

**SPEEDMASTER®
INVERTER-DUTY/
VECTOR DUTY MOTORS**

2000:1 CONSTANT TORQUE



Features:

- Class H inverter-rated IRIS™ insulation system
- Constant torque operation from 0 to base RPM rating on Vector Drives
- Constant HP operation to twice base RPM rating for 143T-256T frame, 1.5 x base RPM for all other sizes
- Designed for optimum performance with IGBT inverters – not for across-the-line starting
- C-face with rigid base through 100HP
- Normally closed thermostats (one per phase)
- Continuous duty at 40° C ambient
- 1.0 Service Factor (Class “B” rise on TEBC motors)
- Premium quality, cast iron frame and endbells
- 284T and larger are blower-cooled with a separately powered three-phase blower motor to provide added cooling at low speeds
- Ball bearings (Roller bearings available 360-frame and larger)
- Field convertible to F2 mounting
- Encoder provisions included on opposite drive end (See Encoder Kits this page)
- UL Recognized and CSA Certified
- Three-year warranty
- Meets NEMA MG1, parts 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●	\$1177	C	61	230/460	3.0	5400	13.68
1½	1725	145TC	810547●	1296	C	68	230/460	4.6	5400	14.68
2	1750	145TC	810546●	1354	C	70	230/460	6.0	5400	14.68
3	1750	182TC	811320●	1617	C	110	230/460	8.0	5400	16.68
5	1750	184TC	811322●	1792	C	118	230/460	13.4	5400	17.69
7½	1760	213TC	810157●	2411	C	180	230/460	21.0	4200	20.56
10	1760	215TC	810140●	2848	C	290	230/460	26.0	4200	22.74
15	1765	254TC	810066●	3414	C	320	230/460	39.0	4200	25.12
	1170	284TC	810068	7212	C	440	230/460	40.0	3600	37.48
20	1765	256TC	810007●	4653	C	435	230/460	52.0	4200	27.13
	1170	286TC	810001	8641	C	450	230/460	52.4	3600	37.48
25	1770	284TC	810011	5799	C	438	230/460	65.0	3600	37.48
	1180	324TC	810003	10165	C	620	230/460	67.0	3600	40.41
30	1780	286TC	810015	6386	C	520	230/460	74.0	4200	38.98
	1180	326TC	810005	11186	C	700	230/460	82.0	3600	41.91
40	1775	324TC	810019	8077	C	620	230/460	100.0	3600	40.41
	1185	364TC	810096	13489	C	975	230/460	104.0	2700	42.78
50	1780	326TC	810023	9528	C	640	230/460	120.0	3600	41.91
	1185	365TC	810097	16171	C	1029	230/460	180.0	2700	43.78
60	1780	364TC	810027	12262	C	975	230/460	147.0	2700	42.78
	1185	404TC	810098	17941	C	1322	230/460	142.0	2700	46.72
75	1780	365TC	810031	14703	C	1050	230/460	180.0	2700	43.78
	1185	405TC	810099	21859	C	1350	230/460	180.0	2700	49.28
100	1780	405TC	810087	17914	C	1400	230/460	230.0	2700	49.28
	1185	444TC	811367+	24852	C	2050	230/460	250.0	2700	52.72
125	1780	444T	811369+	22591	C	2000	460	138.0①	2700	52.72
150	1780	445T	811371+	25631	C	2321	460	170.0①	2700	54.72
200	1785	445T	810503+	30340	C	2450	460	230.0①	2700	54.72
250	1780	449T	811516+	40196	C	3210	460	295.0①	2700	63.21
300	1785	449T	811529+	50953	C	3410	460	330.0①	2700	63.21
350	1785	449T	811530+	62152	C	3520	460	385.0①	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.
- + Contact LEESON for production leadtime on these items.
- ① Amps at 460 volts

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	\$2610	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	Dynapar HS35	1024	E175928	1676	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	BEI HS35	1024	E175929	1676	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	Dynapar HS35	2048	E175930	1676	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	BEI HS35	2048	E175931	1676	C
Modular Mount, 5-15 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Northstar SL56	1024	E175921	2610	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Dynapar HS35	1024	E175922	1676	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	BEI HS35	1024	E175923	1676	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Dynapar HS35	2048	E175924	1676	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	BEI HS35	2048	E175925	1676	C
Conduit Box Required for all TEBC Units	—	—	—	—	ECB175926	186	C

* Shipped separately for field installation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION