

# microMAX™ AC Inverter Duty Motor

## 1000:1 Constant Torque (TENV), 20:1 Constant Torque (TEFC)

### C-Face with Rigid Base

**Applications:** Designed for direct replacement of PMDC or any other variable speed application where up to a 1000:1 constant torque speed range is required. Typical uses include: machine tools, conveyors, packaging machines, batching machines, and printing equipment.



- Features:**
- Replaces 90 volt and 180 volt PMDC motors (when used with AC variable frequency drives)
  - Constant torque operation from 0 to base speed (TENV ratings)
  - Constant torque operation from 1/20 speed to base speed (TEFC ratings)
  - Constant horsepower to twice base speed (RPM)
  - Class H insulation with CR<sup>200</sup> magnet wire
  - Removable base for C-Face footless mounting (as noted)
  - Continuous duty at 40°C ambient
  - "Quick Connect" terminal board (as noted)
  - Top mounted conduit box with pigtail leads (TEFC and 1.5 HP TENV)
  - Eliminates brush and commutator maintenance
  - UL Recognized, CSA Certified, and CE Marked
  - Three year warranty

HP	RPM	VOLTS	ENCL.	FRAME	CAT NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
<b>1/8</b>	1800	230	TENV	56C	Y605	56H17T2021	\$220	E3	0.7	18	9.05	Q
<b>1/4</b>	1800	230	TENV	56C	Y500★	56H17T2011	\$238	E3	1.0	18	9.80	Q
<b>1/3</b>	1800	230	TENV	56C	Y502★	56H17T2013	\$256	E3	1.2	18	9.80	Q
<b>1/2</b>	1800	230	TENV	56C	Y504★	56H17T2015	\$301	E3	1.8	20	10.55	Q
	1800	230/460	TENV	56C	Y360★	56H17T2017	\$301	E3	1.8/0.9	20	10.55	
	1800	575	TENV	56C	Y361	56H17T2019	\$301	E3	0.7	20	10.55	Q
<b>3/4</b>	1800	230	TEFC	56C	Y506★	56H17F2011	\$372	E3	2.8	23	11.19	
	1800	230/460	TEFC	56C	Y362★	56H17F2017	\$372	E3	2.8/1.4	23	11.19	
	1800	575	TEFC	56C	Y363	56H17F2015	\$372	E3	1.1	23	11.19	
<b>1</b>	1800	230	TEFC	56C	Y508	56H17F2013	\$419	E3	3.2	28	12.44	
	1800	230/460	TEFC	56C	Y364★	56H17F2021	\$419	E3	3.2/1.6	28	12.44	
	1800	575	TEFC	56C	Y365★	56H17F2019	\$419	E3	1.3	28	12.44	
<b>1 1/2</b>	1800	230	TENV	145TC	Y522★	145THTR5328	\$521	E3	4.8	48	13.48	6
	1800	230/460	TENV	145TC	Y366★	145THTR5329	\$521	E3	4.8/2.4	48	13.48	6
	1800	575	TENV	145TC	Y367	145THTR5330	\$521	E3	1.9	48	13.48	6
<b>2</b>	1800	230	TEFC	145TC	Y523	145THFR5326	\$691	E3	5.8	53	14.87	6
	1800	230/460	TEFC	145TC	Y368★	145THFR5329	\$691	E3	5.8/2.9	51	14.87	6
	1800	575	TEFC	145TC	Y369★	145THFR5330	\$691	E3	2.3	51	14.87	6
<b>3</b>	1800	230	TEFC	182/145TC	Y530	182THFR5326	\$815	E3	8.4	52	14.87	86,88
	1800	230	TEFC	182TC	Y998	182THFR7726	\$850	E3	8.4	70	16.19	6
	1800	230/460	TEFC	182/145TC	Y370★	182THFR5329	\$815	E3	8.4/4.2	52	14.87	86,88
	1800	230/460	TEFC	182TC	Y999★	182THFR7729	\$850	E3	8.4/4.2	86	16.19	6
	1800	575	TEFC	182/145TC	Y371	182THFR5330	\$815	E3	3.4	52	14.87	86,88
	1800	575	TEFC	182TC	Y270	182THFR7730	\$850	E3	3.4	86	16.19	6
<b>5</b>	1800	230/460	TEFC	184TC	Y372★	184THFR7726	\$967	E3	13.4/6.7	88	16.69	6
	1800	575	TEFC	184TC	Y373	184THFR7736	\$967	E3	5.4	88	16.69	6
<b>7 1/2</b>	1800	230/460	TEFC	213TC	Y994★	213THFW7726	\$1,237	E3	21.4/10.7	98	20.97	6
	1800	575	TEFC	213TC	Y995	213THFW7736	\$1,237	E3	8.5	98	20.97	6
<b>10</b>	1800	230/460	TEFC	215TC	Y996★	215THFW7726	\$1,582	E3	27.6/13.8	125	22.22	d, 6
	1800	575	TEFC	215TC	Y997	215THFW7736	\$1,582	E3	11.1	125	22.22	6

