

**SPEEDMASTER®
INVERTER-DUTY MOTORS**
2000:1 CONSTANT TORQUE



Features:

- Continuous constant torque operation from 0 to base speed on IGBT power
- Constant HP operation to twice base speed (143-256, 1800 RPM) or 1.5 x base speed (284-449)
- Designed for optimum performance with IGBT inverters – not for across-the-line starting
- Class F N/C thermostats (one per phase)
- Continuous duty at 40°C ambient
- IRIS™ Spike Protection
- 284T and larger are blower-cooled with a separately powered three phase 1 HP, 1800 RPM motor with blower for added cooling at low speeds
- Premium quality, cast iron frame and brackets
- Ball bearing (roller bearing available 360 Frame & larger)
- Encoder provisions included on opposite drive end (see Encoder Kit below)
- UL Recognized and CSA Certified
- Three year warranty
- Meets NEMA MG1, part 30 and 31

Applications:

Designed for inverter or vector applications where up to a 2000:1 constant torque speed range is required. Typical uses include: material handling, machine tools, conveyors, crane and hoist, metal processing, test stands, pumps, compressors, textile processing, and other industrial machinery installed in dusty or dirty environments.

THREE PHASE • TOTALLY ENCLOSED • RIGID BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps 230V	RPM Max.†	"C" Dim. (Inches)
1	1725	143TC	810548 ●	\$761	C	61	230/460	3.0	5400	13.68
1½	1725	145TC	810547 ●	839	C	68	230/460	4.6	5400	14.68
2	1750	145TC	810546 ●	876	C	70	230/460	6.0	5400	14.68
3	1750	182TC	811320 ●	1009	C	110	230/460	8.0	5400	16.68
5	1750	184TC	811322 ●	1141	C	118	230/460	13.4	5400	17.69
7½	1760	213TC	810157 ●	1485	C	180	230/460	21.0	4200	20.56
10	1760	215TC	810140 ●	1782	C	290	230/460	26.0	4200	22.74
15	1765	254TC	810066 ●	1852	C	320	230/460	39.0	4200	25.12
	1170	284TC	810068	4670	C	440	230/460	40.0	3600	37.48
20	1765	256TC	810007 ●	2070	C	425	230/460	54.0	4200	25.12
	1170	286TC	810001	5596	C	450	230/460	52.4	3600	37.48
25	1770	284TC	810011	3260	C	438	230/460	65.0	3600	37.48
	1180	324TC	810003	6583	C	620	230/460	67.0	3600	40.41
30	1780	286TC	810015	4135	C	520	230/460	74.0	4200	38.98
	1180	326TC	810005	7243	C	700	230/460	82.0	3600	41.91
40	1775	324TC	810019	5230	C	620	230/460	100.0	3600	40.41
	1185	364TC	810096	8736	C	975	230/460	104.0	2700	42.78
50	1780	326TC	810023	6170	C	640	230/460	120.0	3600	41.91
	1185	365TC	810097	10473	C	1029	230/460	180.0	2700	43.78
60	1780	364TC	810027	7941	C	975	230/460	147.0	2700	42.78
	1185	404TC	810098	11618	C	1322	230/460	142.0	2700	46.72
75	1780	365TC	810031	9521	C	1050	230/460	180.0	2700	43.78
	1185	405TC	810099	14156	C	1350	230/460	180.0	2700	49.28
100	1780	405TC	810087	11601	C	1400	230/460	230.0	2700	49.28
	1185	444TC	811367	16095	C	2050	230/460	250.0	2700	52.72
125	1780	444T	811369	14631	C	2000	460	138.0	2700	52.72
150	1780	445T	811371	16573	C	2321	460	170.0	2700	54.72
200	1785	445T	810503	19520	C	2450	460	230.0	2700	54.72
250	1780	449T	811516	26032	C	3210	460	295.0	2700	63.21
300	1785	449T	811529	32999	C	3410	460	330.0	2700	63.21
350	1785	449T	811530	40252	C	3520	460	385.0	2700	63.21

● These motors are Totally Enclosed, Non-Ventilated (TENV)—Others are Totally Enclosed Blower-Cooled (TEBC).

† Contact LEESON for applications requiring higher speeds.

ENCODER KITS* FOR SPEEDMASTER® 2000:1 MOTORS

Description	Enclosure	Frame	Brand/Model	PPR	Catalog Number	List Price	Disc. Sym.
Encoders							
Modular Mount, 5-15 VDC, with EPIC connector	TENV	143-256T	Northstar SL56	1024	E175927	\$1599	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	Dynapar HS35	1024	E175928	1027	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	BEI HS35	1024	E175929	1027	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	Dynapar HS35	2048	E175930	1027	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	BEI HS35	2048	E175931	1027	C
Modular Mount, 5-15 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Northstar SL56	1024	E175921	1599	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Dynapar HS35	1024	E175922	1027	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	BEI HS35	1024	E175923	1027	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Dynapar HS35	2048	E175924	1027	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	BEI HS35	2048	E175925	1027	C
Conduit Box Required for all 215-449T Frame Units	—	—	—	—	ECB175926	114	C

* Shipped separately for field installation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION