



Cooling Tower/Severe Duty, Single-Speed Blue Chip® Totally Enclosed

Three Phase, Rigid Base

Applications:

Cooling towers, Fan and Blowers, and other severe duty environments where long life and high efficiency are desired. Replacement for single speed Marley cooling tower motors.

Features:

- Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
- Internal and external epoxy paint
- Class F insulation
- 1.15 Service Factor
- Extended grease tubes, regreaseable in service
- T-drains provided for effective drainage (Installed in both endshields)
- Shaft Slinger
- Forsheda seals on both ends
- Actual test and vibration data supplied with each motor
- UL Recognized and CSA Certified
- Two year warranty
- Horizontal mounting only; consult Engineering for Vertical mounting
- Ball Bearings
- Suitable for 10:1 VT on VFD (Requires N/P modification)



HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	CT SPEED RANGE*	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
3	1800	230/460	182T	U867 *	182TTFS4557	\$789	S3	10:1	87.5	8.4/4.2	136	15.19	20
5	1800	230/460	184T	U868 *	184TTFS4555	\$862	S3	10:1	87.5	13.0/6.5	118	16.19	20
7 1/2	1800	230/460	213T	U869 *	213TTFS4550	\$1,088	S3	10:1	89.5	20.0/10.0	208	18.22	20
10	1800	230/460	215T	U870 *	215TTFS4546	\$1,246	S3	10:1	91.0	26.0/13.0	243	19.72	20
15	1800	230/460	254T	U871 *	254TTFNA4549	\$1,608	S3	10:1	91.0	39.0/19.5	463	23.52	
20	1800	230/460	256T	U872 *	256TTFNA4532	\$1,891	S3	10:1	91.0	50.0/25.0	340	25.27	
25	1800	230/460	284T	U873 *	284TTFPA4545	\$2,241	S3	10:1	92.4	62.0/31.0	285	26.27	20
30	1800	230/460	286T	U874 *	286TTFPA4544	\$2,622	S3	10:1	92.4	74.0/37.0	435	27.77	20
40	1800	230/460	324T	U875 *	324TTFPA4540	\$3,399	S3	2:1	93.0	100/50.0	515	28.97	20
50	1800	230/460	326T	U876 *	326TTFPA4550	\$4,201	S3	2:1	93.0	122/61.0	585	30.47	20
60	1800	230/460	364T	U877 *	364TTFS4550	\$5,991	S3	2:1	93.6	144/72.0	984	31.50	20
75	1800	230/460	365T	U878 *	365TTFS4560	\$7,458	S3	2:1	94.1	178/89.0	1080	32.50	20
100	1800	230/460	405T	U879 *	405TTFS4560	\$9,236	S3	2:1	94.5	228/114	1325	37.12	20
125	1800	460	444T	U880 *	444TTFS4546	\$11,890	S3	2:1	94.5	142	1809	41.25	20
150	1800	460	445T	U881 *	445TTFN4826	\$14,158	S3	2:1	95.0	172	2145	43.26	20
200	1800	460	445T	U882 *	445TTFN4574	\$16,900	S3	2:1	95.0	225	2324	43.26	20
250	1800	460	445T	U884	445TTFN4575	\$19,095	S3	2:1	95.0	285	2409	43.26	20

Blue shaded areas are Cast Iron Frames

* Stock Model

* Requires nameplate modification

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet or exceed U.S. EPAAct and/or NRCAN Canadian standards.

DEFINITE PURPOSE

Footnotes:

20 Rated 60/50 hertz, 190/380 or 380 volt at next lower horsepower

Cooling Tower/Severe Duty, Two-Speed, One-Winding, Variable Torque, Blue Chip XRI®

Three Phase Totally Enclosed, Rigid Base



Applications: Cooling towers, Fan and Blowers, and other severe duty environments where long life and ultra-high efficiency are desired. Guaranteed efficiencies offer an **eXtra R**eturn on your **I**nvestment when using these premium efficiency motors on high cycle or long run applications. Replacement for two-speed Marley cooling tower motors.

- Features:**
- Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
 - Internal and external epoxy paint
 - Class F insulation
 - 1.15 Service Factor
 - Extended grease tubes, regreasable in service
 - T-drains provided for effective drainage (Installed in both endshields)
 - Shaft Slinger
 - Forsheda seals on both ends
 - Actual test and vibration data supplied with each motor
 - Ball Bearings
 - UL Recognized and CSA Certified
 - Three year warranty
 - Horizontal mounting only; consult Engineering for Vertical mounting

IP55

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGHT. LBS.	"C" DIM.	FOOT NOTES
3/7.5	1800/900	460	184T	Y380	184TTFS7290	\$1,287	S3	85.5	4.0/1.75	141	16.19	
5/1.25	1800/900	460	213T	Y381★	213TTFS7238	\$1,423	S3	89.5	6.0/2.4	199	19.72	d
7.5/1.9	1800/900	460	215T	Y382★	215TTFS7290	\$1,845	S3	89.5	9.0/3.1	189	19.72	
10/2.5	1800/900	460	254T	Y383	254TTFNA7210	\$2,223	S3	90.2	12.0/4.0	360	23.52	
15/3.75	1800/900	460	256T	Y384★	256TTFNA7250	\$2,777	S3	90.2	18.0/6.0	408	25.27	
20/5	1800/900	460	284T	Y385★	284TTFNA7240	\$3,465	S3	91.7	24.0/8.5	382	26.34	
25/6.25	1800/900	460	286T	Y386★	286TTFNA7260	\$4,044	S3	91.7	31.0/11.0	489	27.84	
30/7.5	1800/900	460	324T	Y387★	324TTFS7290	\$4,935	S3	91.0	35.0/11.2	623	28.87	
40/10	1800/900	460	326T	Y388★	326TTFS9210	\$6,167	S3	87.5	46.0/14.6	668	30.37	
50/13	1800/900	460	364T	Y389★	364TTFS9234	\$7,844	S3	92.4	61.0/24.0	975	31.50	
60/15	1800/900	460	365T	Y390★	365TTFS9230	\$11,353	S3	92.4	75.0/25.0	1000	32.50	
75/18.75	1800/900	460	405T	Y391	405TTFS7297	\$14,685	S3	94.1	83.0/27.0	1331	37.12	
100/25	1800/900	460	444T	Y392	444TTFS7262	\$17,761	S3	94.1	113/37.5	1781	41.25	

Blue shaded areas are Cast Iron Frames

★ Stock Model

DEFINITE PURPOSE

Footnotes:

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

Two-Speed, One-Winding, Variable Torque, Three Phase

Dripproof, Rigid Base

Applications: Commercial and industrial fans, blowers, pumps, and other machinery that have variable torque characteristics. Prolonged use at low speed can result in significant energy savings. Dripproof motors are intended for use in environments that are relatively clean and dry. For use outdoors an enclosure or drip cover may be required (see Accessories section).



- Features:**
- Ball Bearings
 - 1.15 Service Factor
 - UL Recognized and CSA Certified

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
3/1.75	1800/900	200-230	182T	Y484★	182TTDR7412	\$606	S3	82.5	8.8-3.8/8.0-3.6	64	14.19	d,F,13,25
	1800/900	200-230	182T	Y1484★	182TTDW7412	\$606	S3	82.5	8.8-3.8/8.0-3.6	64	14.19	F,13,25
	1800/900	460	182T	Y485	182TTDR7203	\$606	S3	84.0	3.8/1.6	58	13.22	25
5/1.25	1800/900	200-230	184T	Y486★	184TTDR7287	\$848	S3	85.5	15.0-14.0/6.0-6.2	87	14.72	d,F,13,25
	1800/900	200-230	184T	Y1486★	184TTDW7287	\$848	S3	85.5	15.0-14.0/6.0-6.2	87	14.72	F,13,25
	1800/900	460	184T	Y487★	184TTDR7209	\$848	S3	84.0	6.8/2.8	79	14.72	13,25
7.5/1.88	1800/900	200-230	213T	Y488	213TTDW7202	\$1,052	S3	86.5	21.6-19.8/7.6-7.8	110	17.30	
	1800/900	460	213T	Y489★	213TTDW7201	\$1,052	S3	87.5	9.6/3.6	118	17.30	
10/2.5	1800/900	200-230	215T	Y490	215TTDW17206	\$1,329	S3	86.5	29.0-26.4/10.0-10.0	143	18.55	F,13
	1800/900	460	215T	Y491	215TTDW7201	\$1,329	S3	86.5	12.5/4.5	106	17.30	
15/3.75	1800/900	460	256T	Y492	256TTDX7207	\$1,745	S3	87.5	18.4/6.1	197	22.32	
20/5	1800/900	460	284T	Y493	284TTDP7202	\$2,172	S3	87.5	25.0/8.0	320	23.49	

Blue shaded areas are Cast Iron Frames

★ Stock Model

Two-Speed, Two-Winding, Variable Torque, Three Phase

Dripproof, Rigid Base

Applications: Commercial and industrial fans, blowers, pumps, and other machinery that have variable torque characteristics. Prolonged use at low speed can result in significant energy savings. Dripproof motors are intended for use in environments that are relatively clean and dry. For use outdoors an enclosure or drip cover may be required (see Accessories section).

