	FIG NO. ⁹⁾	HF1 ⁹⁾	HF2 ⁹⁾	HG	L	LB	SHAFT END										BEARING		APPROX. WEIGHT (kg)	
								D	E	F	G	DK	EK	ET	EX	GD	GE	ED	D.E.		N.D.E. ⁸⁾
N315LL	4 ~ 10	1 or 2	713	---	897	2260	2066	95	170	25	86	83	12	194	24	14	9	140	6220C3 ⁷⁾	29330+6028	2300
N355LL	4 ~ 10	1 or 2	982	---	1166	2610	2370	110	210	28	100	95	15	240	30	16	10	180	6224C3 ⁷⁾	29330+6028	3300
N400LL	4 ~ 10	1 or 2 or 3	1140	845	1302	2870	2630	110	210	28	100	95	15	240	30	16	10	180	6224C3 ⁷⁾	29330+6028	5000
N450LL	4 ~ 10	2 or 3	1276	981	1438	3090	2850	120	210	32	109	105	15	240	30	18	11	180	6226C3 ⁸⁾	29330+6028	5800
N500LL	6 ~ 10	2 or 3	1206	634	1513	3350	3070	130	250	32	119	115	15	280	30	18	11	220	6228C3 ⁸⁾	29334+6032	7800
N560LL	6 ~ 10	2 or 3	1316	744	1623	3390	3050	160	300	40	147	140	20	340	40	22	13	250	6034C3 ⁸⁾	29340+6038	10000

Note:

- 1) Tolerance of diameter D : m6.
- 2) Tolerance of diameter N : H7.
- 3) Tolerance of key width F : h9, height GD : h11.
- 4) Dimensions L, AB, AC, AD, AD1, AD2, AD3, AE, AE1, AE2, AE3, HF1, HF2, HG, LB are approximate values.
- 5) For direct coupled.
- 6) Dimension L may be extended to meet low noise level.
- 7) Grease lubricated.
- 8) Oil lubricated.
- 9) Fig. 1 for 4160 volts and below for N315LL, N355LL and N400LL.

Fig. 2 for 6000 volts and 6600 volts for all frames and for 4160 volts and below for N450LL, N500LL and N560LL.
 Fig. 3 for 10000 volts and above for N400LL, N450LL, N500LL and N560LL.

D34-17808

LARGE AC MOTOR INQUIRY/ORDERING SHEET

INQUIRY/ORDER NO _____
 CUSTOMER _____
 AGENT _____

ITEM		YOUR REQUIREMENTS	IF REQUIREMENT NOT SPECIFIED, OUR OFFER WILL BE AS FOLLOWS	REMARK
△ 1	OUTPUT	_____ kW _____ HP		
△ 2	ROTOR TYPE	<input type="checkbox"/> SQUIRREL CAGE <input type="checkbox"/> WOUND ROTOR		
△ 3	POLE	_____ P		
△ 4	VOLTAGE	_____ V		
△ 5	FREQUENCY	_____ HZ		
△ 6	INSULATION CLASS	_____ CLASS	F CLASS	
7	TEMPERATURE RISE	_____ °C	100°C	
8	SITE CONDITION	LOCATION <input type="checkbox"/> OUTDOOR <input type="checkbox"/> INDOOR	INDOOR	
9		ALTITUDE _____ M	BELOW 1000M	
10		HUMIDITY _____ % RH	BELOW 80%	
11		AMBIENT TEMP _____ °C	BELOW 40°C	
△ 12	APPLICATION (LOAD TYPE)			
△ 13	MOUNTING	<input type="checkbox"/> HORIZONTAL <input type="checkbox"/> VERTICAL(SHAFT ↓)		
△ 14	ENCLOSURE AND COOLING	<input type="checkbox"/> TEFC(TEAAC) <input type="checkbox"/> ODP <input type="checkbox"/> DPG(WPI) <input type="checkbox"/> TEWAC <input type="checkbox"/> TEPV <input type="checkbox"/> DPPV <input type="checkbox"/> NEMA WP II <input type="checkbox"/> EXPLOSION PROOF		IP _____ <input type="checkbox"/> Exe <input type="checkbox"/> Exd <input type="checkbox"/> _____ CLASS _____ DIVISION _____ GROUP _____
15	SERVICE FACTOR	SF _____	1.0	
16	OVER LOAD	_____ % _____ HOURS	NOT CONSIDERED	
17	LOAD WR2 AT MOTOR SHAFT	_____ KG-M2		
18	STARTING METHOD			
19	NUMBER OF CONSECUTIVE STARTS		ONE HOT / TWO COLD	
20	BREAKDOWN TORQUE	_____ % FLT	TATUNG STANDARD	
21	LOCKED ROTOR TORQUE	_____ % FLT	TATUNG STANDARD	
22	LOCKED ROTOR CURRENT	_____ % FLC	TATUNG STANDARD	
△ 23	DIRECTION OF ROTATION	HORIZONTAL _____ (VIEW FROM DE)	CCW(VIEW FROM DE)	
		VERTICAL _____ (VIEW FROM TOP SIDE)	CW(VIEW FROM TOP SIDE)	
△ 24	COUPLED METHOD	<input type="checkbox"/> COUPLING <input type="checkbox"/> BELT <input type="checkbox"/> GEAR	COUPLING	
25	PULLEY (FOR BELT DRIVE ONLY)	PULLEY EXTERNAL DIAMETER _____ PULLEY WIDTH _____	TATUNG STANDARD	CUSTOMER MAY SPECIFY BELT TENSION IF PULLEY DIMENSION NOT AVAILABEL
26	BEARING TYPE	<input type="checkbox"/> ANTI-FRICTION <input type="checkbox"/> SLEEVE	TATUNG STANDARD	
27	LUBRICATION	<input type="checkbox"/> GREASE <input type="checkbox"/> OIL <input type="checkbox"/> FORCED OIL	TATUNG STANDARD	
△ 28	AXIAL THRUST	LUBRICATION _____ kgs (ODE → DE) _____ kgs (ODE ← DE)	TATUNG STANDARD	
		VERTICAL(SHAFT ↓) _____ kgs DOWN _____ kgs UP	TATUNG STANDARD	
△ 29	NON-REVERSE RATCHET (VERTICAL ONLY)	<input type="checkbox"/> WITH <input type="checkbox"/> WITHOUT	NIL	
30	NOISE	_____ dB(A)	TATUNG STANDARD	NO LOAD AT ONE METER
31	TERMINAL BOX POSITION	<input type="checkbox"/> RIGHT <input type="checkbox"/> LEFT <input type="checkbox"/> UPPER	TATUNG STANDARD	VIEWED FROM DE
32	T/BOX CONDUIT THREAD	<input type="checkbox"/> PF _____ INCH <input type="checkbox"/> NPT _____ INCH		
33	COIL TEMP DETECTOR	<input type="checkbox"/> RTD <input type="checkbox"/> THERMOSTAT <input type="checkbox"/> THERMISTOR	NIL	TYPE _____ QTY _____
34	BEARING TEMP. DETECTOR	<input type="checkbox"/> RTD <input type="checkbox"/> THERMOCOUPLE	NIL	TYPE _____ QTY _____
35	SPACE HEATER	_____ PHASE _____ VOLT _____ WATT	NIL	
36	BASE, RAIL	<input type="checkbox"/> RAIL <input type="checkbox"/> SOLE PLATE	NIL	
37	ANCHOR BOLT	<input type="checkbox"/> WITH <input type="checkbox"/> WITHOUT	NIL	
38	SPARE PARTS		NIL	
39	SPECIAL REQUIREMENT			