★ Stock Model

Continued on next page.

**Footnotes:**

- Q "Quick Connect" terminal board
- 6 Bolt-on, removable base for footless mounting option
- 86 2:1 constant torque speed range; contact factory for greater than 2:1 capability
- 88 182T base and shaft height, 145TC mounting face and shaft dimensions

# microMAX™ AC Inverter Duty Motor

## 1000:1 Constant Torque (TENV), 20:1 Constant Torque (TEFC)

C-Face

HP	RPM	VOLTS	ENCL.	FRAME	CAT NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
<b>1/8</b>	1800	230	TENV	56C	Y606*	56H17T2022	\$220	E3	0.7	15	9.05	Q
<b>1/4</b>	1800	230	TENV	56C	Y501*	56H17T2012	\$238	E3	1.0	17	9.80	Q
<b>1/3</b>	1800	230	TENV	56C	Y503*	56H17T2014	\$256	E3	1.2	17	9.80	Q
<b>1/2</b>	1800	230	TENV	56C	Y505	56H17T2016	\$301	E3	1.8	19	10.55	Q
	1800	230/460	TENV	56C	Y374*	56H17T2018	\$301	E3	1.8/0.9	19	10.55	
	1800	575	TENV	56C	Y375	56H17T2020	\$301	E3	0.7	19	10.55	Q
<b>3/4</b>	1800	230	TEFC	56C	Y507*	56H17F2012	\$372	E3	2.8	21	11.19	d
	1800	230/460	TEFC	56C	Y376*	56H17F2018	\$372	E3	2.8/1.4	21	11.19	
	1800	575	TEFC	56C	Y377	56H17F2016	\$372	E3	1.1	21	11.19	
<b>1</b>	1800	230	TEFC	56C	Y521*	56H17F2014	\$419	E3	3.2	27	12.44	d
	1800	230/460	TEFC	56C	Y378*	56H17F2022	\$419	E3	3.2/1.6	27	12.44	
	1800	575	TEFC	56C	Y379*	56H17F2020	\$419	E3	1.3	27	12.44	d

\* Stock Model

INVERTER DUTY

**Footnotes:**

- d Will become build-up item when current stock is gone
- Q "Quick Connect" terminal board

# Black Max® Vector Duty, 1000:1 Constant Torque

## Totally Enclosed Non-Ventilated, C-Face with Rigid Base

**Applications:** Designed for inverter or vector applications where up to a 1000:1 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.