- Features:**
- Ball Bearings
 - 1.15 Service Factor
 - UL Recognized and CSA Certified
 - Plus Economical two-winding, two-speed design

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
1/1.25	1800/900	460	145T	Y465★	145TTDR5701	\$730	S3	79.5	1.5/0.75	43	12.99	5,13
1/1.44	1800/1200	200-230	145T	Y449★	145TTDR5703	\$730	S3	80.0	3.4-3.2/2.0-2.0	42	12.99	5,13
	1800/1200	460	145T	Y450	145TTDR5704	\$730	S3	78.5	1.5/1.0	39	12.49	5,13
1.5/1.37	1800/900	460	145T	Y466★	145TTDR5702	\$801	S3	78.5	2.2/1.1	47	13.49	5,13
1.5/1.67	1800/1200	200-230	145T	Y451★	145TTDR5705	\$801	S3	80.0	5.0-4.8/2.6-2.9	48	13.49	5,13
	1800/1200	460	145T	Y452★	145TTDR5706	\$801	S3	78.5	2.3/1.3	44	12.99	5,13
2/1.5	1800/900	460	182T	Y467★	182TTDR7411	\$883	S3	80.0	3.0/1.2	61	13.22	13,25
2/1.88	1800/1200	200-230	182T	Y453★	182TTDR7413	\$883	S3	81.0	6.5-6.3/3.5-3.5	64	13.72	d,13,25
	1800/1200	200-230	182T	Y1453★	182TTDW7413	\$883	S3	81.0	6.5-6.3/3.5-3.5	64	13.72	13,25
2/1.9	1800/1200	460	182T	Y409★	182TTDR7211	\$883	S3	80.0	3.0/1.7	53	12.72	25
3/1.75	1800/900	460	184T	Y468★	184TTDR7230	\$919	S3	82.5	4.3/1.8	72	13.72	25
3/1.3	1800/1200	200-230	184T	Y454★	184TTDR7286	\$919	S3	82.5	9.3-8.5/4.9-4.6	79	14.72	d,13,25
	1800/1200	200-230	184T	Y1454★	184TTDW7286	\$919	S3	82.5	9.3-8.5/4.9-4.6	79	14.72	13,25
	1800/1200	460	184T	Y412★	184TTDR7215	\$919	S3	82.5	4.6/2.7	69	13.72	25
5/1.25	1800/900	460	215T	Y469★	215TTDW7205	\$1,286	S3	86.5	6.8/3.1	118	17.30	
5/2.22	1800/1200	200-230	215T	Y455★	215TTDW7204	\$1,286	S3	85.5	14.5-13.0/7.3-7.0	119	17.30	
	1800/1200	460	215T	Y415★	215TTDW7203	\$1,286	S3	85.5	6.5/3.5	106	17.30	

Footnotes:

- d Will become build-up item when current stock is gone
- F Class F Insulation
- 13 F1 Mounting Only, Cannot reassemble to F2
- 25 Motor will NOT accept C-Face kit

Continued on next page.

DEFINITE PURPOSE

Two-Speed, Two-Winding, Variable Torque, Three Phase

Dripproof, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
7.5/1.9	1800/900	460	254T	Y470	254TTDX7201	\$1,595	S3	85.5	10.5/4.1	135	20.57	
7.5/3.3	1800/1200	200-230	254T	Y456★	254TTDX7278	\$1,595	S3	87.5	20.8-18.4/11.0-10.2	198	22.32	
	1800/1200	460	254T	Y418★	254TTDX7208	\$1,595	S3	84.0	10.0/5.6	144	20.57	
10/2.5	1800/900	460	256T	Y471	256TTDX7253	\$1,978	S3	86.5	12.9/5.6	145	22.32	
10/4.4	1800/1200	200-230	256T	Y457	256TTDX7263	\$1,978	S3	88.5	28-26/15-14	214	22.32	
	1800/1200	460	256T	Y458★	256TTDX7264	\$1,978	S3	87.5	12.0/6.5	185	22.32	
15/3.8	1800/900	460	284T	Y472	284TTDP7205	\$2,646	S3	88.5	18.0/6.5	300	23.49	
15/6.7	1800/1200	460	284T	Y459★	284TTDP7221	\$2,646	S3	87.5	18.5/9.5	325	23.49	
20/5	1800/900	460	286T	Y473	286TTDP7251	\$3,296	S3	88.5	25.0/8.5	321	24.99	
20/8.9	1800/1200	460	286T	Y460	286TTDP7217	\$3,296	S3	88.5	25.0/12.0	340	24.99	

Blue shaded areas are Cast Iron Frames

★ Stock Model

50 Hertz, Three Phase

Dripproof, Rigid Base



Applications: For general purpose use where 50 hertz power is available on compressors, pumps, conveyors, fans, blowers, and other machinery in environments that are relatively clean and dry. For use outdoors an enclosure or drip cover may be required (see Accessories section).

- Features:**
- Ball bearings
 - 1.15 Service Factor
 - Nameplated 190-200-208/380-400-416
 - 12 Lead delta capability
 - UL Recognized and CSA Certified

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
2	1500	190-208/380-416	145T	H952	145TTDR5647	\$426	E6	82.5	7.2-7.3/3.6-3.65	41	12.99	F,YD,5,7
3	1500	190-208/380-416	182T	H953	182TTDR8353	\$474	E6	81.5	10.0-9.8/5.0-4.9	60	13.22	F,YD,25
5	1500	190-208/380-416	184T	H954★	184TTDR9040	\$603	E6	82.5	16.2-15.6/8.1-7.8	84	14.72	F,YD,13,25
7 1/2	1500	190-208/380-416	213T	H955	213TTDW7053	\$792	E6	85.5	22.6-19.0/9.5-11.3	115	17.30	YD
10	1500	190-208/380-416	215T	H956★	215TTDW7053	\$942	E6	88.5	31.0-29.1/15.5-14.5	135	17.30	YD
15	1500	190-208/380-416	254T	H957	254TTDX8338	\$1,247	E6	88.5	46.0-44.0/23.0-22.0	180	22.32	F,YD

★ Stock Model

Footnotes:

- | | | | |
|----|---|----|---|
| F | Class F Insulation | 7 | Will accept C-Face kit, see Accessory Section |
| YD | 12 Leads for WYE-DELTA, Part Winding, or across-the-line starting | 13 | F1 Mounting Only, Cannot reassemble to F2 |
| 5 | 56H, 143T, and 145T Combination Base with 12 mounting holes | 25 | Motor will NOT accept C-Face kit |

Automotive Duty, U-Frame

Three Phase, Totally Enclosed, Rigid Base

Applications: For use in plants that require automotive approved motors. These motors are designed to meet the mechanical and electrical requirements of Daimler Chrysler NPEM-100, Ford EM-1, and General Motors GM 7EQ specifications.



