

**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	Disc. Sym.	App. Wgt. (lbs.)	Voltage	F.L. Amps 230V	RPM Max.†	“C” Dim. (Inches)
1	1725	143TC	810548●	C	61	230/460	3.0	5400	13.68
1½	1725	145TC	810547●	C	68	230/460	4.6	5400	14.68
2	1750	145TC	810546●	C	70	230/460	6.0	5400	14.68
3	1750	182TC	811320●	C	110	230/460	8.0	5400	16.68
5	1750	184TC	811322●	C	118	230/460	13.4	5400	17.69
7½	1760	213TC	810157●	C	180	230/460	21.0	4200	20.56
10	1760	215TC	810140●	C	290	230/460	26.0	4200	22.74
15	1765	254TC	810066●	C	320	230/460	39.0	4200	25.12
	1170	284TC	810068	C	440	230/460	40.0	3600	37.48
20	1765	256TC	810007●	C	435	230/460	52.0	4200	27.13
	1170	286TC	810001	C	450	230/460	52.4	3600	37.48
25	1770	284TC	810011	C	438	230/460	65.0	3600	37.48
	1180	324TC	810003	C	620	230/460	67.0	3600	40.41
30	1780	286TC	810015	C	520	230/460	74.0	4200	38.98
	1180	326TC	810005	C	700	230/460	82.0	3600	41.91
40	1775	324TC	810019	C	620	230/460	100.0	3600	40.41
	1185	364TC	810096	C	975	230/460	104.0	2700	42.78
50	1780	326TC	810023	C	640	230/460	120.0	3600	41.91
	1185	365TC	810097	C	1029	230/460	180.0	2700	43.78
60	1780	364TC	810027	C	975	230/460	147.0	2700	42.78
	1185	404TC	810098	C	1322	230/460	142.0	2700	46.72
75	1780	365TC	810031	C	1050	230/460	180.0	2700	43.78
	1185	405TC	810099	C	1350	230/460	180.0	2700	49.28
100	1780	405TC	810087	C	1400	230/460	230.0	2700	49.28
	1185	444TC	811367+	C	2050	230/460	250.0	2700	52.72
125	1780	444T	811369+	C	2000	460	138.0①	2700	52.72
150	1780	445T	811371+	C	2321	460	170.0①	2700	54.72
200	1785	445T	810503+	C	2450	460	230.0①	2700	54.72
250	1780	449T	811516+	C	3210	460	295.0①	2700	63.21
300	1785	449T	811529+	C	3410	460	330.0①	2700	63.21
350	1785	449T	811530+	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	Disc. Sym.
Encoders						
Modular Mount, 5-15 VDC, with EPIC connector	TENV	143-256T	Northstar SL56	1024	E175927	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	Dynapar HS35	1024	E175928	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	BEI HS35	1024	E175929	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	Dynapar HS35	2048	E175930	C
Shaft Mount, 5-26 VDC, with 10 pin connector	TENV	143-256T	BEI HS35	2048	E175931	C
Modular Mount, 5-15 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Northstar SL56	1024	E175921	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Dynapar HS35	1024	E175922	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	BEI HS35	1024	E175923	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	Dynapar HS35	2048	E175924	C
Shaft Mount, 5-26 VDC (Encoder Conduit Box Required)	TEBC	284-449T	BEI HS35	2048	E175925	C
Conduit Box Required for all TEBC Units	—	—	—	—	ECB175926	C

* Shipped separately for field installation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

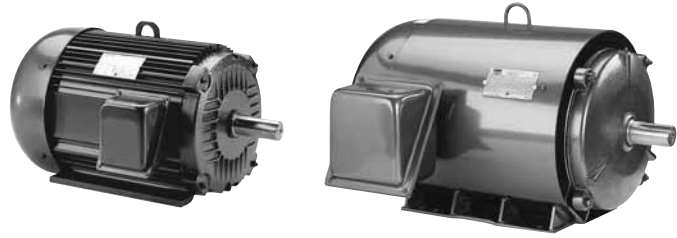


TEFC 15 TO 60 HZ CONSTANT TORQUE INVERTER DUTY

230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1/3 TO 400 HP

Features:

- 4:1 Constant torque speed range at continuous duty of 15-60 Hz.
- Variable torque speed range with open loop drive of 0-60 Hz.
- Constant horsepower speed range of 2x base speed (56-256T frames) or 1.5x base speed* (284T-449T frames).
- Wider speed ranges possible on intermittent duty
- Ultimate Spike Defense™ Insulation System
- 1.00 service factor on PWM waveform, 1.15 service factor or better on sine-wave power.
- Precision dynamic balanced rotor assembly
- Thermal overload protection (Class F thermostats)
- Warranty: 42 months from date of manufacture and 36 months from date of installation which ever period expires first.
- Made in the U.S.A.



