

Inverter (Vector) Duty: Blue Max® 2000

2000:1 Constant Torque, Totally Enclosed, Three Phase

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 where cast iron construction is required.

Features:

- MAX GUARD® Class H insulation system
- Constant torque operation from 0 to base speed on vector drive, including TEFC (On Volts/Hertz drives, TEFC motors are limited to 20:1 constant torque)
- Constant HP operation to twice base speed (143-256 frame);
1.5 times base (all others)
- Optimized for operation with IGBT inverter
- C-Face foot mount through 100 HP, as noted
- Normally closed thermostats (one per phase, class F)
- Continuous duty at 40°C ambient
- 1.0 Service Factor ("B" rise on TEBC motors)
- Blue Chip quality, cast iron frame and brackets
- Patented "fracket" design (TEBC enclosure)
- Ball Bearings (roller bearing available 360 Frame & larger)
- Field reversible to F2
- Encoder provisions included on opposite drive end
(see Modification and/or Accessory Kits sections)
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty



Rigid Base and C-Face Footed (Rigid Base)

Suitable for use on VFD per guidelines on page 17.

HP	RPM	VOLTS	ENCL	FRAME	CAT. NO.	MODEL NO.	STOCK	LIST PRICE	MULT. SYMB.	F.L. AMPS	WEIGHT	"C" DIM.	FOOT NOTES
1	1800	230/460	TENV	143TC	Y525	143THTN8028	✓	\$1,003	E3	3.0/1.5	61	13.68	B
1 1/2	1800	230/460	TENV	145TC	Y590	145THTN8037	✓	\$1,008	E3	4.6/2.3	65	14.68	
2	1800	230/460	TENV	145TC	Y526	145THTN8029	✓	\$1,086	E3	6.0/3.0	71	14.68	
3	1800	230/460	TENV	182TC	Y527	182THTS8028	✓	\$1,364	E3	8.0/4.0	113	16.68	
5	1800	230/460	TENV	184TC	Y564	184THTS8028	✓	\$1,525	E3	13.4/6.7	147	17.68	
7 1/2	1800	230/460	TEFC	213TC	Y595	213THFS8028	✓	\$1,784	E3	19.4/9.7	192	21.03	
	1800	230/460	TENV	213TC	Y565	213THTS8038	✓	\$2,055	E3	21.0/10.5	85	20.56	
10	1800	230/460	TEFC	215TC	Y596	215THFS8029	✓	\$2,132	E3	25.4/12.7	212	22.53	
	1800	230/460	TENV	215TC	Y566	215THTS8038	✓	\$2,437	E3	26.0/13.0	272	22.74	
15	1800	230/460	TEFC	254TC	Y597	254THFNA8038	✓	\$2,568	E3	37.0/18.5	350	26.34	
	1800	230/460	TENV	254TC	Y509	254THTNA8058	✓	\$2,917	E3	40.4/20.2	334	23.38	
	1200	230/460	TEBC	284TC	Y395	284THFPA8086		\$5,723	E3	40.0/20.0	500	37.48	BP
20	1800	230/460	TEFC	256TC	Y598	256THFNA8038	✓	\$2,841	E3	52.0/26.0	377	28.09	
	1800	230/460	TENV	256TC	Y510	256THTNA8038	✓	\$4,038	E3	52.0/26.0	425	27.13	
	1200	230/460	TEBC	286TC	Y582	286THFPA8086		\$7,399	E3	52.4/26.2	660	38.98	BP
25	1800	230/460	TEFC	284T	Y569	284THFPA8028	✓	\$3,548	E3	63.0/31.5	393	28.58	
	1800	230/460	TEBC	284TC	Y511	284THFPA8038	✓	\$4,959	E3	63.0/31.5	470	37.48	BP
	1200	230/460	TEBC	324TC	Y583	324THFPA8086		\$8,703	E3	67.0/33.5	633	40.41	B,BP
30	1800	230/460	TEFC	286T	Y570	286THFNA8028	✓	\$4,056	E3	77.0/38.5	371	29.91	
	1800	230/460	TEBC	286TC	Y512	286THFPA8038	✓	\$5,467	E3	74.0/37.0	507	38.98	BP
	1200	230/460	TEBC	326TC	Y584	326THFPA8086		\$9,574	E3	80.4/40.2	550	41.91	B,BP
40	1800	230/460	TEFC	324T	Y571	324THFPA8028	✓	\$5,252	E3	100/50.0	545	30.71	
	1800	230/460	TEBC	324TC	Y513	324THFPA8038	✓	\$6,549	E3	100/50.0	531	40.41	BP
	1200	230/460	TEBC	364TC	Y585	364THFS8391		\$11,549	E3	107/53.5	1011	42.67	BP
50	1800	230/460	TEFC	326T	Y572	326THFS8028	✓	\$6,497	E3	121/60.5	765	32.44	
	1800	230/460	TEBC	326TC	Y514	326THFPA8038	✓	\$7,508	E3	120/60.0	686	41.91	BP
	1200	230/460	TEBC	365TC	Y586	365THFS8380		\$13,845	E3	130/65.0	1081	43.78	BP
60	1800	230/460	TEFC	364T	Y573	364THFS8036	✓	\$8,375	E3	147/73.5	987	33.70	
	1800	230/460	TEBC	364TC	Y515	364THFS8046	✓	\$9,191	E3	147/73.5	1062	42.67	BP
	1200	230/460	TEBC	404TC	Y587	404THFS8092		\$15,358	E3	142/71.0	1339	48.22	BP
75	1800	230/460	TEFC	365T	Y574	365THFS8036	✓	\$9,487	E3	184/92.0	1061	34.69	
	1800	230/460	TEBC	365TC	Y516	365THFS8046	✓	\$10,987	E3	180/90.0	1129	43.67	BP
	1200	230/460	TEBC	405TC	Y588	405THFS8378	✓	\$18,713	E3	180/90.0	1387	49.72	B,BP