**Features:**

- MAX GUARD® Class F insulation system
- Constant Torque operation from 0 to base speed on Vector Drive
- Constant Horsepower operation up to twice base RPM
- Continuous duty at 40°C ambient
- Optimized for operation with IGBT inverter (NEMA Design A)
- Normally closed thermostats (one per phase, Class F)
- Removable rigid base (as noted)
- Ball Bearings
- Field reversible to F2 (except where noted)
- Encoder and brake provisions included on opposite drive end (maximum 10 lb-ft brake, see Modifications and/or Accessory Kits sections)
- UL Recognized, CSA Certified, and CE Marked
- Three year warranty



HP	RPM	VOLTS	FRAME	OVER LOAD	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
<b>1/4</b>	1800	230/460	56C	TSTAT	Y592★	56H17T2001	\$349	E3	1.2/0.6	19	11.88	S,13
<b>1/2</b>	1800	230/460	56C	TSTAT	Y534★	56H17T5301	\$437	E3	1.6/0.8	28	13.48	S,6,13
	1800	575	56C	TSTAT	Y555★	56H17T5311	\$437	E3	0.6	28	13.48	S,6,13
<b>1</b>	1800	230/460	56C	TSTAT	Y535★	56H17T5302	\$521	E3	3.0/1.5	41	14.98	S,6,13
	1800	575	56C	TSTAT	Y556★	56H17T5312	\$521	E3	1.2	41	14.98	S,6,13
	1800	230/460	143TC	TSTAT	Y536★	143THTR5326	\$535	E3	3.0/1.5	43	15.04	S,6,13
	1200	230/460	145TC	TSTAT	Y537★	145THTR5376	\$620	E3	3.8/1.9	49	16.04	S,6,13
<b>1 1/2</b>	1800	230/460	145TC	TSTAT	Y538★	145THTR5326	\$650	E3	4.8/2.4	50	16.04	S,6,13
<b>2</b>	1800	230/460	145TC	TSTAT	Y551★	145THTN6046	\$898	E3	6.0/3.0	72	14.68	
	1800	575	145TC	TSTAT	Y557★	145THTN6060	\$898	E3	2.4	72	14.68	
	1200	230/460	184TC	TSTAT	Y540★	184THTL7776	\$1,284	E3	6.6/3.3	88	16.94	AL
<b>3</b>	1800	230/460	182TC	TSTAT	Y541★	182THTL7726	\$1,113	E3	8.4/4.2	96	17.39	AL
	1800	575	182TC	TSTAT	Y558★	182THTL7736	\$1,113	E3	3.4	96	17.39	AL
	1200	230/460	213TC	TSTAT	Y542★	213THTL7776	\$1,582	E3	9.4/4.7	118	19.94	AL
<b>5</b>	1800	230/460	184TC	TSTAT	Y543★	184THTL7726	\$1,329	E3	14.0/7.0	98	18.94	AL
	1800	575	184TC	TSTAT	Y559★	184THTL7736	\$1,329	E3	5.6	98	18.94	AL
	1200	230/460	215TC	TSTAT	Y544★	215THTL7776	\$1,924	E3	15.4/7.7	138	20.54	AL
<b>7 1/2</b>	1800	230/460	213TC	TSTAT	Y545★	213THTL7726	\$1,745	E3	21.0/10.5	146	20.54	AL
	1800	575	213TC	TSTAT	Y560★	213THTL7736	\$1,745	E3	8.4	146	20.54	AL
	1200	230/460	254TC	TSTAT	Y546★	254THTL5776	\$2,588	E3	22.0/11.0	209	25.37	AL,I
<b>10</b>	1800	230/460	215TC	TSTAT	Y547★	215THTL7726	\$2,087	E3	27.0/13.5	159	23.04	AL
	1800	575	215TC	TSTAT	Y561★	215THTL7736	\$2,087	E3	10.8	159	23.04	AL
	1200	230/460	256TC	TSTAT	Y548★	256THTL5776	\$2,930	E3	28.0/14.0	203	26.87	AL,I
<b>15</b>	1800	230/460	254TC	TSTAT	Y549★	254THTL5726	\$2,484	E3	40.0/20.0	250	26.87	I,AL
	1800	575	254TC	TSTAT	Y562★	254THTL5736	\$2,484	E3	16.0	250	26.87	I,AL
<b>20</b>	1800	230/460	256TC	TSTAT	Y552★	256THTNA7026	\$3,626	E3	52.0/26.0	300	27.13	
	1800	575	256TC	TSTAT	Y563★	256THTNA7036	\$3,626	E3	20.8	300	27.13	
<b>25</b>	1800	230/460	284TC	TSTAT	Y553★	284THTNA7026	\$3,944	E3	62.0/31.0	495	27.08	I
	1800	575	284TC	TSTAT	Y567★	284THTNA7036	\$3,944	E3	24.8	495	27.08	d, I
<b>30</b>	1800	230/460	286TC	TSTAT	Y393★	286THTNA7026	\$4,447	E3	74.0/37.0	575	28.58	I
	1800	575	286TC	TSTAT	Y394★	286THTNA7036	\$4,447	E3	29.6	575	28.58	d, I