Applications:

For use in constant torque (conveyors, machine tools) or variable torque (pumps, fans) variable speed applications within the stated speed range of the motor.

In a very small percentage of installations, bearing currents can develop in motors operated by PWM-based adjustable-speed drives. Contact your local sales office to review ways of eliminating bearing currents.

* Actual speed not to exceed "RPM MAX" listed for specific motor.

FOOT MOUNT

HP	SYN RPM @ 60 Hz	RPM Max	Frame	FL Nom Eff (%)	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
1/3	1800	4000	56	72.0	230/460	SRF4S0.33T61Q40	LM22644		28	LS-1
1/2	3600	4000	56	70.0	230/460	SRF2S0.5T61Q40	LM22646		28	LS-1
	1800	4000	56	74.0	230/460	SRF4S0.5T61Q40	LM22648		28	LS-1
	1200	4000	56	70.0	230/460	SRF6S0.5T61Q40	LM22650		28	LS-1
3/4	3600	4000	56	74.0	230/460	SRF2S0.75T61Q40	LM22652		28	LS-1
	1800	4000	56	77.0	230/460	SRF4S0.75T61Q40	LM22654		28	LS-1
	1200	4000	56	72.0	230/460	SRF6S0.75T61Q40	LM22656		36	LS-1
1	3600	4000	56	75.5	230/460	SRF2S1T61Q40	LM22658		28	LS-1
	1800	4000	56	78.5	230/460	SRF4S1T61Q40	LM22660		28	LS-1
	1800	4000	143T	82.5	230/460	SSF4P1T61Q40	LM26097		46	LS-1
	1200	4000	145T	80.0	230/460	SSF6P1T61Q40	LM26383		51	LS-1
1 1/2	3600	4000	56	78.5	230/460	SRF2S1.5T61Q40	LM22662		28	LS-1
	3600	4000	143T	82.5	230/460	SSF2P1.5T61Q40	TBD		46	LS-1
	1800	4000	56H	80.0	230/460	SRF4S1.5T61Q40	LM22664		28	LS-1
	1800	4000	145T	84.0	230/460	SSF4P1.5T61Q40	LM26098		51	LS-1
	1200	4000	182T	85.5	230/460	AAF6P1.5T61Q40	LM21188		83	LS-1
2	3600	4000	56H	78.5	230/460	SRF2S2T61Q40	LM22666		36	LS-1
	3600	4000	145T	84.0	230/460	SSF2P2T61Q40	TBD		51	LS-1
	1800	4000	145T	84.0	230/460	SSF4P2T61Q40	LM25991		51	LS-1
	1200	4000	184T	86.5	230/460	AAF6P2T61Q40	LM21191		92	LS-1
3	3600	4000	182T	85.5	230/460	AAF2P3T61Q40	LM21189		83	LS-1
	1800	4000	182T	87.5	230/460	AAF4P3T61Q40	LM21190		83	LS-1
	1200	4000	213T	87.5	230/460	AF6P3T61Q40	LM21194		127	LS-1
5	3600	4000	184T	87.5	230/460	AAF2P5T61Q40	LM21192		92	LS-1
	1800	4000	184T	87.5	230/460	AAF4P5T61Q40	LM21193		92	LS-1
	1200	4000	215T	87.5	230/460	AAF6P5T61Q40	LM21197		138	LS-1

Prices and data subject to change without notice.

Product numbers in red are STOCK items.

TEFC 15 TO 60 HZ CONSTANT TORQUE INVERTER DUTY



**230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1/3 TO 400 HP**

FOOT MOUNT (cont'd)