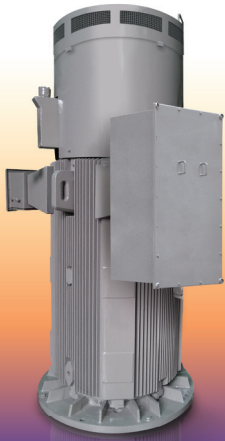
DE: DRIVE END
 ODE: OPPOSITE DRIVE END
 ODP: OPEN DRIP PROOF
 DPG: DRIP PROOF GUARDED(WPI)
 FLT: FULL LOAD TORQUE
 FLC: FULL LOAD CURRENT

DPPV: DRIP PROOF PIPE VENTILATION
 TEFC: TOTALLY ENCLOSED FAN COOLED
 TEPV: TOTALLY ENCLOSED PIPE VENTILATION
 TEAAC: TOTALLY ENCLOSED AIR TO AIR COOLED
 TEWAC: TOTALLY ENCLOSED WATER TO AIR COOLED

YOUR INQUIRY (ORDER) SHOULD FURNISH ITEM 1、2、3、4、5、6、12、13、14、23、24、28、29 (MARK △) AT LEAST

MEMO

A series of horizontal dashed lines for writing.



Contact Information

TATUNG Company

22 Chungshan N. Road, 3rd Sec.

Taipei, 10435 Taiwan

Tel: 886-2-2599-5429,

886-2-2592-5252

ext. 2403, 2489, 2908

Fax: 886-2-2598-4427

E-mail: service@sansha.tatung.com.tw

Web: www.tatung.com

TATUNG (Shanghai) Co., Ltd.

No. 5299 Beisong Road, Chedun Town

Songjiang District, Shanghai 201611,

China

Tel: 86-21-57605299 ext. 206, 288

Fax: 86-21-57605266

Email: export@tatungsh.net

Web: www.tatungsh.com

TATUNG Electric GmbH

Schlehenweg 1, 29690 Schwarmstedt/

Essel, Germany

Tel: +49 5071 96891 55

Fax: +49 5071 96891 51

E-mail:

D.Sawischlewski@tatungelectric.de

Web: www.tatungelectric.de



TATUNG Sanhsia Motor Factory Facts

TATUNG Company Founded in 1918

Sanhsia Factory Land Area — 166,578 M²

Total MV Motors Produced — over 30,000

Continuous Production since 1949

Voltage Range — thru 13,800 Volts

Test Facility through 37,500kW — IEC 60034-2-1 or

IEEE 112 Method F1

Location — 352 Shi-tong Rd., Sanhsia, New Taipei City 23743, Taiwan