

Premium Severe Duty/Chemical Processing, Three Phase, NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base



Applications:

Chemical plants, paper mills, refineries, mines, food processing, foundries, and other severe duty environments where long life and ultra-high efficiency are desired. Guaranteed efficiencies offer an **eXtra R**eturn on your **I**vestment when using these premium efficiency motors on high cycle or long run applications.

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



IP54

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.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
3/4	1200	460	143T	E648 ★	143TTN6576	1000:1	\$561	E9	80.0	1.4	53	10.43	75,76,N	A603
	1200	460	143T	E373	143TTFN6576	20:1	\$617	E9	80.0	1.4	53	12.92	75,76	A603
1	1800	460	143T	E649 ★	143TTN6526	1000:1	\$458	E9	85.5	1.5	55	10.43	75,76,N	A603
	1800	460	143T	E374	143TTFN6526	20:1	\$504	E9	85.5	1.5	71	12.92	75,76	A603
	1800	230/460	143T	E461 ★	143TTN6563	1000:1	\$458	E9	85.5	3.1/1.5	55	12.95	75,76,N	A603
	1800	230/460	143T	E375	143TTFN6563	20:1	\$504	E9	85.5	3.1/1.5	71	12.95	75,76	A603
	1800	575	143T	E666 ★	143TTN6530	1000:1	\$458	E9	85.5	1.2	55	10.43	75,76,N	A603
	1800	575	143T	E376	143TTFN16539	20:1	\$504	E9	85.5	1.2	71	14.17	75,76	A603
	1200	460	145T	E650 ★	145TTN6576	1000:1	\$576	E9	80.0	1.65	60	11.43	75,76,N,NP	A655
	1200	230/460	145T	E462	145TTN6584	1000:1	\$576	E9	80.0	3.3/1.65	60	11.43	75,76,N,NP	A655
1 1/2	3600	460	143T	E651 ★	143TTN6501	1000:1	\$573	E9	86.5	2.0	58	10.43	75,76,N	A603
	3600	460	143T	E377	143TTFN6501	20:1	\$630	E9	85.5	2.0	64	14.17	75,76	A603
	3600	230/460	143T	E463	143TTN6502	1000:1	\$573	E9	86.5	4.0/2.0	58	10.43	75,76,N	A603
	3600	230/460	143T	E378	143TTFN6502	20:1	\$630	E9	85.5	4.0/2.0	64	14.17	75,76	A603
	3600	575	143T	E851 ★	143TTN6505	1000:1	\$573	E9	86.5	1.6	58	10.43	d,75,76,N	A603
	3600	575	143T	E379	143TTFN6505	20:1	\$630	E9	85.5	1.6	64	14.17	75,76	A603
	1800	460	145T	E652 ★	145TTN6526	1000:1	\$497	E9	84.0	2.2	65	11.43	75,76,N,NP	A655
	1800	230/460	145T	E464 ★	145TTN6834	1000:1	\$497	E9	84.0	4.4/2.2	65	11.43	75,76,N,NP	A655
	1800	575	145T	E667	145TTN6529	1000:1	\$497	E9	84.0	1.8	65	11.43	75,76,N,NP	A655
	1200	460	182T	E632 ★	182TTS6576	1000:1	\$737	E9	87.5	2.2	100	12.71	75,76,N	A644
	1200	460	182T	E380	182TTFN6576	20:1	\$811	E9	87.5	2.2	110	15.19	75	A644
	1200	230/460	182T	E465	182TTS6578	1000:1	\$737	E9	87.5	4.4/2.2	100	12.71	75,N	A644
1200	230/460	182T	E381	182TTFN6578	20:1	\$811	E9	87.5	4.4/2.2	110	15.19	75	A644	
2	3600	460	145T	E653 ★	145TTN6501	1000:1	\$601	E9	85.5	2.5	68	11.43	75,76,N	A655
	3600	460	145T	E382	145TTFN6501	20:1	\$661	E9	85.5	2.0	80	14.17	75,76	A655
	3600	230/460	145T	E466	145TTN6521	1000:1	\$601	E9	85.5	5.0/2.5	68	11.43	75,76,N	A655
	3600	230/460	145T	E383	145TTFN6521	20:1	\$661	E9	85.5	4.0/2.0	80	14.17	75,76	A655
	3600	575	145T	E852	145TTN6505	1000:1	\$601	E9	85.5	2.0	68	11.43	75,76,N	A655
	3600	575	145T	E384	145TTFN6505	20:1	\$661	E9	85.5	1.6	80	14.17	75,76	A655

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. 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

76 Addition of C-Face Kits in non-NEMA "AH" dimension "AH" is 2.12", rework "AH" is 2.38".

Continued on next page.