- Features:**
- **AQ = Standard efficiency and meets GM 7EQ (see footnote)**
 - **AH = Premium efficiency and meets GM 7EH and GM 7EQ (see footnote)**
 - Cast iron construction
 - Oversized, fully gasketed, cast iron conduit box
 - Oversized ball bearings
 - NEMA Design B
 - Class F insulation
 - 1.0 Service Factor at 65°C ambient, 1.15 Service Factor at 40°C ambient
 - V-Ring shaft seals
 - Five year warranty

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
3/4	1200	460	182U	P410	-----	\$850	E9	82.5	1.3	108	12.21	AH
	1200	460	182U	P310	-----	\$660	E9	81.5	1.3	108	12.21	AQ
1	1800	460	182U	P412	182UTTS4026	\$798	E9	87.5	1.5	108	12.21	AH
	1800	460	182U	P312	182UTTS8026	\$619	E9	86.5	1.5	108	12.21	AQ
	1200	460	184U	P413	184UTTS4076	\$976	E9	86.5	1.7	108	13.21	AH
	1200	460	184U	P313	184UTTS8076	\$758	E9	85.5	1.7	108	13.21	AQ
1 1/2	3600	460	182U	P415	182UTTS4001	\$736	E9	85.5	2.0	108	12.21	AH
	1800	460	184U	P416	184UTTS4026	\$855	E9	88.5	2.1	108	13.21	AH
	1800	460	184U	P316	184UTTS8026	\$664	E9	87.5	2.1	108	13.21	AQ
	1200	460	184U	P417	184UTTS4078	\$1,077	E9	87.5	2.2	108	13.21	AH
2	3600	460	184U	P419	184UTFS4001	\$811	E9	85.5	2.7	108	15.69	AH
	1800	460	184U	P420	184UTFS4026	\$901	E9	89.5	2.6	119	15.69	AH
	1800	460	184U	P320	184UTFS8026	\$698	E9	88.5	2.6	120	15.69	AQ
	1200	460	213U	P421	213UTFS4076	\$1,192	E9	87.5	3.1	170	17.82	AH
	1200	460	213U	P321	213UTFS8076	\$926	E9	86.5	3.1	170	17.82	AQ
3	3600	460	184U	P423	184UTFS4002	\$920	E9	87.5	3.8	120	15.69	AH
	1800	460	213U	P424	213UTFS4026	\$1,037	E9	88.5	4.0	170	17.82	AH
	1200	460	215U	P425	215UTFS4076	\$1,477	E9	89.5	4.4	170	19.32	AH
	1200	460	215U	P325	215UTFS8076	\$1,149	E9	88.5	4.4	170	19.32	AQ
5	3600	460	213U	P427	213UTFS4001	\$1,095	E9	87.5	6.4	179	17.82	AH
	1800	460	215U	P428	215UTFS4026	\$1,375	E9	89.5	6.5	170	19.32	AH
	1800	460	215U	P328	215UTFS8026	\$1,067	E9	88.5	6.5	170	19.32	AQ
	1200	460	254U	P429	254UTFNA4076	\$2,055	E9	90.2	6.7	260	23.27	AH
7 1/2	3600	460	215U	P431 *	215UTFS4001	\$1,330	E9	88.5	9.5	170	19.32	AH
	1800	460	254U	P432	254UTFPA4026	\$1,806	E9	91.7	9.6	260	23.44	AH
	1800	460	254U	P332	254UTFPA8026	\$1,443	E9	90.2	9.6	260	23.44	AQ
	1200	460	256U	P433	256UTFNA4076	\$2,628	E9	91.0	9.9	332	25.02	AH
	1200	460	256U	P333	256UTFNA8076	\$2,100	E9	89.5	9.9	332	25.02	AQ
10	3600	460	254U	P435 *	254UTFPA4001	\$1,592	E9	90.2	12.0	325	23.44	AH,NS,d
	1800	460	256U	P436	256UTFPA4026	\$2,194	E9	91.7	12.5	260	25.19	AH
	1800	460	256U	P336	256UTFPA8026	\$1,755	E9	90.2	12.5	260	25.19	AQ
	1200	460	284U	P437	284UTFPA4076	\$3,219	E9	91.0	13.1	490	26.52	AH
15	3600	460	256U	P439	256UTFNA4001	\$2,029	E9	91.7	17.5	260	25.02	AH,NS,d
	1800	460	284U	P440	284UTFPA4026	\$3,013	E9	92.4	18.0	525	26.52	AH
	1800	460	284U	P340	284UTFPA8026	\$2,411	E9	91.0	18.0	525	26.52	AQ
	1200	460	324U	P441	324UTFS4076	\$4,334	E9	92.4	19.0	610	29.24	AH
	1200	460	324U	P341	324UTFS8076	\$3,462	E9	91.0	19.5	610	29.24	AQ

Blue shaded areas are Cast Iron Frames

* **Stock Model**

Continued on next page.

Footnotes:

- d Will become build-up item when current stock is gone
- AH Conforms to GM 7EH and satisfies Ford EM-1 and GM 7EQ
- AQ Conforms to GM 7EQ and satisfies Daimler Chrysler NPEM-100, and Ford EM-1
- NS Single Shielded Ball Bearings

DEFINITE PURPOSE

Automotive Duty, U-Frame

Three Phase, Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
20	3600	460	286U	P444	286UTFPA4001	\$2,761	E9	92.4	23.4	636	28.02	AH,NS
	1800	460	286U	P445	286UTFPA4026	\$3,700	E9	93.0	25.0	636	28.02	AH
	1800	460	286U	P344	286UTFPA8026	\$2,959	E9	91.0	24.1	525	28.02	AQ
	1200	460	326U	P446	326UTFS4076	\$5,295	E9	92.4	25.0	750	30.74	AH
25	3600	460	324US	P450	324USTFPA4001	\$3,541	E9	93.6	28.1	520	26.97	AH,NS
	1800	460	324U	P451	324UTFS4026	\$4,632	E9	94.1	30.0	700	29.24	AH
	1800	460	324U	P348	324UTFS8026	\$3,702	E9	93.0	30.0	671	29.24	AQ
	1200	460	364U	P453	364UTFS4086	\$6,393	E9	93.0	31.0	1160	32.00	AH
	1200	460	364U	P349	364UTFS8086	\$5,111	E9	91.7	31.0	1160	32.00	AQ
30	3600	460	326US	P457	326USTFPA4001	\$4,271	E9	91.0	35.0	748	28.47	AH,NS
	1800	460	326U	P458	326UTFS4026	\$5,412	E9	94.1	35.5	700	30.74	AH
	1800	460	326U	P352	326UTFS8026	\$4,327	E9	92.4	36.0	748	30.74	AQ
	1200	460	365U	P460	365UTFS4086	\$7,234	E9	93.0	37.0	1160	33.00	AH
	1200	460	365U	P353	365UTFS8086	\$5,785	E9	91.7	37.0	1160	33.00	AQ
40	3600	460	364US	P464	364USTFS4001	\$5,575	E9	93.6	45.0	939	29.38	AH,NS
	1800	460	364U	P465	364UTFS4036	\$7,137	E9	94.1	46.5	965	32.00	AH
	1800	460	364U	P356	364UTFS8036	\$5,706	E9	93.0	46.5	977	32.00	AQ
	1200	460	404U	P467	404UTFS4086	\$9,320	E9	93.6	48.5	1158	35.50	AH
	1200	460	404U	P357	-----	\$7,449	E9	92.4	48.5	1110	35.50	AQ
50	3600	460	365US	P471	365USTFS4001	\$7,036	E9	94.1	56.0	1017	30.38	AH,NS
	1800	460	365U	P472	365UTFS4036	\$8,372	E9	94.5	57.0	1061	33.00	AH,V
	1800	460	365U	P360	365UTFS8036	\$6,691	E9	93.0	57.0	1061	33.00	AQ
	1200	460	405U	P474	405UTFS4086	\$10,765	E9	94.1	59.0	1110	37.00	AH
	1200	460	405U	P361	-----	\$8,605	E9	93.6	59.0	1110	37.00	AQ
60	3600	460	405US	P478	405USTFS4001	\$8,371	E9	94.1	65.5	1206	34.12	AH,V
	1800	460	405U	P479	405UTFS4036	\$10,394	E9	95.0	67.5	1110	37.00	AH,V
	1800	460	405U	P364	405UTFS17033	\$8,310	E9	93.6	68.5	1110	37.00	AQ
	1200	460	444U	P481	444UTFS4086	\$12,639	E9	94.1	71.0	1787	41.38	AH
	1200	460	444U	P365	444UTFS17077	\$10,103	E9	93.6	71.0	1787	41.38	AQ
75	3600	460	444US	P485	444USTFS4001	\$11,000	E9	94.1	82.0	1704	37.00	AH
	1800	460	444U	P486	444UTFS4036	\$12,819	E9	95.0	85.0	1745	41.38	AH
	1800	460	444U	P368	-----	\$10,250	E9	92.4	89.5	1787	41.38	AQ
	1200	460	445U	P488	445UTFN4086	\$14,987	E9	95.0	90.0	1787	43.51	AH
	1200	460	445U	P369	-----	\$11,981	E9	93.6	88.0	1787	43.51	AQ
100	3600	460	445US	P492	445USTFN4001	\$14,536	E9	95.4	113	1685	38.94	AH
	1800	460	445U	P493	445UTFN4036	\$15,938	E9	95.4	113	2115	43.51	AH,V
	1800	460	445U	P372	-----	\$12,955	E9	94.5	115	1787	43.51	AQ