HP	SYN RPM @ 60 Hz	RPM Max	Frame	FL Nom Eff (%)	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
7 1/2	3600	4600	G213T	88.5	230/460	AF2P7.5T61Q40	LM21195		127	LS-1
	1800	4600	213T	89.5	230/460	AF4P7.5T61Q40	LM21196		127	LS-1
	1200	4400	254T	89.5	230/460	AAF6P7.5T61Q40	LM21200		209	LS-1
10	3600	4600	G215T	89.5	230/460	AF2P10T61Q40	LM21198		138	LS-1
	1800	4600	215T	89.5	230/460	AF4P10T61Q40	LM21199		138	LS-1
	1200	4400	256T	89.5	230/460	AAF6P10T61Q40	LM21203		236	LS-1
15	3600	4400	G254T	90.2	230/460	AAF2P15T61Q40	LM21201		209	LS-1
	1800	4400	254T	91.0	230/460	AF4P15T61Q40	LM21202		209	LS-1
	1200	4200	284T	90.2	230/460	AF6P15T61YQ40	LM21206		363	LS-1
20	3600	4400	256T	90.2	230/460	AF2P20T61Q40	LM21204		236	LS-1
	1800	4400	256T	91.0	230/460	AF4P20T61Q40	LM21205		236	LS-1
	1200	4200	286T	90.2	230/460	AF6P20T61YQ40	LM21209		408	LS-1
25	3600	4200	284TS	91.0	230/460	AF2P25TS61YQ40	LM21207		363	LS-1
	1800	4200	284T	92.4	230/460	AF4P25T61YQ40	LM21208		363	LS-1
	1200	4000	324T	91.7	230/460	SF6P25T61YQ40	LM21212		504	LS-1
30	3600	4200	286TS	91.0	230/460	AF2P30TS61YQ40	LM21210		408	LS-1
	1800	4200	286T	92.4	230/460	AF4P30T61YQ40	LM21211		408	LS-1
	1200	4000	326T	91.7	230/460	SF6P30T61YQ40	LM21215		570	LS-1
40	3600	4000	324TS	91.7	230/460	SF2P40TS61YQ40	LM21213		504	LS-1
	1800	4000	324T	93.0	230/460	SF4P40T61YQ40	LM21214		504	LS-1
	1200	3800	364T	93.0	230/460	SF6P40T61YQ40	LM21218		765	LS-1
50	3600	4000	326TS	92.4	230/460	SF2P50TS61YQ40	LM21216		558	LS-1
	1800	4000	326T	93.0	230/460	SF4P50T61YQ40	LM21217		558	LS-1
	1200	3800	365T	93.0	230/460	SF6P50T61YQ40	LM21221		822	LS-1
60	3600	3800	364TS	93.0	230/460	SF2P60TS61YQ40	LM21219		765	LS-1
	1800	3800	364T	93.6	230/460	SF4P60T61YQ40	LM21220		765	LS-1
	1200	3600	404T	93.6	230/460	SF6P60T61YQ40	LM21224		918	LS-1
75	3600	3800	365TS	93.0	230/460	SF2P75TS61YQ40	LM21222		822	LS-1
	1800	3800	365T	94.1	230/460	SF4P75T61YQ40	LM21223		822	LS-1
	1200	3600	405T	93.6	230/460	SF6P75T61YQ40	LM21225		1002	LS-1
100	3600	3600	405TS	93.6	230/460	SF2P100TS61YQ40	LM21226		1002	LS-1
	1800	3600	405T	94.5	230/460	SF4P100T61YQ40	LM21227		1002	LS-1
	1200	3000	444T	94.1	460	SF6P100T64YQ40	LM21228		1351	LS-1
125	3600	3600	444TS	94.5	460	SF2P125TS64YQ40	LM21229		1351	LS-1
	1800	3000	444T	94.5	460	SF4P125T64YQ40	LM21230		1351	LS-1
	1200	3000	445T	94.1	460	SF6P125T64YQ40	LM21231		1504	LS-1
150	3600	3600	445TS	94.5	460	SF2P150TS64YQ40	LM21232		1504	LS-1
	1800	3000	445T	95.0	460	SF4P150T64YQ40	LM21233		1504	LS-1
	1200	3000	445T	95.0	460	SF6P150T64YQ40	LM21234		1504	LS-1
200	3600	3600	445TS	95.0	460	SF2P200TS64YQ40	LM21235		1504	LS-1
	1800	3000	445T	95.0	460	SF4P200T64YQ40	LM21236		1504	LS-1
	1200	3000	447T	95.0	460	SF6P200T64YQ40	LM21237		1812	LS-1
250	3600	3600	449TS	95.4	460	SF2P250TS64YQ40	LM21240		2185	LS-1
	1800	2800	447T	95.0	460	SF4P250T64YQ40	LM21238		1812	LS-1

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TEFC 15 TO 60 HZ CONSTANT TORQUE INVERTER DUTY

230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1/3 TO 400 HP

FOOT MOUNT (cont'd)

HP	SYN RPM @ 60 Hz	RPM Max	Frame	FL Nom Eff (%)	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
300	3600	3600	449TS	95.4	460	SF2P300TS64YQ40	LM21242		2185	LS-1
	1800	2800	449T	95.4	460	SF4P300T64YQ40	LM21239		2185	LS-1
350	3600	3600	449TS	95.8	460	SF2B350TS64YQ40	LM21243		2185	LS-1
	1800	2800	449T	95.4	460	SF4P350T64YQ40	LM21244		2185	LS-1
400	1800	2800	449T	96.2	460	SF4B400T64YQ40	TBD		TBD	TBD

