Encoder-equipped ACCU-Torq® motors are an error-free solution to applications requiring accurate positioning or precise speed control without the rapid acceleration dynamics of a servomotor. ACCU-Torq is designed to be used with inverters and vector drives in applications requiring up to a 2000:1 constant torque speed range.

**Product Features:**
- Totally Enclosed Non-Ventilated Construction (TENV)
- Constant torque operation; zero to base speed on vector drives
- Constant power (HP) operation to twice base speed
- Optimized for operation with IGBT and intelligent power module drives (NEMA® Design A)
- F-1 Standard, field convertible to F-2 for 180 frame and above
- Normally closed thermostats standard
- Shaft grounding ring option on all ratings
- Encoder and brake provision on all ratings

**Product Overview and Options**

**Encoder-equipped ACCU-Torq® motors are an error-free solution to applications requiring accurate positioning or precise speed control without the rapid acceleration dynamics of a servomotor. ACCU-Torq is designed to be used with inverters and vector drives in applications requiring up to a 2000:1 constant torque speed range.**

**Typical Applications:**
- Packaging machinery
- Extruders
- Material handling
- Indexing and positioning
- Positive displacement pumps
- DC Motor Replacements

**HP** | **Base RPM** | **Max RPM** | **Voltage** | **Frame** | **Catalog Number** | **C" Dim. (inches)** | **Full Load Amps** | **Rated Torque lb.-in.** | **Inertia lb.-in.-sec 2** | **Ship Wt. (lbs.)**
---|---|---|---|---|---|---|---|---|---|---
1/4 | 1800 | 3600 | 230/460 | 56C | UN14T2BC | 12.9 | 1.0/0.5 | 8.4 | 0.026 | 29
1/3 | 1800 | 3600 | 230/460 | 56C | UN13T2BC | 14.4 | 1.1/0.6 | 12.0 | 0.036 | 37
1/2 | 1800 | 3600 | 230/460 | 56C | UN12T2BC | 14.4 | 1.5/0.7 | 18.0 | 0.039 | 38
1 | 1800 | 3600 | 230/460 | 56C | UN1T2BC | 14.4 | 3.2/1.6 | 36.0 | 0.040 | 36
1200 | 2400 | 230/460 | 143TC | UN1T2BC | 14.5 | 3.2/1.6 | 36.0 | 0.040 | 37
1.1/2 | 1800 | 3600 | 230/460 | 143TC | UN1T2BC | 14.5 | 4.6/2.3 | 54.0 | 0.052 | 36
2 | 1800 | 3600 | 230/460 | 145TC | UN2T2BC | 15.5 | 5.6/2.8 | 72.0 | 0.065 | 53
1800 | 3600 | 575 | 145TC | UN2T2BC | 15.5 | 2.2 | 72.0 | 0.065 | 53
1200 | 2400 | 230/460 | 184TC | UN2T3BC | 16.7 | 6.2/3.1 | 108.0 | 0.134 | 64
3 | 1800 | 3600 | 230/460 | 182TC | UN3T2BC | 15.9 | 10.0/5.0 | 106.8 | 0.117 | 59
1800 | 3600 | 575 | 182TC | UN3T2BC | 15.9 | 4.1 | 106.8 | 0.117 | 58
1200 | 2400 | 230/460 | 213TC | UN3T3BC | 18.5 | 9.0/4.5 | 160.8 | 0.254 | 127
5 | 1800 | 3600 | 230/460 | 184TC | UN5T2BC | 16.7 | 14.0/7.0 | 177.6 | 0.176 | 78
1800 | 3600 | 575 | 184TC | UN5T2BC | 16.7 | 5.6 | 177.6 | 0.176 | 77
1200 | 2400 | 230/460 | 215TC | UN5T3BC | 20.0 | 18.0/8.0 | 267.6 | 0.344 | 129
7-1/2 | 1800 | 3600 | 230/460 | 213TC | UN7T2BC | 20.0 | 18.8/9.4 | 266.4 | 0.359 | 125
1800 | 3600 | 575 | 213TC | UN7T2BC | 20.0 | 7.5 | 266.4 | 0.359 | 127
1200 | 2400 | 230/460 | 254TC | UN7T3BC | 23.1 | 18.9/9.9 | 396.4 | 1.194 | 286
10 | 1800 | 3600 | 230/460 | 215TC | UN10T2BC | 23.0 | 25.4/12.7 | 355.2 | 0.494 | 172
1900 | 3600 | 575 | 215TC | UN10T2BC | 23.0 | 10.0 | 355.2 | 0.494 | 125
1200 | 2400 | 230/460 | 256TC | UN10T3BC | 24.9 | 25.3/12.7 | 540.0 | 1.506 | 227
15 | 1800 | 3600 | 230/460 | 254TC | UN15T2BC | 24.9 | 36.0/17.8 | 530.4 | 1.274 | 265
1800 | 3600 | 575 | 254TC | UN15T2BC | 24.9 | 14.2 | 530.4 | 1.274 | 270
20* | 1800 | 3600 | 230/460 | 256TC | UN20T2BC | 26.3 | 50.0/24.8 | 706.8 | 1.325 | 270
1800 | 3600 | 575 | 256TC | UN20T2BC | 26.3 | 19.8 | 706.8 | 1.325 | 270