DEFINITE PURPOSE

Blue shaded areas are Cast Iron Frames

★ Stock Model

Footnotes:

- AH Conforms to GM-7EH and satisfies Ford EM-1, and GM-7EQ
- AQ Conforms to GM-7EQ and satisfies Daimler Chrysler NPEM-100 and Ford EM-1
- V Vibration not met
- NS Single Shielded Ball Bearings

Automotive Duty, U-Frame

Three Phase, Totally Enclosed, C-Face Rigid Base

Applications: For use in plants that require automotive approved motors. These motors are designed to meet the mechanical and electrical requirements of Daimler Chrysler NPEM-100, Ford EM-1, and General Motors GM 7EH and GM 7EQ specifications.

Features: **Premium efficiency conforms to GM 7EH** **Satisfies Ford EM-1, Daimler Chrysler**



- Cast iron construction
- Oversized, fully gasketed, cast iron conduit box
- Oversized ball bearings
- NEMA Design B
- **NPEM-100 and GM 7EQ**
- Class F insulation
- 1.0 Service Factor at 65°C ambient, 1.15 Service Factor at 40°C ambient
- V-Ring Shaft Seals
- Five year warranty

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
3/4	1200	460	182UC	P510	-----	\$906	E9	82.5	1.3	120	12.96	
1	1800	460	182UC	P512	182UTTS4027	\$855	E9	87.5	1.5	120	12.96	
	1200	460	184UC	P513	184UTTS4077	\$1,032	E9	86.5	1.7	112	13.96	
1 1/2	3600	460	182UC	P514	-----	\$793	E9	85.5	2.0	120	12.96	
	1800	460	184UC	P515	184UTTS4027	\$912	E9	88.5	2.1	108	13.96	
	1200	460	184UC	P516	184UTTS4079	\$1,134	E9	87.5	2.2	135	13.96	
2	3600	460	184UC	P517	-----	\$869	E9	85.5	2.7	132	16.28	
	1800	460	184UC	P518	184UTFS4027	\$959	E9	89.5	2.6	180	16.28	
	1200	460	213UC	P519	213UTFS4078	\$1,258	E9	87.5	3.1	181	18.58	NS
3	3600	460	184UC	P520	184UTFS4004	\$977	E9	87.5	3.8	132	16.28	
	1800	460	213UC	P521	213UTFS4027	\$1,103	E9	88.5	4.0	181	18.58	NS
	1200	460	215UC	P522	215UTFS4078	\$1,544	E9	89.5	4.4	181	20.08	NS
5	3600	460	213UC	P523	213UTFS4002	\$1,161	E9	87.5	6.4	181	18.58	
	1800	460	215UC	P524	215UTFS4027	\$1,441	E9	89.5	6.5	181	20.08	NS
	1200	460	254UC	P525	254UTFNA4078	\$2,141	E9	90.2	6.7	272	23.77	
7 1/2	3600	460	215UC	P526	215UTFS4002	\$1,397	E9	88.5	9.5	181	20.08	
	1800	460	254UC	P527	254UTFPA4027	\$1,893	E9	91.7	9.6	272	23.89	
	1200	460	256UC	P528	256UTFNA4078	\$2,714	E9	91.0	9.9	408	25.52	
10	3600	460	254UC	P529	-----	\$1,680	E9	89.5	12.0	272	25.64	
	1800	460	256UC	P530	256UTFPA4027	\$2,281	E9	91.7	12.5	260	25.64	
	1200	460	284UC	P531	284UTFPA4078	\$3,370	E9	91.0	13.1	434	26.52	
15	3600	460	256UC	P532	-----	\$2,116	E9	91.7	17.5	272	25.52	
	1800	460	284UC	P533	284UTFPA4027	\$3,165	E9	92.4	18.0	675	26.52	
	1200	460	324UC	P534	324UTFS4078	\$4,587	E9	92.4	19.0	757	29.25	
20	3600	460	286UC	P535	286UTFN4002	\$2,910	E9	93.6	22.5	531	28.02	
	1800	460	286UC	P536	286UTFPA4027	\$3,853	E9	93.0	24.1	531	28.02	
	1200	460	326UC	P537	326UTFS4078	\$5,549	E9	92.4	25.0	757	30.75	
25	3600	460	324UC	P538	324UTFS4002	\$3,795	E9	93.6	28.0	700	29.25	
	1800	460	324UC	P539	324UTFS4027	\$4,884	E9	94.1	30.0	600	29.25	
	1200	460	364UC	P540	364UTFS4087	\$6,800	E9	93.0	31.0	1169	32.00	
30	3600	460	326USC	P541	-----	\$4,523	E9	93.6	34.0	755	30.75	
	1800	460	326UC	P542	-----	\$5,664	E9	94.1	35.5	755	30.75	
	1200	460	365UC	P543	-----	\$7,642	E9	93.0	37.0	1169	33.00	
40	3600	460	364USC	P544	-----	\$5,983	E9	93.6	45.0	917	32.00	
	1800	460	364UC	P545	-----	\$7,543	E9	94.1	46.5	986	32.00	
	1200	460	404UC	P546	-----	\$9,802	E9	93.6	48.5	1123	35.50	
50	3600	460	365USC	P547	-----	\$7,442	E9	94.1	56.0	989	33.00	
	1800	460	365UC	P548	-----	\$8,778	E9	94.5	57.0	1072	33.00	
	1200	460	405UC	P549	-----	\$11,248	E9	94.1	59.5	1123	37.00	
60	3600	460	405USC	P550	-----	\$8,853	E9	94.1	65.5	1143	37.00	
	1800	460	405UC	P551	-----	\$10,878	E9	95.0	67.5	1123	37.00	
	1200	460	444UC	P552	-----	\$13,238	E9	94.1	71.0	1810	41.38	
75	3600	460	444USC	P553	-----	\$11,597	E9	94.1	82.0	1708	41.38	
	1800	460	444UC	P554	444UTFS4027	\$13,418	E9	95.0	85.0	1797	41.38	
	1200	460	445UC	P555	-----	\$15,584	E9	95.0	90.0	1810	43.38	
100	3600	460	445USC	P556	-----	\$15,134	E9	95.4	113	1708	43.38	
	1800	460	445UC	P557	-----	\$16,533	E9	95.4	113	1810	43.38	

Footnotes:

NS Single Shielded Ball Bearings

Blue shaded areas are Cast Iron Frames

DEFINITE PURPOSE

Automotive Duty, U-Frame

Three Phase, Totally Enclosed, C-Face

Applications: For use in plants that require automotive approved motors. These motors are designed to meet the mechanical and electrical requirements of Daimler Chrysler NPEM-100, Ford EM-1, and General Motors GM 7EH and GM 7EQ specifications.