★ Stock Model

Blue shaded areas are Cast Iron Frames

Contact Marathon for other base speeds and options not shown in this catalog.

**Footnotes:**

- AL Aluminum Frame Construction
- I Reduced HP @ 120 HZ
- S Steel Frame Construction
- 6 Bolt-on, removable base for footless mounting option
- 13 F1 Mounting Only, Cannot reassemble to F2

# Black Max® Vector Duty, 1000:1 Constant Torque Explosion Proof, Class I Groups C & D, Class II Groups F & G

Totally Enclosed Non-Ventilated, C-Face with Rigid Base



**Applications:** For use in material handling, machine tools, conveyors, crane & hoist, and other variable speed applications requiring up to 1000:1 constant torque speed range, to be installed in hazardous environments as defined by the motor's explosion proof class and group rating. Refer to the General Information sections contained in this catalog for information on explosion proof classifications. Consult the National Electrical Code and your local regulations for the proper selection of motors in hazardous locations.

- Features:**
- Class F MAX GUARD® insulation system
  - Constant torque operation from 0 to base speed on vector drive
  - Constant HP operation to twice base RPM
  - 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
  - Top mount (F3) conduit box included, shipped loose
  - No Encoder Provisions included
  - UL listed, under file #E12044
  - Meets temperature code T3B
  - CSA certified, under file numbers LR47504 and LR21839
  - Three year warranty



HP	RPM	VOLTS	FRAME	OVER LOAD	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
<b>1/4</b>	1800	230/460	56C	TSTAT	Y600*	56H17E5301	\$520	E3	1.1/0.55	34	11.97	
<b>1/3</b>	1800	230/460	56C	TSTAT	Y601	56H17E5302	\$610	E3	1.2/0.6	34	11.97	
<b>1/2</b>	1800	230/460	56C	TSTAT	Y602*	56H17E5303	\$658	E3	1.8/0.9	39	12.47	
<b>3/4</b>	1800	230/460	56C	TSTAT	Y603	56H17E5304	\$728	E3	2.4/1.2	42	13.47	
<b>1</b>	1800	230/460	56C	TSTAT	Y604*	56H17E5305	\$797	E3	3.0/1.5	45	13.97	

★ Stock Model

Contact Marathon Electric for other base speeds and options not shown in this catalog.

# Blue Max® 2000 Vector Duty, 2000:1 Constant Torque

## Totally Enclosed Rigid Base, and C-Face with Rigid Base

**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 (Class H on catalog models only)
  - Constant torque operation from 0 to base speed on vector drive, including TEFC (On Volts/Hz 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 Marked
  - Three year warranty