C-FACE WITH FEET

HP	SYN RPM @ 60 Hz	RPM Max	Frame	FL Nom Eff (%)	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
1/3	1800	4000	56C	72.0	230/460	SRF4S0.33TC61Q40	LM22645		33	LS-1
1/2	3600	4000	56C	70.0	230/460	SRF2S0.5TC61Q40	LM22647		33	LS-1
	1800	4000	56C	74.0	230/460	SRF4S0.5TC61Q40	LM22649		33	LS-1
	1200	4000	56C	70.0	230/460	SRF6S0.5TC61Q40	LM22651		33	LS-1
3/4	3600	4000	56C	74.0	230/460	SRF2S0.75TC61Q40	LM22653		33	LS-1
	1800	4000	56C	77.0	230/460	SRF4S0.75TC61Q40	LM22655		33	LS-1
	1200	4000	56C	72.0	230/460	SRF6S0.75TC61Q40	LM22657		28	LS-1
1	3600	4000	56C	75.5	230/460	SRF2S1TC61Q40	LM22659		33	LS-1
	1800	4000	56C	78.5	230/460	SRF4S1TC61Q40	LM22661		28	LS-1
	1800	4000	143TC	82.5	230/460	SSF4P1TC61Q40	LM26081		52	LS-1
	1200	4000	145TC	80.0	230/460	SSF6P1TC61Q40	LM26323		57	LS-1
1 1/2	3600	4000	56C	78.5	230/460	SRF2S1.5TC61Q40	LM22663		28	LS-1
	3600	4000	143TC	82.5	230/460	SSF2P1.5TC61Q40	TBD		52	LS-1
	1800	4000	56HC	80.0	230/460	SRF4S1.5TC61Q40	LM22665		36	LS-1
	1800	4000	145TC	84.0	230/460	SSF4P1.5TC61Q40	LM26008		57	LS-1
	1200	4000	182TC	85.5	230/460	AAF6P1.5TC61Q40	LM22822		95	LS-1
2	3600	4000	56HC	78.5	230/460	SRF2S2TC61Q40	LM22667		36	LS-1
	3600	4000	145TC	84.0	230/460	SSF2P2TC61Q40	TBD		57	LS-1
	1800	4000	145TC	84.0	230/460	SSF4P2TC61Q40	LM25962		57	LS-1
	1200	4000	184TC	86.5	230/460	AAF6P2TC61Q40	LM22825		104	LS-1
3	3600	4000	182TC	85.5	230/460	AAF2P3TC61Q40	LM22826		95	LS-1
	1800	4000	182TC	87.5	230/460	AAF4P3TC61Q40	LM22827		95	LS-1
	1200	4600	213TC	87.5	230/460	AF6P3TC61Q40	LM22828		138	LS-1
5	3600	4000	184TC	87.5	230/460	AAF2P5TC61Q40	LM22829		104	LS-1
	1800	4000	184TC	87.5	230/460	AAF4P5TC61Q40	LM22830		104	LS-1
	1200	4600	215TC	87.5	230/460	AF6P5TC61Q40	LM31434		149	LS-1
7 1/2	3600	4600	G213TC	88.5	230/460	AF2P7.5TC61Q40	LM22832		138	LS-1
	1800	4600	213TC	89.5	230/460	AAF4P7.5TC61Q40	LM22833		138	LS-1
	1200	4400	254TC	89.5	230/460	AF6P7.5TC61Q40	LM22834		221	LS-1
10	3600	4600	G215TC	89.5	230/460	AF2P10TC61Q40	LM22835		149	LS-1
	1800	4600	215TC	89.5	230/460	AF4P10TC61Q40	LM22836		149	LS-1
	1200	4400	256TC	89.5	230/460	AF6P10TC61Q40	LM22837		248	LS-1
15	3600	4400	G254TC	90.2	230/460	AF2P15TC61Q40	LM22838		221	LS-1
	1800	4400	254TC	91.0	230/460	AF4P15TC61Q40	LM22839		221	LS-1
20	3600	4400	256TC	90.2	230/460	AF2P20TC61Q40	LM22840		248	LS-1
	1800	4400	256TC	91.0	230/460	AF4P20TC61Q40	LM22841		248	LS-1

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ODP • 30 TO 60 HZ CONSTANT TORQUE INVERTER DUTY



230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1/3 TO 400 HP

Features:

- 10:1 Constant torque speed range at continuous duty of 6-60 Hz.
- Variable torque speed range with open loop drive of 0-60 Hz.
- Constant horsepower speed range of 2x base speed (56-256T frames) or 1.5x base speed* (284T-449T frames).
- Ultimate Spike Defense™ Insulation System
- 1.00 service factor on PWM waveform, 1.15 service factor or better on sine-wave power.
- Precision dynamic balanced rotor assembly
- Thermal overload protection (Class F thermostats)
- Warranty: 42 months from date of manufacture and 36 months from date of installation which ever period expires first.
- Made in the U.S.A.



Applications:

For use in constant torque (conveyors, machine tools) or variable torque (pumps, fans) variable speed applications within the stated speed range of the motor.

* Actual speed not to exceed "RPM MAX" listed for specific motor.