Premium Severe Duty/Chemical Processing, Three Phase, NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

SEVERE DUTY

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT	
2	1800	460	145T	E654 *	145TTTN6527	1000:1	\$546	E9	85.5	3.0	68	11.43	75,76,N,NP	A655	
	1800	460	145T	E385	145TTFN6527	20:1	\$601	E9	86.5	2.8	68	14.17	75,76	A655	
	1800	230/460	145T	E467 *	145TTTN6835	1000:1	\$546	E9	85.5	6.0/3.0	68	11.43	75,76,N,NP	A655	
	1800	230/460	145T	E386	145TTFN6835	20:1	\$601	E9	86.5	5.6/2.8	68	14.17	75,76	A655	
	1800	575	145T	E668 *	145TTTN6530	1000:1	\$546	E9	85.5	2.4	68	11.43	75,76,N,NP	A655	
	1800	575	145T	E387	145TTFN6530	20:1	\$601	E9	86.5	2.2	68	14.17	75,76	A655	
	1200	460	184T	E633 *	184TTTS6576	1000:1	\$911	E9	88.5	3.0	112	13.71	75,N	A644	
	1200	460	184T	E388	184TTFS6576	20:1	\$1,002	E9	88.5	2.9	110	16.19	75	A644	
	1200	230/460	184T	E468 *	184TTTS6582	1000:1	\$911	E9	88.5	6.0/3.0	112	13.71	75,N	A644	
	1200	230/460	184T	E389	184TTFS6582	20:1	\$1,002	E9	88.5	5.8/2.9	110	16.19	75	A644	
3	3600	460	182T	E601 *	182TTTS6501	1000:1	\$825	E9	87.5	3.8	98	12.71	75,N	A644	
	3600	460	182T	E390	182TTFS6501	20:1	\$908	E9	87.5	3.8	105	15.19	75	A644	
	3600	230/460	182T	E391	182TTFS6519	20:1	\$908	E9	87.5	7.6/3.8	105	15.19	75	A644	
	3600	575	182T	E853	182TTTS6505	1000:1	\$825	E9	87.5	3.0	105	12.71	75,N	A644	
	3600	575	182T	E392	182TTFS6505	20:1	\$908	E9	87.5	3.0	105	21.57	75	A644	
	1800	460	182T	E616 *	182TTTS6526	1000:1	\$740	E9	90.2	4.0	102	12.71	75,N	A644	
	1800	460	182T	E393	182TTFS6526	20:1	\$814	E9	90.7	4.0	110	15.94	75	A644	
	1800	230/460	182T	E470 *	182TTTS6538	1000:1	\$740	E9	90.2	8.0/4.0	102	12.71	75,N	A644	
	1800	230/460	182T	E394	182TTFS6538	20:1	\$814	E9	90.7	8.0/4.0	110	15.94	75	A644	
	1800	575	182T	E669 *	182TTTS6530	1000:1	\$740	E9	90.2	3.2	102	12.71	75,N	A644	
	1800	575	182T	E395	182TTFS6530	20:1	\$814	E9	90.7	3.2	110	15.94	75	A644	
	1200	460	213T	E634 *	213TTFS6576	20:1	\$1,122	E9	89.5	4.4	176	18.22	75	A206	
	1200	230/460	213T	E471 *	213TTFS6594	20:1	\$1,122	E9	89.5	8.8/4.4	176	18.22	75	A206	
	5	3600	460	184T	E602 *	184TTFS6501	2:1	\$917	E9	89.5	5.9	142	16.19	75	A644
3600		230/460	184T	E472 *	184TTFS6810	2:1	\$917	E9	89.5	11.8/5.9	142	16.19	75	A644	
3600		575	184T	E655 *	184TTFS6505	20:1	\$917	E9	89.5	4.7	142	16.19	75	A644	
1800		460	184T	E617 *	184TTFS6526	20:1	\$858	E9	90.2	6.2	130	16.19	75	A644	
1800		230/460	184T	E473 *	184TTFS6844	20:1	\$858	E9	90.2	12.4/6.2	130	16.19	75	A644	
1800		575	184T	E670 *	184TTFS6530	20:1	\$858	E9	90.2	5.0	130	16.19	75	A644	
1200		460	215T	E635 *	215TTFS6576	20:1	\$1,378	E9	89.5	6.9	202	19.72	75	A206	
1200		230/460	215T	E474 *	215TTFS6881	20:1	\$1,378	E9	89.5	13.8/6.9	202	19.72	75	A206	
1200		575	215T	E683 *	215TTFS6580	20:1	\$1,378	E9	89.5	5.5	202	19.72	d,75	A206	
7 1/2		3600	460	213T	E603 *	213TTTS6501	1000:1	\$1,108	E9	91.7	8.9	200	17.19	75,N	A206
	3600	460	213T	E396	213TTFS6501	2:1	\$1,219	E9	89.5	8.9	175	19.72	75	A206	
	3600	230/460	213T	E475 *	213TTTS6502	1000:1	\$1,108	E9	91.7	17.8/8.9	200	17.19	75,N	A206	
	3600	230/460	213T	E397	213TTFS6502	2:1	\$1,219	E9	89.5	17.8/8.9	175	18.22	75	A206	
	3600	575	213T	E656 *	213TTTS6505	1000:1	\$1,108	E9	91.7	7.1	200	17.19	75,N	A206	
	3600	575	213T	E398	213TTFS6505	2:1	\$1,219	E9	89.5	7.1	175	18.22	75	A206	
	1800	460	213T	E618 *	213TTFS6526	20:1	\$1,051	E9	91.7	9.6	200	19.72	75	A206	
	1800	230/460	213T	E476 *	213TTFS6531	20:1	\$1,051	E9	91.7	19.2/9.6	200	19.72	75	A206	
	1800	575	213T	E671 *	213TTFS6530	20:1	\$1,051	E9	91.7	7.7	200	19.72	75	A206	
	1200	460	254T	E636 *	254TTFNA6576	20:1	\$1,786	E9	91.0	9.9	326	23.52	75	A284	
	1200	230/460	254T	E477 *	254TTFNA6590	20:1	\$1,786	E9	91.0	19.8/9.9	326	23.52	75	A284	
	1200	575	254T	E684	254TTFNA6578	20:1	\$1,786	E9	91.0	7.9	326	23.52	75	A284	
	10	3600	460	215T	E604 *	215TTFS6501	2:1	\$1,293	E9	91.7	11.8	218	19.72	75	A206
		3600	230/460	215T	E478 *	215TTFS6807	2:1	\$1,293	E9	91.7	23.6/11.8	218	19.72	75	A206
3600		575	215T	E657	215TTFS6505	2:1	\$1,293	E9	91.7	9.5	218	19.72	75	A206	
1800		460	215T	E619 *	215TTFS6526	20:1	\$1,266	E9	91.7	12.5	225	19.72	75	A206	
1800		230/460	215T	E479 *	215TTFS6527	20:1	\$1,266	E9	91.7	25.0/12.5	225	19.72	75	A206	
1800		575	215T	E672 *	215TTFS6530	20:1	\$1,266	E9	91.7	10.0	225	19.72	75	A206	
1200		460	256T	E637 *	256TTFNA6576	20:1	\$2,182	E9	91.0	13.1	405	25.27	75	A284	
1200		230/460	256T	E480 *	256TTFNA6596	20:1	\$2,182	E9	91.0	26.2/13.1	405	25.27	75	A284	
1200		575	256T	E685	256TTFNA6578	20:1	\$2,182	E9	91.0	10.5	405	25.27	75	A284	