HP	RPM	VOLTS	ENCL	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
<b>1</b>	1800	230/460	TENV	143TC	Y525 ★	143THTN8028	\$938	E3	3.0/1.5	61	13.68	B
<b>1 1/2</b>	1800	230/460	TENV	145TC	Y590 ★	145THTN8037	\$943	E3	4.6/2.3	63	14.68	
<b>2</b>	1800	230/460	TENV	145TC	Y526 ★	145THTN8029	\$1,016	E3	6.0/3.0	70	14.68	
<b>3</b>	1800	230/460	TENV	182TC	Y527 ★	182THTS8028	\$1,276	E3	8.0/4.0	110	16.68	
<b>5</b>	1800	230/460	TENV	184TC	Y564 ★	184THTS8028	\$1,427	E3	13.4/6.7	117	17.68	
<b>7 1/2</b>	1800	230/460	TEFC	213TC	Y595 ★	213THFS8028	\$1,669	E3	19.4/9.7	183	21.03	
	1800	230/460	TENV	213TC	Y565 ★	213THTS8038	\$1,922	E3	21.0/10.5	180	20.56	
<b>10</b>	1800	230/460	TEFC	215TC	Y596 ★	215THFS8029	\$1,994	E3	25.4/12.7	211	22.53	
	1800	230/460	TENV	215TC	Y566 ★	215THTS8038	\$2,280	E3	26.0/13.0	290	22.74	
<b>15</b>	1800	230/460	TEFC	254TC	Y597 ★	254THFNA8038	\$2,402	E3	37.0/18.5	339	26.34	
	1800	230/460	TENV	254TC	Y509 ★	254THTNA8058	\$2,729	E3	40.4/20.2	350	23.38	
<b>20</b>	1200	230/460	TEBC	284TC	Y395	284THFPA8086	\$5,354	E3	40.0/20.0	480	37.48	94
	1800	230/460	TEFC	256TC	Y598 ★	256THFNA8038	\$2,658	E3	52.0/26.0	375	28.09	
	1800	230/460	TENV	256TC	Y510 ★	256THTNA8038	\$3,777	E3	52.0/26.0	300	27.13	
<b>25</b>	1200	230/460	TEBC	286TC	Y582	286THFPA8086	\$6,921	E3	52.4/26.2	660	38.98	94
	1800	230/460	TEFC	284T	Y569 ★	284THFPA8028	\$3,319	E3	63.0/31.5	393	28.58	
	1800	230/460	TEBC	284TC	Y511 ★	284THFPA8038	\$4,639	E3	63.0/31.5	500	37.48	94
<b>30</b>	1200	230/460	TEBC	324TC	Y583	324THFPA8086	\$8,141	E3	67.0/33.5	723	40.41	B,94
	1800	230/460	TEFC	286T	Y570 ★	286THFNA8028	\$3,794	E3	77.0/38.5	594	29.91	
	1800	230/460	TEBC	286TC	Y512 ★	286THFPA8038	\$5,114	E3	74.0/37.0	520	38.98	94
<b>40</b>	1200	230/460	TEBC	326TC	Y584	326THFPA8086	\$8,956	E3	80.4/40.2	750	41.91	B,94
	1800	230/460	TEFC	324T	Y571 ★	324THFPA8028	\$4,913	E3	100/50.0	690	30.71	
	1800	230/460	TEBC	324TC	Y513 ★	324THFPA8038	\$6,126	E3	100/50.0	700	40.41	94
<b>50</b>	1200	230/460	TEBC	364TC	Y585	364THFS8391	\$10,804	E3	107/53.5	1011	42.67	94
	1800	230/460	TEFC	326T	Y572 ★	326THFS8028	\$6,078	E3	121/60.5	640	32.44	
	1800	230/460	TEBC	326TC	Y514 ★	326THFPA8038	\$7,023	E3	120/60.0	750	41.91	94
<b>60</b>	1200	230/460	TEBC	365TC	Y586	365THFS8380	\$12,951	E3	130/65.0	1081	43.78	94
	1800	230/460	TEFC	364T	Y573 ★	364THFS8036	\$7,834	E3	147/73.5	965	33.70	
	1800	230/460	TEBC	364TC	Y515 ★	364THFS8046	\$8,598	E3	147/73.5	1062	42.67	94
<b>75</b>	1200	230/460	TEBC	404TC	Y587	404THFS8092	\$14,367	E3	142/71.0	1339	48.22	94
	1800	230/460	TEFC	365T	Y574 ★	365THFS8036	\$8,875	E3	184/92.0	1006	34.69	
	1800	230/460	TEBC	365TC	Y516 ★	365THFS8046	\$10,278	E3	180/90.0	1106	43.67	94
	1200	230/460	TEBC	405TC	Y588 ★	405THFS8378	\$17,505	E3	180/90.0	1350	49.72	B,94