FOOT MOUNT

HP	SYN RPM @ 60 Hz	RPM Max	Frame	FL Nom Eff (%)	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
1	1800	5000	143T	82.5	230/460	SSD4P1T61Q40	LM21148	D	55	LS-1
1 1/2	1800	5000	145T	84.0	230/460	SSD4P1.5T61Q40	LM21151	D	68	LS-1
2	1800	5000	145T	84.0	230/460	SSD4P2T61Q40	LM21153	D	68	LS-1
3	1800	4800	182T	86.5	230/460	SSD4P3T61Q40	LM21157	D	82	LS-1
5	1800	4800	184T	87.5	230/460	SSD4P5T61Q40	LM21159		71	LS-1
7 1/2	1800	4600	213T	88.5	230/460	SSD4P7.5T61Q40	LM21162	D	141	LS-1
10	1800	4600	215T	89.5	230/460	SSD4P10T61Q40	LM21165	D	168	LS-1
	1200	4400	256T	90.2	230/460	SSD6P10T61Q40	LM21170	D	255	LS-1
15	1800	4400	254T	91.0	230/460	SSD4P15T61Q40	LM21168	D	245	LS-1
20	1800	4400	256T	91.0	230/460	SSD4P20T61Q40	LM21171		255	LS-1
	1800	4000	284T	91.7	230/460	SD4P25T61YQ40	LM21174♣	D	N/A	LS-1
25	1800	4000	284T	91.7	230/460	CCD4P25T61YQ40	LM29579		350	LS-1
	1800	4000	286T	92.4	230/460	SD4P30T61YQ40	LM21177♣	D	N/A	LS-1
30	1800	4000	286T	92.4	230/460	CCD4P30T61YQ40	LM29936		400	LS-1
	1800	4000	324T	93.0	230/460	SD4P40T61YQ40	LM21180	D	469	LS-1
40	1800	4000	324T	93.0	230/460	SD4P40T61YQ40	LM21180	D	469	LS-1
50	1800	4000	326T	93.0	230/460	SD4P50T61YQ40	LM21118	D	522	LS-1
75	1800	3800	365T	94.1	230/460	SD4P75T61YQ40	LM21124		763	LS-1
100	1800	3600	404T	94.1	230/460	SD4P100T61YQ40	LM21127		882	LS-1
125	1800	3600	405T	94.5	230/460	SD4P125T61YQ40	LM30727		958	LS-1

Prices and data subject to change without notice.

♣ Contact your local sales office for availability.

Product numbers in red are STOCK items.

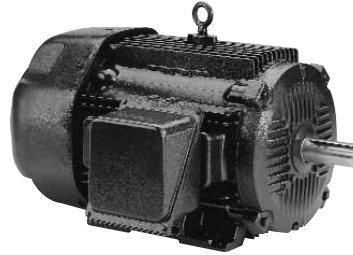


TEFC • CAST IRON SEVERE DUTY 15 TO 60 HZ CONSTANT TORQUE • INVERTER DUTY

230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1 TO 350 HP

Features:

- 10:1 Constant torque speed range of 6-60 Hz at continuous duty.
- Variable torque speed range of 0-60 Hz.
- Constant horsepower speed range of 2x base speed (56-256T frames) or 1.5x base speed* (284T-449T frames).
- Wider speed ranges possible on intermittent duty
- Severe Duty – full cast iron construction
- Ultimate Spike Defense™ Insulation System
- 1.00 service factor on PWM waveform, 1.15 service factor or better on sine-wave power.
- Precision dynamic balanced rotor assembly
- Thermal overload protection (Class F thermostats)
- Warranty: 42 months from date of manufacture and 36 months from date of installation which ever period expires first.
- Made in the U.S.A.



Applications:

For use in constant torque (conveyors, machine tools) or variable torque (pumps, fans) variable speed applications within the stated speed range of the motor.

Supporting Materials:

Dimensions: contact your local sales office
Performance: contact your local sales office

* Actual speed not to exceed "RPM MAX" listed for specific motor.

FOOT MOUNT

HP	SYN @ 60 Hz	Frame	FL Nom Eff (%)	SF	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
1	1800	143T	82.5	1.00	230/460	CS4P1T61Q40	LM21525	D	74	LS-1
	1200	145T	84.0	1.00	230/460	CS6B1T61Q40	LM21585	D	83	LS-1
1 1/2	1800	145T	84.0	1.00	230/460	CS4P1.5T61Q40	LM21528	D	83	LS-1
5	1800	184T	87.5	1.00	230/460	CCS4P5T61Q40	LM21537	D	133	LS-1
7 1/2	1800	213T	89.5	1.00	230/460	CCS4P7.5T61Q40	LM21540	D	188	LS-1
10	1800	215T	89.5	1.00	230/460	CCS4P10T61Q40	LM21543	D	205	LS-1
20	1800	256T	91.0	1.00	230/460	CCS4P20T61Q40	LM21549	D	378	LS-1
25	1800	284T	92.4	1.00	230/460	CCS4P25T61YQ40	LM21552	D	531	LS-1
30	3600	286TS	93.0	1.00	230/460	CCS2B30TS61YQ40	LM21613	D	571	LS-1
	1800	286T	92.4	1.00	230/460	CCS4P30T61YQ40	LM21555	D	571	LS-1
300	3600	449TS	95.4	1.00	460	CCS2P300TS64YQ40	LM21582		2883	LS-1
	1800	447T	96.2	1.00	460	CCS4B300T64YQ40	LM21643	D	2572	LS-

C-FACE

HP	SYN @ 60 Hz	Frame	FL Nom Eff (%)	SF	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
3	1800	182T	87.5	1.00	230/460	CCS4P3TC61Q40	LM22854		152	LS-1

Prices and data subject to change without notice.