- Features:**
- **Premium efficiency conforms to GM 7EH**
 - **Satisfies Ford EM-7, Daimler Chrysler NPEM-100 and GM-7EQ**
 - Cast iron construction
 - Oversized, fully gasketed, cast iron conduit box
 - Oversized ball bearings
 - NEMA Design B
 - Class F insulation
 - 1.0 Service Factor at 65°C ambient, 1.15 Service Factor at 40°C ambient
 - V-Ring shaft seals
 - Five year warranty



HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
1	1800	460	182UC	P612	182UTTS4028	\$855	E9	87.5	1.5	120	12.96	
	1200	460	184UC	P613	184UTTS4080	\$1,032	E9	86.5	1.7	120	13.96	
1 1/2	1800	460	184UC	P614	184UTTS4028	\$912	E9	88.5	2.1	120	13.96	
	1200	460	184UC	P615	184UTTS4081	\$1,134	E9	87.5	2.2	120	13.96	
2	1800	460	184UC	P616	184UTFS4028	\$959	E9	89.5	2.6	132	16.22	
	1200	460	213UC	P617	213UTFS4079	\$1,258	E9	87.5	3.1	185	18.58	NS
3	1800	460	213UC	P618	213UTFS4028	\$1,103	E9	88.5	4.0	181	18.58	NS
	1200	460	215UC	P619	215UTFS4079	\$1,544	E9	89.5	4.4	181	20.08	NS
5	1800	460	215UC	P620	215UTFS4028	\$1,441	E9	89.5	6.5	181	20.08	NS
	1200	460	254UC	P621	254UTFNA4079	\$2,141	E9	90.2	6.7	272	25.51	
7 1/2	1800	460	254UC	P622	254UTFPA4028	\$1,893	E9	91.7	9.6	272	23.94	
	1200	460	256UC	P623	256UTFNA4079	\$2,714	E9	91.0	9.9	344	25.51	
10	1800	460	256UC	P624	256UTFPA4028	\$2,281	E9	91.7	12.5	272	25.69	
	1200	460	284UC	P625	284UTFPA4079	\$3,370	E9	91.0	13.1	531	26.50	
15	1800	460	284UC	P626	284UTFPA4028	\$3,165	E9	92.4	18.0	531	26.50	
20	1800	460	286UC	P627	286UTFPA4028	\$3,853	E9	93.0	24.1	531	28.00	
25	1800	460	324UC	P628	324UTFS4028	\$4,884	E9	94.1	30.0	755	29.25	
30	1800	460	326UC	P629	326UTFS4028	\$5,664	E9	94.1	35.5	900	30.75	
	1200	460	365UC	P630	365UTFS4088	\$7,642	E9	93.0	37.0	1169	33.00	
40	1800	460	364UC	P631	364UTFS4028	\$7,543	E9	94.1	47.0	979	32.00	
	1200	460	405UC	P632	-----	\$9,802	E9	93.6	48.5	1123	35.50	
50	1800	460	365UC	P633	365UTFS4028	\$8,778	E9	94.5	57.0	1072	33.00	
	1200	460	405UC	P634	-----	\$11,248	E9	94.1	59.5	1123	37.00	
60	1800	460	405UC	P635	405UTFS4028	\$10,878	E9	95.0	67.5	1123	37.00	
	1200	460	444UC	P636	-----	\$13,238	E9	94.1	71.0	1810	41.38	
75	1800	460	444UC	P637	444UTFS4028	\$13,418	E9	95.0	85.0	1810	43.38	
	1200	460	445UC	P638	-----	\$15,584	E9	95.0	90.0	1810	43.38	
100	1800	460	445UC	P639	445UTFN4028	\$16,533	E9	95.4	113	1810	43.50	

Blue shaded areas are Cast Iron Frames

DEFINITE PURPOSE

Footnotes:

NS Single Shielded Ball Bearings

Automotive Duty, T-Frame, GM 7E-TA

Three Phase, Totally Enclosed, Rigid Base

Applications: For use in plants that require automotive approved motors. These motors are designed to meet the mechanical and electrical requirements of General Motors GM 7E-TA.

- Features:**
- Conforms to GM 7E-TA
 - Vibration comments on record with GM corporate
 - Meets or exceeds NEMA Premium® efficiencies**, except where noted
 - Meets IEEE-841 standard for severe duty applications
 - Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
 - Inpro/Seal® VBX® bearing isolators on drive end shaft extension TENV and on both ends of TEFC
 - Provisions to add stub shaft for an encoder (182T-449T, TEFC only)
 - Internal and external epoxy paint
 - MAX GUARD® Class F insulation system
 - 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
 - Bearing caps (254T and larger)
 - Precision balanced
 - Extended grease tubes, regreasable in service
 - Brass drain and breather
 - Meets IEEE45 USCG Marine Duty, API RPI4F for offshore platforms, IP56
 - Meets NEMA MG1 - 1.26.6 Waterproof specification
 - Hazardous Duty™ Division 2 CSA certification nameplate, for hazardous locations, Class I, Groups A, B, C, and D
 - Meets temperature code T2B
 - Actual test and vibration data supplied with each motor
 - Ball bearings, except where noted
 - UL Recognized (through 449T), CSA Certified
 - Five year warranty

Available with Nameplate Modification (through 40 HP):

- 2:1, 20:1, or 1000:1 Constant Torque, 1.0 Service Factor on IGBT (PWM) power
- 1.25 Service Factor through 40 HP (sinewave only)
- 50HZ at same HP, 1.0 Service Factor through 40 HP (sinewave only)
- Contact Marathon Electric for optional nameplate markings on 50 HP and larger



Suitable for use on VFD per guidelines on page 15.

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KITS
3/4	1200	460	143T	R.T.M.	-----	-----	E9	80.0	1.4	53	10.43	N	
1	1800	460	143T	R.T.M.	-----	-----	E9	85.5	1.5	55	10.43	N	
	1200	460	145T	R.T.M.	-----	-----	E9	80.0	1.65	60	11.43	N,NP	
1 1/2	3600	460	143T	R.T.M.	-----	-----	E9	86.5	2.0	58	10.43	N	
	1800	460	145T	R.T.M.	-----	-----	E9	84.0	2.2	65	11.43	N,NP	
	1200	460	182T	W509	182THTS9076	\$996	E9	87.5	2.2	100	12.71	d,N,75	A182
2	3600	460	145T	R.T.M.	-----	-----	E9	85.5	2.5	68	11.43	N	
	1800	460	145T	R.T.M.	-----	-----	E9	85.5	3.0	68	11.43	N,NP	
	1200	460	184T	W515	184THTS9076	\$1,230	E9	88.5	3.0	112	13.71	N,75	A182
3	3600	460	182T	W517 *	182THTS9001	\$1,114	E9	87.5	3.8	105	12.71	d,N,75	A182
	1800	460	182T	W519 *	182THTS9026	\$999	E9	90.2	4.0	100	12.71	N,75	A182
	1200	460	213T	W521 *	213THFS9076	\$1,515	E9	89.5	4.4	176	18.22	75	A183
5	3600	460	184T	W523 *	184THFS9001	\$1,238	E9	89.5	5.9	142	16.19	75	A182
	1800	460	184T	W525 *	184THFS9026	\$1,158	E9	90.2	6.2	130	16.19	75	A182
	1200	460	215T	W527 *	215THFS9076	\$1,860	E9	89.5	6.9	202	19.72	75	A183
7 1/2	3600	460	213T	W530 *	213THTS9001	\$1,495	E9	91.7	8.9	200	17.18	N,75	A183
	1800	460	213T	W532 *	213THFS9026	\$1,419	E9	91.7	9.6	200	19.73	75	A183
	1200	460	254T	W534 *	254THFNA9076	\$2,233	E9	91.0	9.9	326	23.52	75	A184
10	3600	460	215T	W537 *	215THFS9001	\$1,746	E9	91.7	11.9	218	19.72	75	A183
	1800	460	215T	W539 *	215THFS9026	\$1,709	E9	91.7	12.5	225	19.72	75	A183
	1200	460	256T	W541	256THFNA9076	\$2,727	E9	91.0	13.1	405	25.27	75	A184
15	3600	460	254T	W544 *	254THFNA9001	\$2,165	E9	91.7	17.5	345	23.52		A184
	1800	460	254T	W546 *	254THFNA9026	\$2,033	E9	92.4	18.8	350	23.52		A184
	1200	460	284T	W548 *	284THFNA9076	\$3,620	E9	91.7	20.4	479	27.88		A186

Blue shaded areas are Cast Iron Frames * Stock Model R.T.M. Refer to Marathon Electric Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet or exceed U.S. EPCa and/or NRCa Canadian standards.

Footnotes:

- d Will become build-up item when current stock is gone
- N Totally Enclosed, Non-Ventilated
- NP Does not meet NEMA Premium efficiency

75 Addition of C Face Kits may result in non-NEMA "BA" dimension. For the resulting "BA" dimension consult chart found in modification section.