Blue shaded areas are Cast Iron Frames

★ Stock Model

**Footnotes:**

d Will become build-up item when current stock is gone

B NEMA Design B  
94 Separate power supply required for blower motor

INVERTER DUTY

# Blue Max® 2000 Vector Duty, 2000:1 Constant Torque

Totally Enclosed Rigid Base, and C-Face with Rigid Base

HP	RPM	VOLTS	ENCL	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
100	1800	230/460	TEFC	405T	Y575 ★	405THFS8036	\$12,009	E3	230/115	1308	39.32	
	1800	230/460	TEBC	405TC	Y517 ★	405THFS8046	\$14,347	E3	230/115	1429	49.72	94
	1200	230/460	TEBC	444TC	Y589 ★	444THFN8384	\$20,092	E3	250/125	2150	52.72	B,94
125	1800	460	TEFC	444T	Y576 ★	444THFN8036	\$15,805	E3	143	2062	43.27	
	1800	460	TEBC	444T	Y518 ★	444THFN8046	\$18,283	E3	138	2110	52.72	B,94
150	1800	460	TEFC	445T	Y577 ★	445THFN8036	\$18,248	E3	170	2246	45.27	
	1800	460	TEBC	445T	Y519 ★	445THFN8046	\$20,725	E3	170	2321	54.72	94
200	1800	460	TEFC	445T	Y578 ★	445THFN8040	\$22,027	E3	230	2404	45.27	
	1800	460	TEBC	445T	Y520 ★	445THFN8050	\$24,504	E3	230	2457	54.72	94
250	1800	460	TEFC	449T	Y579	449THFS8036	\$27,437	E3	280	2800	53.89	CT
	1800	460	TEBC	449T	Y531 ★	449THFS8046	\$30,693	E3	295	2880	63.21	94
300	1800	460	TEFC	449T	Y580	449THFS8037	\$31,240	E3	330	2890	53.89	CT
	1800	460	TEBC	449T	Y532 ★	449THFS8047	\$34,496	E3	327	2950	63.21	94
350	1800	460	TEBC	449T	Y533 ★	449THFS8048	\$37,753	E3	385	3099	63.21	94

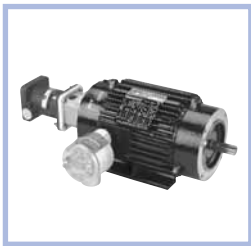
Blue shaded areas are Cast Iron Frames

★ Stock Model

# Blue Max® 2000 Vector Duty, 2000:1 Constant Torque

Explosion Proof, Class I Group D, (Group C as noted) Class II Groups F & G

Totally Enclosed Non-Ventilated, C-Face with Rigid Base and Encoder



**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
- CSA Certified, under file #LR47504 and #LR21839
- UL listed, under file #E12044
- Meets temperature code T3B
- Three year warranty



INVERTER DUTY

HP	RPM	VOLTS	FRAME	OVER LOAD	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
1	1800	230/460	143TC	TSTAT	Y978 ★	143THEN8034	\$5,435	E3	3.0/1.5	84	21.44	
2	1800	230/460	145TC	TSTAT	Y979 ★	145THEN8034	\$5,549	E3	5.8/2.9	90	21.44	
3	1800	230/460	182TC	TSTAT	Y980 ★	182THES8048	\$5,728	E3	8.2/4.1	168	24.82	
5	1800	230/460	213TC	TSTAT	Y981 ★	213THES8053	\$6,026	E3	13.0/6.5	225	27.42	
7 1/2	1800	230/460	254TC	TSTAT	Y982 ★	254THEN8058	\$6,853	E3	25.0/12.5	260	30.20	CD
10	1800	230/460	254TC	TSTAT	Y983 ★	254THEN8059	\$7,180	E3	27.0/13.5	390	30.20	CD
15	1800	230/460	256TC	TSTAT	Y984	256THEN17031	\$7,506	E3	36.0/18.0	450	31.95	CD
20	1800	230/460	284TC	TSTAT	Y985	284THEN8032	\$8,285	E3	57.6/28.8	555	33.16	CD

Blue shaded areas are cast iron frames.