Product numbers in red are STOCK items.

TOTALLY ENCLOSED • 0 TO 60 HZ CONSTANT TORQUE INVERTER DUTY CTAC®



230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1/3 TO 200 HP

Features:

- 2000:1 constant torque speed range of 0-60 Hz at continuous duty (range on RF models is 6-60Hz).
- Variable torque speed range of 0-60 Hz.
- Constant horsepower speed range of 2x base speed (56-256T frames) or 1.5x base speed* (284T-445T frames).
- Wider speed ranges possible on intermittent duty
- Ultimate Spike Defense™ Insulation System
- Ideally suited for IGBT power
- 1.00 SF, 40°C ambient on PWM waveform
- C-Face standard on frames 56-256T
- Precision dynamic balanced rotor assembly
- Over temperature protection (Class F thermostat)
- Provision for mounting feedback device - Q10 models
- TEBC - 3 phase blower motor standard
- Warranty on CTAC motor, 42 months from date of manufacture and 36 months from date of installation which ever period expires first.
- Warranty on TEBC blower motor 30 months from date of manufacture and 24 months from date of installation which ever period expires first.
- Made In U.S.A.



Applications:

Suitable for use in extruders, conveyors, machine tools and other process industries with constant torque, variable speed loads.

In a very small percentage of installations, bearing currents can develop in motors operated by PWM-based adjustable-speed drives. Contact your local sales office to review ways of eliminating bearing currents.

* Actual speed not to exceed "RPM MAX" listed for specific motor.

C-FACE WITH FEET (56-256T)

HP	SYN RPM @ 60 Hz	RPM Max	Frame	Enclosure	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
1/3	1800	4000	56C	TEFC	230/460	SRF4S0.33TC61Q20	LM10336		26	LS-1
1/2	1800	4000	56C	TEFC	230/460	SRF4S0.5TC61Q20	LM10337		28	LS-1
	1200	4000	56HC	TEFC	230/460	SRF6S0.5TC61Q20	LM10338		41	LS-1
3/4	1800	4000	56HC	TEFC	230/460	SRF4S0.75TC61Q20	LM10339		36	LS-1
1	1800	4000	56HC	TEFC	230/460	SRF4S1TC61Q20	LM10340		41	LS-1
	1800	5000	145TC	TENV	230/460	SSN4S1TC61Q10	LM26359		62	LS-1
	1200	4800	182TC	TENV	230/460	AAN6S1TC61Q10	LM06103		78	LS-1
1 1/2	900	4800	184TC	TENV	230/460	AAN8S1TC61Q10	LM06105		90	LS-1
	1800	5000	145TC	TENV	230/460	SSN4S1.5TC61Q10	LM26233		65	LS-1
	1200	4800	184TC	TENV	230/460	AAN6S1.5TC61Q10	LM06109		90	LS-1
2	900	4600	213TC	TENV	230/460	AN8S1.5TC61Q10	LM06111		121	LS-1
	1800	4800	182TC	TENV	230/460	AAN4S2TC61Q10	LM06113		74	LS-1
	1200	4600	213TC	TENV	230/460	AN6S2TC61Q10	LM06115		121	LS-1
	900	4600	215TC	TENV	230/460	AN8S2TC61Q10	LM06117		121	LS-1

Prices and data subject to change without notice.

Product numbers in red are STOCK items.



TOTALLY ENCLOSED • 0 TO 60 HZ CONSTANT TORQUE INVERTER DUTY CTAC®

230/460 & 460 VOLTS • 3-PHASE
FOOT MOUNT & C-FACE
1/3 TO 200 HP

C-FACE WITH FEET (56-256T) & FOOT MOUNT (284T-445T)

