### 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

<table>
<thead>
<tr>
<th>Motor Power [hp]</th>
<th>Full Load Speed [rpm]</th>
<th>Integral Model Number</th>
<th>NEMA T-Frame</th>
<th>NEMA C-Face</th>
<th>IEC Footed B3 Style</th>
<th>IEC Flanged B3 Style</th>
<th>IEC Flanged B14 Style</th>
<th>Full Load Current 230V [A]</th>
<th>Starting Torque 230V [%]</th>
<th>Breakdown Torque 230V [%]</th>
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<tr>
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<td>80LH-B14</td>
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</tbody>
</table>

[www.nord.com](http://www.nord.com)
**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

**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

**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

**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 rotation direction
- Four conduit box locations
- Four cable entry locations
- Threaded cable entry

**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

**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

**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