★ Stock Model

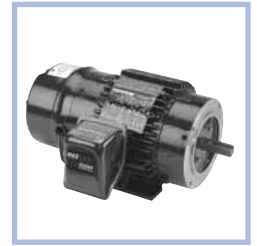
**Footnotes:**

B NEMA Design B  
CD Suitable for Group C

CT Suitable for 20:1 CT on Vector Drive, continuous duty or 2000:1 CT, 60 minute duty.  
94 Separate power supply required for blower motor

# Blue Max® Vector Duty 2000:1 Constant Torque Brakemotors Totally Enclosed Non-Ventilated, C-Face with Rigid Base

**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)
  - Includes 140% rated spring-set self-adjusting NEMA 2 disk brake (Brake coil voltage matches motor)
  - Horizontal mounting (see comment below and Mod Central for vertical mounting)
  - UL Recognized, CSA Certified, and CE Marked
  - Three year warranty (brake disks exempt)



HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	BRAKE TQ. (LB/FT)
1	1800	230/460	143TC	Y986★	143THTN8036	\$1,696	E3	3.0/1.5	67	17.00	6
2	1800	230/460	145TC	Y987★	145THTN8043	\$1,889	E3	6.0/3.0	77	18.00	10
3	1800	230/460	182TC	Y988★	182THTS8048	\$2,473	E3	8.2/4.1	120	19.67	15
5	1800	230/460	184TC	Y989★	184THTS8056	\$2,981	E3	13.4/6.7	131	25.58	25
7 1/2	1800	230/460	213TC	Y990★	213THTS8071	\$3,736	E3	21.0/10.5	250	27.58	35
10	1800	230/460	215TC	Y991★	215THTS8071	\$4,440	E3	26.0/13.0	332	28.83	50
15	1800	230/460	254TC	Y992★	254THTNA8071	\$5,642	E3	40.5/20.2	350	31.53	75
20	1800	230/460	256TC	Y993★	256THTNA8071	\$7,478	E3	52.0/26.0	390	33.28	105

Blue shaded areas are Cast Iron Frames

★ Stock Model

Multiplier Symbol E3

**1024 ppr Encoders through MOD Central**

BRAND	MODEL	CAT. NO.	KIT NUMBER	LIST KIT ONLY	LIST INSTALLED	FITS BRAKEMOTOR CAT. NO.
Avtron	M56	A748★	KIT M561024BRK-140	\$2,038	\$2,338	Y986, Y987
		A749★	KIT M561024BRK-182	\$2,038	\$2,338	Y988
	M85	A750★	KIT M851024BRK-184	\$2,750	\$3,050	Y989
		A751★	KIT M851024BRK-210	\$2,750	\$3,050	Y990, Y991
		A752★	KIT M851024BRK-250	\$2,750	\$3,050	Y992, Y993
NorthStar	SL56	A786★	KIT LKSR-CFACE	\$2,241	\$2,541	Y986, Y987
		A789★	KIT SL561024-182NV	\$2,241	\$2,541	Y988
	SL85	A790★	KIT SL851024-184NV	\$2,750	\$3,050	Y989
		A791★	KIT SL851024-210NV	\$2,750	\$3,050	Y990, Y991
		A792★	KIT SL851024-250NV	\$2,750	\$3,050	Y992, Y993

★ Stock Model

Vertical Mounting: 5 HP (184) and lower are suitable for shaft up or down.  
7-1/2 HP (213) and larger, need vertical modification Cat #: A157, KIT VRT87BRK (SEE MOD SECTION)

CAT. NO.	MODEL NO.	LIST KIT ONLY	LIST INSTALLED
A157	KIT VRT87BRK	\$375	\$493