Continued on next page.

Automotive Duty, T-Frame, GM 7E-TA

Three Phase, Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KITS
20	3600	460	256T	W551 ★	256THFNA9001	\$2,683	E9	92.4	23.4	375	25.27	75	A184
	1800	460	256T	W553 ★	256THFNA9026	\$2,553	E9	93.0	24.1	425	25.27	75	A184
	1200	460	286T	W555	286THFNA9076	\$4,410	E9	91.7	26.8	550	27.84		A186
25	3600	460	284TS	W558 ★	284TSHFNA9001	\$3,305	E9	93.6	28.1	481	24.97		A186
	1800	460	284T	W560 ★	284THFNA9026	\$3,015	E9	93.6	31.0	478	26.44		A186
	1200	460	324T	W562	324THFS9076	\$5,346	E9	93.0	32.5	675	28.87		A187
30	3600	460	286TS	W565 ★	286TSHFNA9001	\$3,860	E9	93.6	33.8	500	26.44		A186
	1800	460	286T	W567 ★	286THFNA9026	\$3,507	E9	94.1	36.5	525	27.84		A186
	1200	460	326T	W569 ★	326THFS9076	\$6,157	E9	93.0	38.5	725	30.37		A187
40	3600	460	324TS	W571 ★	324TSHFS9001	\$5,090	E9	93.6	47.0	656	27.37		A187
	1800	460	324T	W573 ★	324THFS9026	\$4,657	E9	94.1	47.5	700	28.87		A187
	1200	460	364T	W575	364THFS9086	\$7,677	E9	93.6	50.0	950	31.50	NP	A188
50	3600	460	326TS	W577	326TSHFS9001	\$6,584	E9	93.6	58.0	725	28.87		A187
	1800	460	326T	W580 ★	326THFS9026	\$5,720	E9	94.5	60.0	775	30.37		A187
	1200	460	365T	W582 ★	365THFS9086	\$8,816	E9	93.6	61.5	975	32.50	NP	A188
60	3600	460	364TS	W584 ★	364TSHFS9001	\$7,969	E9	94.5	67.0	925	29.38		A189
	1800	460	364T	W587 ★	364THFS9036	\$7,549	E9	95.0	69.0	1000	31.50		A188
	1800	460	364TS	W586	364TSHFS9026	\$7,549	E9	95.0	69.0	1000	29.38		A189
	1200	460	404T	W589	404THFS9086	\$10,330	E9	94.5	72.0	1156	35.62		A190
75	3600	460	365TS	W591 ★	365TSHFS9001	\$10,007	E9	94.5	84.0	1002	30.38		A189
	1800	460	365T	W594 ★	365THFS9036	\$9,571	E9	95.4	86.0	1100	32.50		A188
	1800	460	365TS	W593	365TSHFS9026	\$9,571	E9	95.4	86.0	1100	30.38		A189
	1200	460	405TS	W596	405THFS9086	\$12,159	E9	94.5	90.0	1280	37.12		A190
100	3600	460	405TS	W598 ★	405TSHFS9001	\$13,409	E9	95.0	108	1295	34.12		A191
	1800	460	405T	W600 ★	405THFS9036	\$11,824	E9	95.4	113	1330	37.12		A190
	1800	460	405TS	W599	405TSHFS9026	\$11,824	E9	95.4	113	1330	34.12		A191
	1200	460	444T	W602	-----	\$17,931	E9	95.0	119	1700	41.25		
125	3600	460	444TS	W604	444TSHFS9001	\$17,530	E9	95.4	136	1725	37.50		A193
	1800	460	444T	W606	444THFS9036	\$15,566	E9	95.4	141	1725	41.25		A192
	1200	460	445T	W608	445THFN9086	\$20,412	E9	95.0	155	2000	43.19		A192
150	3600	460	445TS	W610	445TSHFN9001	\$21,058	E9	95.8	165	2187	39.37	SL	A195
	1800	460	445T	W612 ★	445THFN9036	\$18,096	E9	95.8	172	2070	43.19		A194
	1200	460	445T	W614	445THFN9087	\$22,839	E9	95.8	181	2500	43.19	H, RB	A194
200	3600	460	445TS	W616	445TSHFN9005	\$26,639	E9	95.8	223	2300	39.37	H, SL	A195
	1800	460	445T	W618	445THFN9038	\$22,009	E9	96.2	226	2437	43.19	RB	A194
	1800	460	445TS	W617	445TSHFN9028	\$22,009	E9	96.2	226	2700	39.37		A195
	1800	460	447/9T	W620	-----	\$25,310	E9	96.5	225	2700	51.69	RB	
	1200	460	447/9T	W621	449THFS19092	\$27,957	E9	95.8	225	2927	51.84		
	1200	460	447/9T	W622	449THFS9088	\$27,957	E9	95.8	240	2927	51.69	RB	
250	3600	460	447/9TS	W624	449TSHFS9003	\$33,596	E9	96.5	274	2700	47.94	SL	
	1800	460	445T	W625	-----	\$27,612	E9	95.8	285	2450	43.19	RB, SL, H	
	1800	460	447/9T	W626	449THFS9028	\$31,755	E9	96.5	285	2830	51.69	SL	
	1800	460	447/9T	W627	-----	\$31,755	E9	96.5	285	2830	51.69	RB, SL	
	1200	460	447/9T	W629	-----	\$32,138	E9	95.8	300	3415	51.69	RB	
	1200	460	447/9T	W628	-----	\$32,138	E9	95.8	300	3415	51.69		
300	3600	460	447/9TS	W631	-----	\$43,547	E9	96.2	330	2700	47.94	SL	
	1800	460	447/9T	W632	449THFS9027	\$32,390	E9	96.5	339	3211	51.84	SL	
	1800	460	447/9T	W633	-----	\$32,390	E9	96.5	339	3211	51.69	SL, RB	
350	3600	460	447/9TS	W634	449TSHFS9001	\$49,938	E9	96.2	382	3064	47.94	SL	
	1800	460	447/9T	W635	449THFS9036	\$41,174	E9	96.2	395	3350	51.84	RB, SL	

DEFINITE PURPOSE

Blue shaded areas are Cast Iron Frames

★ Stock Model

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet or exceed U.S. EPA and/or NRC Canadian standards.

Footnotes:

- H Class H insulation
- NP Does not meet NEMA Premium efficiency
- RB Roller Bearing on shaft end for belted load only
- SL Sound level exceeds standards

Automotive Duty, T-Frame, Ford EM-1

Three Phase, Totally Enclosed, Rigid Base

Applications: For use in plants that require automotive approved motors. These motors are designed to meet the mechanical and electrical requirements of Ford EM-1 T-Frame specifications.

- Features:**
- Meets or exceeds NEMA Premium® efficiencies, except where noted
 - Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
 - Provisions to add stub shaft for an encoder (182T-449T, TEFC only)
 - Internal and external epoxy paint
 - MAX GUARD® Class F insulation system
 - 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
 - Bearing caps (254T and larger)
 - Precision balanced
 - Extended grease tubes, regreasable in service
 - Brass drain and breather
 - Meets IEEE45 USCG Marine Duty, IP54 Construction
 - Meets Ford EM1 Automotive Duty Specification
 - Hazardous Duty™ Division 2 CSA certification nameplate, for hazardous locations, Class I, Groups A, B, C, and D
 - Meets temperature code T2B
 - Actual test and vibration data supplied with each motor
 - Ball bearings, except where noted
 - UL Recognized (through 449T) CSA Certified
 - Three year warranty

Available with Nameplate Modification (through 40 HP):

- 2:1, 20:1, or 1000:1 Constant Torque, 1.0 Service Factor on IGBT (PWM) power
- 1.25 Service Factor through 40 HP (sinewave only)
- 50HZ at same HP, 1.0 Service Factor through 40 HP (sinewave only)
- Contact Marathon Electric for optional nameplate markings on 50 HP and larger



Suitable for use on VFD per guidelines on page 14.

