ACCU-Torq® Motors
Vector Duty Induction Motors

Horsepower: 1/4 – 20 HP

Speed Range: 2000:1

Poles: 4 and 6

Rated Voltages: 230/460 and 575 Volts

Temp Rise: Continuous duty at 40°C Ambient

Insulation: Class F Insulation

Warranty: Three year limited warranty*

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

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



ACCU-Torq® Motor

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
	1800	3600	575	56C	UN12T2GC	14.4	0.6	18.0	0.039	37
1	1800	3600	230/460	56C	UN1T2BFC	14.4	3.2/1.6	36.0	0.040	36
	1800	3600	575	56C	UN1T2GC	14.4	1.3	36.0	0.040	36
	1800	3600	230/460	143TC	UN1T2BC	14.5	3.2/1.6	36.0	0.040	37
	1200	2400	230/460	145TC	UN1T3BC	14.5	3.6/1.8	55.2	0.045	42
1-1/2	1800	3600	230/460	145TC	UN32T2BC	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	UN2T2GC	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	UN3T2GC	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	UN5T2GC	16.7	5.6	177.6	0.176	77
	1200	2400	230/460	215TC	UN5T3BC	20.0	16.0/8.0	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	UN7T2GC	20.0	7.5	266.4	0.359	127
	1200	2400	230/460	254TC	UN7T3BC	23.1	19.8/9.9	398.4	1.194	286
10	1800	3600	230/460	215TC	UN10T2BC	23.0	25.4/12.7	355.2	0.494	172
	1800	3600	575	215TC	UN10T2GC	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	UN15T2GC	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	UN20T2GC	26.3	19.8	706.8	1.325	270

*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 2048ppr
- Encoder cables not supplied by Nidec Motor Corporation

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


HS20 Encoder


HS35 Encoder


SL56 Encoder


260 Encoder

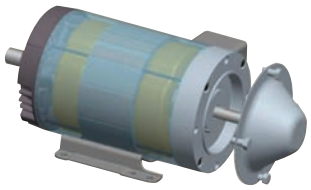

25T Encoder

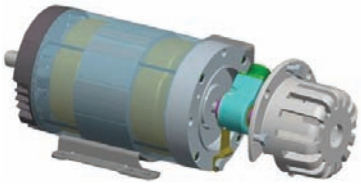

770 Encoder

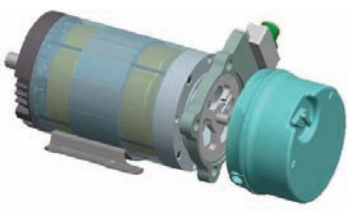
ACCU-Torq® Motor Brake Options:

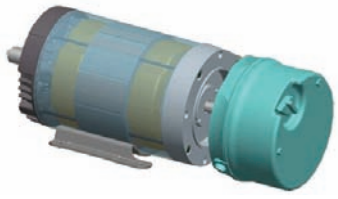
Make	Coil Volts (v-ac)	Holding Torque (lb-ft)	Discount Symbol
Stearns	575	10 lb-ft	DS-VFM
Stearns	575	6 lb-ft	DS-VFM
Stearns	208-230/460	10 lb-ft	DS-VFM
Stearns	208-230/460	6 lb-ft	DS-VFM
Stearns	115/208-230	10 lb-ft	DS-VFM
Stearns	115/208-230	6 lb-ft	DS-VFM

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


ACCU-Torq® Motor & Encoder Configuration


ACCU-Torq® Motor, Encoder & Brake Configuration


ACCU-Torq® Motor & Brake Configuration

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.

Nidec Motor Corporation, 2011; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation.
Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

NIDEC MOTOR CORPORATION
8050 W. Florissant Avenue | St. Louis, MO 63136
Phone: 888-637-7333 | Fax: 866-422-7758