ENERGY EFFICIENT MOTORS
GEAR MOTORS

NORD DRIVESYSTEMS

60 HERTZ LINE FREQUENCY - SF 1:15

230V - 3 phase : 1 to 40 hp
460V - 3 phase : 1 to 200 hp
575V - 3 phase : 1 to 200 hp

50 HERTZ LINE FREQUENCY

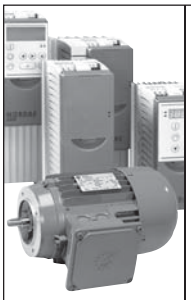
230/400V - 3 phase : 1.1 to 2.2 kW
400/690V - 3 phase : 3 to 90 kW

ENERGY EFFICIENCY STANDARDS

NEMA MG-1 : conforming
EPAct : conforming
NRCan : conforming
CE : EFF 1

Motor Power		Full Load Speed	Integral Model Number	Mounting Options					Full Load Current			Starting Torque	Breakdown Torque
				NEMA T-Frame	NEMA C-Face	IEC Footed B3 Style	IEC Flanged B3 Style	IEC Flanged B14 Style	230V	460V	575V		
[hp]	[kW]	[rpm]							[A]	[A]	[A]	[%]	[%]
1	0.75	1750	80LH/4	56T, 143T	56C, 143TC	80LH-B3	80LH-B5	80LH-B14	3.88	1.94	1.50	460	430
1.5	1.1	1740	90SH/4	145T	145TC	90SH-B3	90SH-B5	90SH-B14	4.30	2.15	1.75	350	380
2	1.5	1745	90LH/4	145T	145TC	90LH-B3	90LH-B5	90LH-B14	6.30	3.15	2.45	430	450
3	2.2	1765	100LH/4	182T	182TC	100LH-B3	100LH-B5	100LH-B14	8.60	4.30	3.40	360	470
5	3.7	1770	112MH/4	184T	184TC	112MH-B3	112MH-B5	112MH-B14	14.4	7.20	5.60	400	480
7.5	5.5	1780	132SH/4	213T	213TC	132SH-B3	132SH-B5	132SH-B14	21	10.5	8.30	430	460
10	7.5	1770	132MH/4	215T	215TC	132MH-B3	132MH-B5	132MH-B14	27	13.5	10.8	320	400
15	11	1765	160MH/4	254T	254TC	160MH-B3	160MH-B5	-	36	17.9	14.3	260	320
20	15	1765	160LH/4	256T	256TC	160LH-B3	160LH-B5	-	49	25	19.6	280	350
25	18.5	1770	180MH/4	-	-	-	-	-	61	31	24	280	360
30	22	1770	180LH/4	-	-	-	-	-	72	36	29	310	390
40	30	1770	200LH/4	-	-	-	-	-	94	47	38	300	360
50	37	1782	225SH/4	-	-	-	-	-	-	59	47	300	340
60	45	1782	225MH/4	-	-	-	-	-	-	70	56	300	350
75	55	1790	250MH/4	-	-	-	-	-	-	86	69	290	340
100	75	1786	280SH/4	-	-	-	-	-	-	116	93	290	350
125	90	1786	280MH/4	-	-	-	-	-	-	146	117	280	330
150	110	1791	315SH/4	-	-	-	-	-	-	174	139	280	310
200	150	1791	315MaH/4	-	-	-	-	-	-	225	180	330	350

ENERGY EFFICIENT MOTORS



INVERTER DUTY

- Motors conform with NEMA MG-1-2006 Section 31.4.4.2
- insulated with Class H double coated magnet wire
- 5:1 speed range : constant torque from 60Hz to 12Hz
- 20:1 speed range : constant torque from 80Hz to 4Hz : standard with reducer modification

INVERTER DUTY OPTIONS

- 10:1 speed range : constant torque from 60Hz to 6Hz
- 1000:1 speed range : constant torque from 60Hz to 0Hz
- Blower fan 115V - 1 phase : 0.16 to 5 hp
- Blower fan 230V - 1 phase : 0.16 to 60 hp
- Blower fan 230V - 3 phase : 0.16 to 60 hp
- Blower fan 460V - 3 phase : 0.16 to 60 hp
- Incremental encoder

INTERNATIONAL CERTIFICATIONS

- Underwriters Laboratories Recognized component :
- Canadian Standards Association approved for most installations in Canada :
- CSA approved according to both US and Canadian standards :
- European Union (EU) member states approved according to the Low Voltage Directive : CE

THERMAL WINDING PROTECTION OPTIONS

- Thermostat sensor (TW)
- Thermistor sensors (TF)

ENVIRONMENTAL PROTECTION

- IP55 enclosure protection
- Totally Enclosed Fan Cooled (TEFC)
- Tropical protection

ENVIRONMENTAL OPTIONS

NSD+ severe duty protection, Encapsulated windings for IEEE45 Marine Duty, IP66 enclosure, End bell drain holes, Drip cover (RD), Wind protected double drip cover (RDD), Space heater (SH), Additional epoxy coating on inside surface of motor

MOUNTING STYLES

- Integral motor with speed reducer
- NEMA C-face flange mount
- NEMA T-frame footed motor mount
- DIN B5, IEC FF metric face flange mount
- DIN B14, IEC metric face flange mount
- DIN B3, IEC metric foot mount

STANDARD CONSTRUCTION FEATURES

- A minimum Service factor of 1.1
- 1800 rpm synchronous speed
- Continuous duty
- A Maximum ambient temperature of 40° C (104° F)
- 3300 feet of elevation without derating
- A maximum Class B temperature rise of 105° C (221° F)
- Class F insulation system : 155° C (311° F)
- Corrosion resistant aluminum alloy housing
- Low rotor inertia
- Ball bearings
- Water resistant bearing grease
- Squirrel cage rotor
- 1045 carbon steel shaft
- Double coated magnet wire insulation
- Insulation lined slots
- Phase paper
- Phase separators
- First turn winding protection
- Top sticks
- Varnish dipped stator
- Shaft lip seals both end bells
- Inorganic insulation for tropical protection
- Sealed stator to end bell connections
- Cast metal terminal box
- Gasket sealed conduit boxes
- Non sparking low inertia fan
- Dynamically balanced rotor
- Anti-corrosion coated rotor
- Terminal block power connector
- Reverseable roatation direction
- Four conduit box locations
- Four cable entry locations
- Threaded cable entry

OTHER OPTIONS

- Over-running clutch (FK) : 1 to 5 HP
- Anti-rotation backstop (RLS) : 1 to 60 HP
- Extended motor shaft beyond fan cover (WE) : 1 to 200 HP
- High inertia metal fan for soft start (Z) : 1 to 2 HP
- Quick power disconnect plug (MS1) : 1 to 5 HP

DRIVESYSTEMS

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