*For details, refer to: www.usmotors.com

*Constant HP Operation up to 105 Hertz
Conversion Options

Ask your Nidec Motor Corporation sales representative for pre-assembled encoder, brake, and shaft grounding ring options. **No Extra Assembly Charge.**

**ACCU-Torq® Motor Encoder Option:**
- All encoders listed have “line-driver” outputs
- Encoders available in 1024 and 2048 ppr
- Encoder cables not supplied by Nidec Motor Corporation

**ACCU-Torq® Motor Shaft-Grounding Ring Option:**
- Reduces potential bearing failures caused by induced shaft currents
- AEGIS® brand

### Base Model | Manufacturer | Size | Supply Volts | Connector | Application
--- | --- | --- | --- | --- | ---
HS20 | Dynapar | 2.0" | 5-26v DC | MS 10-pin | Medium Duty
HS35 | Dynapar | 3.5" | 5-26v DC | MS 10-pin | Heavy Duty
SL56 | Dynapar | for 4.5" A-K | 5-15v DC | Epic Solderless | For Brake Use**
Model 260 | EPC | 2.0" | 5-28v DC | M-12* | Light Duty
25T | EPC | 2.5" | 5-28v DC | MS 10-pin | Medium Duty
Model 770 | EPC | for 4.5" A-K | 5-28v DC | MS 10-pin | For Brake Use**

* Mating Connectors Not Provided For M12 Connection. **For Use of Brake Along with Encoder on Motor, Please Select These Encoders

**ACCU-Torq® Motor Brake Options:**

<table>
<thead>
<tr>
<th>Make</th>
<th>Coil Volts (v-ac)</th>
<th>Holding Torque (lb-ft)</th>
<th>Discount Symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steams 575</td>
<td>10 lb-ft</td>
<td>DS-VFM</td>
<td></td>
</tr>
<tr>
<td>Steams 575</td>
<td>6 lb-ft</td>
<td>DS-VFM</td>
<td></td>
</tr>
<tr>
<td>Steams 208-230/460</td>
<td>10 lb-ft</td>
<td>DS-VFM</td>
<td></td>
</tr>
<tr>
<td>Steams 208-230/460</td>
<td>6 lb-ft</td>
<td>DS-VFM</td>
<td></td>
</tr>
<tr>
<td>Steams 115/208-230</td>
<td>10 lb-ft</td>
<td>DS-VFM</td>
<td></td>
</tr>
<tr>
<td>Steams 115/208-230</td>
<td>6 lb-ft</td>
<td>DS-VFM</td>
<td></td>
</tr>
</tbody>
</table>

Connections To Brakes: Flying Leads In Brake Enclosure
Brakes Rated For "Holding" Only - Not to be Applied for Stopping
Universal Mount - For Vertical and Horizontal Mounted Motors

**ACCU-Torq® Motor Shaft-Grounding Ring Option:**
- Reduces potential bearing failures caused by induced shaft currents
- AEGIS® brand

† All marks shown within this document are properties of their respective owners.