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGHT. LBS.	"C" DIM.	FOOT NOTES	C FACE KITS
3/4	1200	460	143T	E648 ★	143TTTN6576	\$561	E9	80.0	1.4	53	10.43	N,75,76	A603
1	1800	460	143T	E649 ★	143TTTN6526	\$458	E9	85.5	1.5	55	10.43	N,75,76	A603
	1200	460	145T	E650 ★	145TTTN6576	\$576	E9	80.0	1.65	60	11.43	N,NP,75,76	A655
1 1/2	3600	460	143T	E651 ★	143TTTN6501	\$573	E9	86.5	2.0	58	10.43	N,75,76	A603
	1800	460	145T	E652 ★	145TTTN6526	\$497	E9	84.0	2.2	65	11.43	N,NP,75,76	A655
	1200	460	182T	E632 ★	182TTTS6576	\$737	E9	87.5	2.2	100	12.71	N,75,76	A644
2	3600	460	145T	E653 ★	145TTTN6501	\$601	E9	85.5	2.5	68	11.43	N,75,76	A655
	1800	460	145T	E654 ★	145TTTN6527	\$546	E9	85.5	3.0	68	11.43	N,NP,75,76	A655
	1200	460	184T	E633 ★	184TTTS6576	\$911	E9	88.5	3.0	112	13.71	N,75	A644
3	3600	460	182T	E601 ★	182TTTS6501	\$825	E9	87.5	3.8	98	12.71	N,75	A644
	1800	460	182T	E616 ★	182TTTS6526	\$740	E9	90.2	4.0	102	12.71	N,75	A644
	1200	460	213T	E634 ★	213TTFS6576	\$1,122	E9	89.5	4.4	176	18.22	75	A206
5	3600	460	184T	E602 ★	184TTFS6501	\$917	E9	89.5	5.9	142	16.19	75	A644
	1800	460	184T	E617 ★	184TTFS6526	\$858	E9	90.2	6.2	130	16.19	75	A644
	1200	460	215T	E635 ★	215TTFS6576	\$1,378	E9	89.5	6.9	202	19.72	75	A206
7 1/2	3600	460	213T	E603 ★	213TTTS6501	\$1,108	E9	91.7	8.9	200	17.19	N,75	A206
	1800	460	213T	E618 ★	213TTFS6526	\$1,051	E9	91.7	9.6	200	19.72	75	A206
	1200	460	254T	E636 ★	254TTFNA6576	\$1,786	E9	91.0	9.9	326	23.52	75	A284
10	3600	460	215T	E604 ★	215TTFS6501	\$1,293	E9	91.7	11.8	218	19.72	75	A206
	1800	460	215T	E619 ★	215TTFS6526	\$1,266	E9	91.7	12.5	225	19.72	75	A206
	1200	460	256T	E637 ★	256TTFNA6576	\$2,182	E9	91.0	13.1	405	25.27	75	A284
15	3600	460	254T	E605 ★	254TTFNA6501	\$1,732	E9	91.7	17.5	345	23.52	75	A284
	1800	460	254T	E620 ★	254TTFNA6526	\$1,626	E9	92.4	18.8	350	23.52	75	A284
	1200	460	284T	E638 ★	284TTFNA6576	\$2,896	E9	91.7	20.4	479	26.34	75	A618

Blue shaded areas are Cast Iron Frames

★ Stock Model

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet or exceed U.S. EPCAct and/or NRCAN Canadian standards.

FOOTNOTES:

- N Totally Enclosed, Non-ventilated
- NP Does not meet NEMA Premium efficiency
- 75 Addition of C Face Kits may result in non-NEMA "BA" dimension. For the resulting "BA" dimension consult chart found in modification section.
- 76 Addition of C Face Kits in non-NEMA "AH" dimension. "AH" is 2.12, "Rework AH" is 2.38.

Continued on next page.

DEFINITE PURPOSE

Automotive Duty, T-Frame, Ford EM-1

Three Phase, Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KITS
20	3600	460	256T	E606 ★	256TTFNA6501	\$2,146	E9	92.4	23.4	375	25.27	75	A284
	1800	460	256T	E621 ★	256TTFNA6526	\$2,026	E9	93.0	24.1	425	25.27	75	A284
	1200	460	286T	E639 ★	286TTFNA6576	\$3,528	E9	91.7	26.8	550	27.84		A618
25	3600	460	284TS	E607 ★	284TSTFNA6501	\$2,644	E9	93.6	28.1	481	24.97		A618
	1800	460	284T	E622 ★	284TTFNA6526	\$2,413	E9	93.6	31.0	478	26.34		A618
	1200	460	324T	E640 ★	324TTFS6576	\$4,276	E9	93.0	32.5	675	28.87		A214
30	3600	460	286TS	E608 ★	286TSTFNA6501	\$3,087	E9	93.6	34.1	500	26.47		A618
	1800	460	286T	E623 ★	286TTFNA6526	\$2,805	E9	94.1	36.5	525	27.84		A618
	1200	460	326T	E641 ★	326TTFS6576	\$4,926	E9	93.0	38.5	725	30.37		A214
40	3600	460	324TS	E609 ★	324TSTFS6501	\$4,072	E9	93.6	47.0	656	27.37		A214
	1800	460	324T	E624 ★	324TTFS6526	\$3,726	E9	94.1	47.5	700	30.37		A214
	1200	460	364T	E642 ★	364TTFS6586	\$6,675	E9	93.6	50.0	950	31.50	NP	A395
50	3600	460	326TS	E610 ★	326TSTFS6501	\$5,268	E9	93.6	58.0	725	28.87		A214
	1800	460	326T	E625 ★	326TTFS6526	\$4,576	E9	94.5	60.0	775	31.87		A214
	1800	460	326TS	E453	326TSTFS6536	\$4,576	E9	94.5	60.0	775	28.87		A214
	1200	460	365T	E643 ★	365TTFS6586	\$7,666	E9	93.6	61.5	955	32.50	NP	A395
60	3600	460	364TS	E611 ★	364TSTFS6501	\$6,929	E9	94.5	67.0	954	29.38		A396
	1800	460	364T	E626 ★	364TTFS6536	\$6,565	E9	95.0	69.0	980	31.50		A395
	1800	460	364TS	E454	364TSTFS6526	\$6,565	E9	95.0	69.0	980	29.38		A396
	1200	460	404T	E644 ★	404TTFS6586	\$8,982	E9	94.5	72.0	1156	35.62		A223
75	3600	460	365TS	E612 ★	365TSTFS6501	\$8,702	E9	94.5	84.0	1002	30.38		A396
	1800	460	365T	E627 ★	365TTFS6536	\$8,322	E9	95.4	86.0	1100	32.50		A395
	1800	460	365TS	E455 ★	365TSTFS6526	\$8,322	E9	95.4	86.0	1100	30.38		A396
	1200	460	405T	E645 ★	405TTFS6586	\$10,574	E9	94.5	90.0	1280	37.12		A223
100	3600	460	405TS	E613 ★	405TSTFS6501	\$11,660	E9	95.0	108	1295	34.12		A226
	1800	460	405T	E628 ★	405TTFS6536	\$10,282	E9	95.4	113	1330	37.12		A223
	1800	460	405TS	E456 ★	405TSTFS6526	\$10,282	E9	95.4	113	1330	34.12		A226
	1800	460	444T	E327	444TTFN16577	\$14,451	E9	95.0	124	1970	41.25		A620
	1200	460	444T	E646 ★	444TTFS6586	\$14,451	E9	94.5	119	1690	41.25	d	A229
125	3600	460	444TS	E614 ★	444TSTFS6501	\$15,243	E9	95.4	136	1725	37.50		A232
	1800	460	444T	E629 ★	444TTFS6536	\$13,535	E9	95.4	141	1725	41.25		A229
	1800	460	444TS	E457 ★	444TSTFS6526	\$13,535	E9	95.4	141	1725	37.50		A232
	1200	460	445T	E647 ★	445TTFN6586	\$17,750	E9	95.0	155	2000	43.26		A620
150	3600	460	445TS	E615 ★	445TSTFN6501	\$18,311	E9	95.8	165	2187	39.44		A621
	1800	460	445T	E630 ★	445TTFN6536	\$15,736	E9	95.8	172	2070	43.26		A620
	1800	460	445TS	E458 ★	445TSTFN6526	\$15,736	E9	95.8	172	2070	39.44		A621
	1200	460	445T	E448 ★	445TTFN6587	\$19,859	E9	95.8	180	2500	43.26	H, RB	N/A
200	3600	460	445TS	E449 ★	445TSTFN6505	\$23,164	E9	95.8	222	2300	39.44	H	A621
	1800	460	445T	E631 ★	445TTFN6538	\$19,138	E9	96.2	226	2437	43.26	RB	N/A
	1800	460	445TS	E459 ★	445TSTFN6528	\$19,138	E9	96.2	226	2437	39.44	H	A621
	1800	460	447/9T	E854	449TTFS6540	\$22,009	E9	96.5	225	2700	51.69	H, RB	N/A
	1200	460	447/9T	E773 ★	449TTFS6578	\$24,311	E9	95.8	240	2927	51.69	H	A623
	1200	460	447/9T	E687 ★	449TTFS6588	\$24,311	E9	95.8	240	2927	51.69	H, RB	N/A
250	3600	460	447/9TS	E699	449TSTFS6503	\$29,214	E9	96.5	274	2700	47.88	H	A624
	1800	460	445T	E450	445TTFN6540	\$24,011	E9	95.8	285	2450	43.26	A, H, RB	N/A
	1800	460	447/9T	E771 ★	449TTFS6528	\$27,612	E9	96.5	285	2830	51.69	H	A623
	1800	460	447/9T	E690 ★	449TTFS6538	\$27,612	E9	96.5	285	2830	51.69	H, RB	N/A
	1200	460	447/9T	E774	449TTFS6577	\$27,946	E9	95.8	300	3415	51.69	H	A623
300	3600	460	447/9TS	E698	449TSTFS6502	\$37,866	E9	96.2	330	2700	47.88	H	A626
	1800	460	447/9T	E691 ★	449TTFS6537	\$30,652	E9	96.5	339	3211	51.69	H, RB	N/A
350	3600	460	447/9TS	E769	449TSTFS6501	\$43,424	E9	96.2	382	3064	47.88	H	A624
	1800	460	447/9T	E692 ★	449TTFS6536	\$35,804	E9	96.2	395	3350	51.69	H, RB	N/A
400	1800	460	L447/9T	E776	449TTFS16553	\$36,759	E9	96.2	448	3800	56.71	H, 79	N/A
450	1800	460	L447/9T	E777	-----	\$37,584	E9	96.5	515	3800	56.71	H, 79	N/A