Blue shaded areas are Cast Iron Frames

Continued on next page.

Inverter (Vector) Duty: Blue Max® 2000

2000:1 Constant Torque, Totally Enclosed, Three Phase

Rigid Base and C-Face Footed (Rigid Base)

HP	RPM	VOLTS	ENCL	FRAME	CAT. NO.	MODEL NO.	STOCK	LIST PRICE	MULT. SYMB.	F.L. AMPS	WEIGHT	"C" DIM.	FOOT NOTES
100	1800	230/460	TEFC	405T	Y575	405THFS8036	✓	\$12,838	E3	230/115	1308	39.32	
	1800	230/460	TEBC	405TC	Y517	405THFS8046	✓	\$15,337	E3	230/115	1529	49.72	BP
	1200	230/460	TEBC	444TC	Y589	444THFN8384	✓	\$21,478	E3	250/125	2117	52.72	BP
125	1800	460	TEFC	444T	Y576	444THFN8036	✓	\$16,896	E3	143	2053	43.27	
	1800	460	TEBC	444T	Y518	444THFN8046	✓	\$19,545	E3	138	2010	52.72	B,BP
150	1800	460	TEFC	445T	Y577	445THFN8036	✓	\$19,507	E3	170	2247	45.27	
	1800	460	TEBC	445T	Y519	445THFN8046	✓	\$22,155	E3	170	2310	54.72	BP
200	1800	460	TEFC	445T	Y578	445THFN8040	✓	\$23,547	E3	230	2388	45.27	
	1800	460	TEBC	445T	Y520	445THFN8050	✓	\$26,195	E3	230	2430	54.72	BP
250	1800	460	TEFC	449T	Y579	449THFS8036	✓	\$29,330	E3	280	2900	53.89	CT
	1800	460	TEBC	449T	Y531	449THFS8046	✓	\$32,811	E3	295	2991	63.21	BP
300	1800	460	TEFC	449T	Y580	449THFS8037	✓	\$33,396	E3	330	3077	53.89	CT
	1800	460	TEBC	449T	Y532	449THFS8047	✓	\$36,876	E3	327	2950	63.21	BP
350	1800	460	TEBC	449T	Y533	449THFS8048	✓	\$40,358	E3	385	3099	63.21	BP

Inverter (Vector) Duty: Blue Max® 2000 Hazardous Duty™

(with Encoder) 2000:1 Constant Torque,

Explosion Proof, Three Phase

Class I and II (gases and dust), Groups C (as noted), D, F & G, TENV

Applications:

Designed for industrial applications with Vector Drives where up to a 2000:1 constant torque speed range and/or precise speed or torque regulation is required, including positioning equipment. Used in dirty, dusty or caustic environments where cast iron construction is required, and installed in hazardous environments as defined by the motor's explosion proof class and group rating. Consult the National Electrical Code and your local regulations for the proper selection of motors in hazardous locations.

Features:

- BEI H38 explosion proof encoder 1024 ppr, Class I Groups C & D, Class II Groups E, F, G included
- MAX GUARD® Class F insulation system
- Constant torque operation from 0 to base speed on vector drive
- Constant HP operation up to twice base speed
- Continuous duty at 40°C ambient
- Optimized for operation with IGBT inverter (NEMA Design A)
- Normally closed thermostats (one per phase, Class F)
- Ball Bearings
- Cast iron frame and brackets
- F1 standard, NOT field reversible to F2
- UL Listed File No. E12044, MC228275
- CSA Certified File No. LR47504, MC236833
- Meets temperature code T3B
- Three year warranty



C-Face Footed (Rigid Base)

Suitable for use on VFD per guidelines on page 17.