HP	SYN RPM @ 60 Hz	RPM Max	Frame	Enclosure	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
3	1800	4800	184TC	TENV	230/460	AAN4S3TC61Q10	LM06119		86	LS-1
	1200	4600	215TC	TENV	230/460	AN6S3TC61Q10	LM06121		135	LS-1
	900	4400	254TC	TENV	230/460	AN8S3TC61Q10	LM06123		186	LS-1
5	1800	4600	213TC	TENV	230/460	AN4S5TC61Q10	LM06125		115	LS-1
	1200	4400	254TC	TENV	230/460	AN6S5TC61Q10	LM06127		200	LS-1
	900	4400	256TC	TENV	230/460	AN8S5TC61Q10	LM06129		219	LS-1
7 1/2	1800	4600	215TC	TENV	230/460	AN4S7.5TC61Q10	LM06131		115	LS-1
	1200	4400	256TC	TENV	230/460	AN6S7.5TC61Q10	LM06133		219	LS-1
10	1800	4400	256TC	TENV	230/460	AN4S10TC61Q10	LM06135		211	LS-1
15	1200	4200	284T	TEBC	230/460	SB6H15T61Q10	LM03140		350	LS-1
20	1200	4200	286T	TEBC	230/460	SB6H20T61Q10	LM03156		420	LS-1
25	1800	4200	284T	TEBC	230/460	SB4H25T61Q10	LM03188		350	LS-1
	1200	4000	324T	TEBC	230/460	SB6H25T61Q10	LM03204		490	LS-1
30	1800	4200	286T	TEBC	230/460	SB4H30T61Q10	LM03236		420	LS-1
	1200	4000	326T	TEBC	230/460	SB6H30T61Q10	LM03252		550	LS-1
40	1800	4000	324T	TEBC	230/460	SB4H40T61Q10	LM03284		420	LS-1
	1200	3800	364T	TEBC	230/460	SB6H40T61Q10	LM03300		670	LS-1
50	1800	4000	326T	TEBC	230/460	SB4H50T61Q10	LM03332		490	LS-1
	1200	3800	365T	TEBC	230/460	SB6H50T61Q10	LM03348		740	LS-1
60	1800	3800	364T	TEBC	230/460	SB4H60T61Q10	LM03376		670	LS-1
	1200	3600	404T	TEBC	230/460	SB6H60T61Q10	LM03396		880	LS-1
75	1800	3800	365T	TEBC	230/460	SB4H75T61Q10	LM03424		740	LS-1
	1200	3600	405T	TEBC	230/460	SB6H75T61Q10	LM03444		1000	LS-1
100	1800	3600	405T	TEBC	230/460	SB4H100T61Q10	LM03472		1000	LS-1
	1200	3000	444T	TEBC	460	SB6H100T64YQ10	LM03490		1290	LS-1
125	1800	3000	444T	TEBC	460	SB4H125T64YQ10	LM03516		1290	LS-1
	1200	3000	445T	TEBC	460	SB6H125T64YQ10	LM03536		1480	LS-1
150	1800	3000	445T	TEBC	460	SB4H150T64YQ10	LM03564		1480	LS-1
200	1800	3000	445T	TEBC	460	SB4H200T64YQ10	LM03596		1480	LS-1

Prices and data subject to change without notice.

Product numbers in red are STOCK items.

TOTALLY ENCLOSED • 0 TO 60 HZ CONSTANT TORQUE VECTOR DUTY CTAC®



FOOT MOUNT & C-FACE
1/3 TO 200 HP

Features:

- 2000:1 constant torque speed range of 0-60 Hz at continuous duty with closed-loop drive.
- Variable torque speed range of 0-60 Hz.
- Constant horsepower speed range of 2x base speed (56-256T frames) or 1.5x base speed* (284T-445T frames).
- Ultimate Spike Defense™ Insulation System
- Ideally suited for IGBT power
- 1.00 SF, 40°C ambient on PWM waveform
- C-Face standard on frames 56-256T
- Precision dynamic balanced rotor assembly
- Over temperature protection (Class F thermostat)
- 1024 ppr encoder with differential line driver
- Separate terminal box or conduit with terminal block for feedback termination
- TEBC – 3 phase blower motor standard
- Warranty: (CTAC motor) 42 months from date of manufacture and 36 months from date of installation which ever period expires first. Feedback device and blower motor (TEBC) 30 months from date of manufacture and 24 months from date of installation which ever period expires first.
- Made In U.S.A.



Applications:

For use in demanding industrial applications where premium construction and performance are required. Suitable for use in extruders, conveyors, machine tools and other process industries with constant torque, variable speed loads.

In a very small percentage of installations, bearing currents can develop in motors operated by PWM-based adjustable-speed drives. Contact your local sales office to review ways of eliminating bearing currents.

* Actual speed not to exceed "RPM MAX" listed for specific motor.