DEFINITE PURPOSE

Blue shaded areas are Cast Iron Frames

★ Stock Model

Footnotes:

A NEMA Design A
 d Will become build-up item when current stock is gone
 H Class H insulation
 NP Does not meet NEMA Premium efficiency

RB Roller bearing on shaft end for belted loads only
 79 Ball brgs on both ends suitable for direct connection.
 For belted applications, refer to marketing

Blue Chip® Crusher (Aggregate Duty)

Totally Enclosed, Rigid Base, NEMA Design C

Applications: Specifically designed for the aggregate industry crusher applications such as cone, jaw, and roller type impactors, pulverizers, etc.

- Features:**
- Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
 - NEMA Design C
 - 4140 Shaft Material
 - Roller Bearing on Drive End for belted loads
 - 1.15 Service Factor
 - 80° C rise at rated load
 - Class F insulation
 - Inpro® Smart Ring, rotating shaft seals on each end of shaft
 - Internal and external epoxy paint
 - Brass drain and breather
 - Actual test and vibration data supplied with each motor



IP55

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WgHT. LBS.	"C" DIM.	FOOT NOTES
100	1800	460	405T	Y822★	405TTFS8857	\$7,408	E4	93.6	117	1318	37.12	d
125	1800	460	444T	Y824	444TTFS8841	\$10,057	E4	94.5	142	1695	41.25	YD
150	1800	460	445T	Y826★	445TTFS8870	\$11,026	E4	94.1	174	1990	43.25	d
200	1200	460	449T	Y855	449TTFS8576	\$16,465	E4	94.5	245	3098	51.69	YD
250	1200	460	449T	Y857	449TTFS8581	\$21,974	E4	95.4	304	3242	51.69	YD

Blue shaded areas are Cast Iron Frames

★ Stock Model

Footnotes:

- d Will become build-up item when current stock is gone
- YD 12 Leads for Wye Delta, part winding, or across the line starting

Air Compressor, Single Phase

Dripproof, Rigid Base



Applications: For use in compressors, pumps, pressure washers, and other applications requiring high starting and breakdown torques and used in relatively clean and dry environments. For additional ratings suitable for air compressor applications see the General Purpose Single Phase or General Purpose Three Phase sections.

- Features:**
- Capacitor start and capacitor start/capacitor run designs for reduced amperage and high starting and breakdown torque
 - Heavy gauge steel frame and base
 - Ball bearings
 - Continuous duty at nameplated horsepower, not "special" or "compressor" duty
 - Manual reset thermal protectors, as noted
 - UL Recognized and CSA Certified

HP	RPM	VOLTS	FRAME	OVER LOAD	CAT. NO.	MODEL NO.	LIST PRICE	MULT. SYMB.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES
1/2	3600	115/208-230	56	MANUAL	D014	56C34D2107	\$201	F1	8.4/3.8-4.2	18	10.72	2
	1800	115/208-230	56	MANUAL	G912★	56C17D2013	\$266	F1	8.6/4.1-4.3	23	11.72	2
3/4	3600	115/208-230	56	MANUAL	D015	56C34D2094	\$233	F1	9.8/4.8-4.9	19	10.97	2
	1800	115/208-230	56	MANUAL	K016	56B17D56	\$324	F1	11.0/5.5	25	11.47	1
1	3600	115/208-230	56	MANUAL	D010★	56B34D2029	\$267	F1	10.6/5.5-5.3	23	11.72	1
	1800	115/208-230	56	MANUAL	G936★	56C17D5305	\$353	F1	13.4/6.8-6.7	29	11.44	2,7
1 1/2	3600	115/208-230	56	MANUAL	D018★	56B34D133	\$345	F1	14.8/8.0-7.4	26	11.72	1
	1800	115/208-230	56H	MANUAL	G951★	56C17D5308	\$414	F1	18.0/9.3-9.0	40	12.44	2,5,7
2	3600	115/208-230	56H	MANUAL	D012★	56B34D5318	\$432	F1	19.2/10.5-9.6	35	11.53	1,5,7
	1800	115/208-230	145T	MANUAL	I127★	145TBDR5337	\$497	S1	18.8/10.2-9.4	50	13.49	1,7
3	3600	230	56H	MANUAL	D013★	56B34D5332	\$563	F1	14.0	34	11.44	1,5
	1800	230	184T	NONE	Z502★	184TBDR5326	\$520	S1	12.6	55	14.27	1
5	3600	230	184T	NONE	Z504	184TBDR5301	\$730	S1	20.0	62	14.77	1
	3600	230	56H	MANUAL	D017★	56B34D5302	\$599	F1	20.0	55	13.94	1,5
	1800	208-230	184T	MANUAL	I119★	184TBDR7375	\$829	S1	25.0-24.1	83	16.22	1
	1800	208-230	184T	NONE	I114★	184TBDR7026	\$488	S1	23.0-21.0	102	15.70	1
	1800	208-230	184T	NONE	Z506	184TBDR7656	\$625	S1	23.6-21.5	85	15.22	1,CF
7 1/2	3600	208-230	184T	NONE	I108★	184TBDR7001	\$720	S1	34.3-31.0	110	16.69	1,CF
	3600	208-230	213T	NONE	I105★	213TCDW7001	\$974	S1	40.0-37.0	102	16.55	2
	1800	208-230	215T	NONE	I115★	215TBDW7026	\$961	S1	37.2-34.5	118	18.05	1
10	1800	208-230	215T	NONE	I116★	215TBDW7028	\$1,237	S1	49.0-44.0	140	19.3	1

★ Stock Model

DEFINITE PURPOSE

Footnotes:

- CF Consult Factory for Accessory Kit and/or Modification Selection
- 1 Capacitor Start/Capacitor Run design for reduced amperage
- 2 Capacitor Start Induction Run design
- 5 56H, 143T, and 145T Combination Base with 12 mounting holes
- 7 Will accept C-Face kit, see Accessory Section

Continued on next page.