HP	RPM	VOLTS	ENCL	FRAME	CAT. NO.	MODEL NO.	STOCK	LIST PRICE	MULT. SYMB.	F.L. AMPS	WEIGHT	"C" DIM.	FOOT NOTES
1	1800	230/460	143TC	TSTAT	Y978	143THEN8034	✓	\$5,810	E3	3.0/1.5	86	21.44	CD
2	1800	230/460	145TC	TSTAT	Y979	145THEN8034	✓	\$5,932	E3	5.8/2.9	90	21.44	CD
3	1800	230/460	182TC	TSTAT	Y980	182THES8048	✓	\$6,123	E3	8.2/4.1	117	24.82	CD
5	1800	230/460	213TC	TSTAT	Y981	213THES8053	✓	\$6,442	E3	13.0/6.5	240	27.42	
7 1/2	1800	230/460	254TC	TSTAT	Y982	254THEN8058	✓	\$7,326	E3	22/11	344	30.20	CD
10	1800	230/460	254TC	TSTAT	Y983	254THEN8059	✓	\$7,675	E3	27.0/13.5	376	30.20	CD
15	1800	230/460	256TC	TSTAT	Y984	256THEN17031	✓	\$8,024	E3	36.0/18.0	432	31.95	CD
20	1800	230/460	284TC	TSTAT	Y985	284THEN8032	✓	\$8,857	E3	53/26.5	555	33.16	CD

Blue shaded areas are Cast Iron Frames

Inverter (Vector) Duty: Blue Max® 2000 Brakemotors

2000:1 Constant Torque, TENV, Three Phase

Applications:

Designed for vector applications where up to a 2000:1 constant torque speed range is required. For use on Conveyors, Machine tools, Cranes, Hoists, and other industrial machinery requiring quick stop and/or holding torque.

Features:

- MAX GUARD® Class F insulation system
- Constant torque operation from 0 to base speed on vector drive
- Constant HP operation to twice base speed
- Optimized for operation with IGBT inverter (NEMA Design A)
- Normally closed thermostats (one per phase, Class F)
- Ball Bearings
- Continuous duty at 40°C ambient
- Will accept encoder through Mod Central (see mod 24 for encoder mounting)
- Stearns brakes, 56 series through 15 Lb-Ft, 87 series, 25 Lb-Ft and larger
- Includes 140% rated spring-set self-adjusting NEMA 2 disk brake (Brake coil voltage matches motor)
- Universal mounting up to 15 Lb-Ft, (see comment below and Mod Central for vertical mounting)
- Horizontal mounting (see comment below and Mod Central for vertical mounting)
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty (brake disks are exempt)



C-Face Footed (Rigid Base)

Suitable for use on VFD per guidelines on page 17.

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	STOCK	LIST PRICE	MULT. SYMB.	F.L. AMPS	WEIGHT	"C" DIM.	TORQUE RATING (Lb/Ft)
1	1800	230/460	143TC	Y986	143THTN8036	✓	\$1,813	E3	3.0/1.5	72	17.00	6
2	1800	230/460	145TC	Y987	145THTN8043	✓	\$2,019	E3	6.0/3.0	83	18.00	10
3	1800	230/460	182TC	Y988	182THTS8048	✓	\$2,644	E3	8.2/4.1	118	19.67	15
5	1800	230/460	184TC	Y989	184THTS8056	✓	\$3,187	E3	13.4/6.7	161	25.58	25
7 1/2	1800	230/460	213TC	Y990	213THTS8071	✓	\$3,994	E3	21.0/10.5	256	27.58	35
10	1800	230/460	215TC	Y991	215THTS8071	✓	\$4,746	E3	26.0/13.0	302	28.83	50
15	1800	230/460	254TC	Y992	254THTNA8071	✓	\$6,031	E3	40.5/20.2	384	31.53	75
20	1800	230/460	256TC	Y993	256THTNA8071	✓	\$7,994	E3	52.0/26.0	427	33.28	105

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1024 ppr Encoders through MOD Central

Multiplier Symbol E3

BRAND	MODEL	CAT. NO.	KIT NUMBER	STOCK	LIST (KIT ONLY)	LIST (INSTALLED)	FITS BRAKEMOTOR CAT. NO.	WEIGHT
Avtron	AV56	A748	KIT M561024BRK-140	✓	\$2,283	\$2,619	Y986, Y987	4
		A749	KIT M561024BRK-182	✓	\$2,283	\$2,619	Y988	4
	AV85	A750	KIT M851024BRK-184	✓	\$3,080	\$3,416	Y989	5
		A751	KIT M851024BRK-210	✓	\$3,080	\$3,416	Y990, Y991	8
NorthStar	ST56	A752	KIT M851024BRK-250	✓	\$3,080	\$3,416	Y992, Y993	8
		A786	KIT LKSR-CFACE	✓	\$2,510	\$2,846	Y986, Y987	4
	ST85	A789	KIT SL561024-182NV	✓	\$2,510	\$2,846	Y988	4
		A790	KIT SL851024-184NV	✓	\$3,080	\$3,416	Y989	8
		A791	KIT SL851024-210NV	✓	\$3,080	\$3,416	Y990, Y991	8
		A792	KIT SL851024-250NV	✓	\$3,080	\$3,416	Y992, Y993	8

Vertical Modification Kit (Stearns 87,000 series)

Includes required hardware to accommodate vertical above (shaft down) or vertical below (shaft up) mounting.

TORQUE RATING (Lb/Ft)	MOUNTING		CAT. NO.	STOCK	MODEL NO.	LIST (KITS ONLY)	LIST INSTALLED	WEIGHT
	SHAFT UP	SHAFT DOWN						
25,35	Not req'd	Required	A157	✓	KIT VRT87BRK	\$420	\$552	3
50,75,105	Required	Required						