C-FACE WITH FEET (56-256T)

HP	SYN RPM @ 60 Hz	RPM Max	Frame	Enclosure	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
1/3	1800	5000	56C	TENV	230/460	SRN4S0.33TC61Q15	LM10346		43	LS-1
1/2	1800	5000	56C	TENV	230/460	SRN4S0.5TC61Q15	LM10347		43	LS-1
	1200	5000	56HC	TENV	230/460	SRN6S0.5TC61Q15	LM10348		43	LS-1
3/4	1800	5000	56HC	TENV	230/460	SRN4S0.75TC61Q15	LM10349		54	LS-1
1	1800	5000	56HC	TENV	230/460	SRN4S1TC61Q15	LM10350		54	LS-1
	1800	5000	145TC	TENV	230/460	SSN4S1TC61Q15	LM26109		82	LS-1
	1200	4800	182TC	TENV	230/460	AAN6S1TC61Q15	LM03973		98	LS-1
	900	4800	184TC	TENV	230/460	AAN8S1TC61Q15	LM03975		110	LS-1
1 1/2	1800	5000	145TC	TENV	230/460	SSN4S1.5TC61Q15	LM26278		85	LS-1
	1200	4800	184TC	TENV	230/460	AAN6S1.5TC61Q15	LM03981		110	LS-1
	900	4600	213TC	TENV	230/460	AN8S1.5TC61Q15	LM03983		141	LS-1
2	1800	4800	182TC	TENV	230/460	AAN4S2TC61Q15	LM03987		98	LS-1
	1200	4600	213TC	TENV	230/460	AN6S2TC61Q15	LM03989		141	LS-1
	900	4600	215TC	TENV	230/460	AAN8S2TC61Q15	LM03991		141	LS-1

Prices and data subject to change without notice.

Product numbers in red are STOCK items.



TOTALLY ENCLOSED • 0 TO 60 HZ CONSTANT TORQUE VECTOR DUTY CTAC®

FOOT MOUNT & C-FACE
1/3 TO 200 HP

C-FACE WITH FEET (56-256T) & FOOT MOUNT (284T-445T)

HP	SYN RPM @ 60 Hz	RPM Max	Frame	Enclosure	Volts	Model Number	Product Number	Notes (see page 306)	Approx Shpg Wght (lbs)	Mult Sym
3	1800	4800	184TC	TENV	230/460	AAN4S3TC61Q15	LM03995		110	LS-1
	1200	4600	215TC	TENV	230/460	AN6S3TC61Q15	LM03997		155	LS-1
	900	4400	254TC	TENV	230/460	AN8S3TC61Q15	LM03999		206	LS-1
5	1800	4600	213TC	TENV	230/460	AAN4S5TC61Q15	LM04003		115	LS-1
	1200	4400	254TC	TENV	230/460	AN6S5TC61Q15	LM04005		220	LS-1
	900	4400	256TC	TENV	230/460	AN8S5TC61Q15	LM04007		239	LS-1
7 1/2	1800	4600	215TC	TENV	230/460	AN4S7.5TC61Q15	LM31463		155	LS-1
	1200	4400	256TC	TENV	230/460	AN6S7.5TC61Q15	LM04013		239	LS-1
10	1800	4400	256TC	TENV	230/460	AN4S10TC61Q15	LM30572		235	LS-1
15	1200	4200	284T	TEBC	230/460	CCB6S15T61Q15	LM31961		490	LS-1
20	1200	4200	286T	TEBC	230/460	SB6H20T61Q15	LM03157		420	LS-1
25	1800	4200	284T	TEBC	230/460	SB4H25T61Q15	LM03189		350	LS-1
	1200	4000	324T	TEBC	230/460	SB6H25T61Q15	LM03205		490	LS-1
30	1800	4200	286T	TEBC	230/460	SB4H30T61Q15	LM03237		420	LS-1
	1200	4000	326T	TEBC	230/460	SB6H30T61Q15	LM03253		550	LS-1
40	1800	4000	324T	TEBC	230/460	SB4H40T61Q15	LM03285		550	LS-1
	1200	3800	364T	TEBC	230/460	SB6H40T61Q15	LM03301		670	LS-1
50	1800	4000	326T	TEBC	230/460	SB4H50T61Q15	LM03333		550	LS-1
	1200	3800	365T	TEBC	230/460	SB6H50T61Q15	LM03349		740	LS-1
60	1800	3800	364T	TEBC	230/460	SB4H60T61Q15	LM03377		690	LS-1
	1200	3600	404T	TEBC	230/460	SB6H60T61Q15	LM03397		1000	LS-1
75	1800	3800	365T	TEBC	230/460	SB4H75T61Q15	LM03425		740	LS-1
	1200	3600	405T	TEBC	230/460	SB6H75T61Q15	LM03445		1000	LS-1
100	1800	3600	405T	TEBC	230/460	SB4H100T61Q15	LM03473		1000	LS-1
	1200	3000	444T	TEBC	460	SB6H100T64YQ15	LM03491		1290	LS-1
125	1800	3000	444T	TEBC	460	SB4H125T64YQ15	LM03517		1290	LS-1
	1200	3000	445T	TEBC	460	SB6H125T64YQ15	LM03537		1480	LS-1
150	1800	3000	445T	TEBC	460	SB4H150T64YQ15	LM03565		1490	LS-1
200	1800	3000	445T	TEBC	460	SB4H200T64YQ15	LM03597		1500	LS-1

Prices and data subject to change without notice.

Product numbers in red are STOCK items.