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Premium Severe Duty/Chemical Processing, Three Phase NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
15	3600	460	254T	E605 *	254TTFNA6501	2:1	\$1,732	E9	91.7	17.5	345	23.52	75	A284
	3600	230/460	254T	E481 *	254TTFNA6515	2:1	\$1,732	E9	91.7	35.0/17.5	345	23.52	75	A284
	3600	575	254T	E658	254TTFNA6503	2:1	\$1,732	E9	91.7	14.2	345	23.52	75	A284
	1800	460	254T	E620 *	254TTFNA6526	20:1	\$1,626	E9	92.4	18.8	350	23.52	75	A284
	1800	230/460	254T	E482 *	254TTFNA6529	20:1	\$1,626	E9	92.4	37.6/18.8	350	23.52	75	A284
	1800	575	254T	E673 *	254TTFNA6528	20:1	\$1,626	E9	92.4	15.0	350	23.52	75	A284
	1200	460	284T	E638 *	284TTFNA6576	20:1	\$2,896	E9	91.7	20.4	479	26.34		A618
	1200	230/460	284T	E483 *	284TTFNA6876	20:1	\$2,896	E9	91.7	40.8/20.4	479	26.34		A618
	1200	575	284T	E694 *	284TTFNA6580	20:1	\$2,896	E9	91.7	16.3	479	26.34	d	A618
20	3600	460	256T	E606 *	256TTFNA6501	2:1	\$2,146	E9	92.4	23.4	375	25.27	75	A284
	3600	230/460	256T	E484	256TTFNA6523	2:1	\$2,146	E9	92.4	47.0/23.4	375	25.27	75	A284
	3600	575	256T	E659 *	256TTFNA6503	2:1	\$2,146	E9	92.4	18.7	375	25.27	75	A284
	1800	460	256T	E621 *	256TTFNA6526	20:1	\$2,026	E9	93.0	24.1	425	25.27	75	A284
	1800	230/460	256T	E485 *	256TTFNA6529	20:1	\$2,026	E9	93.0	48.2/24.1	425	25.27	75	A284
	1800	575	256T	E674 *	256TTFNA6528	20:1	\$2,026	E9	93.0	19.3	425	25.27	75	A284
	1200	460	286T	E639 *	286TTFNA6576	20:1	\$3,528	E9	91.7	26.8	550	27.84		A618
	1200	230/460	286T	E486	286TTFNA6876	20:1	\$3,528	E9	91.7	53.5/26.8	550	27.84		A618
	1200	575	286T	E695	286TTFNA6580	20:1	\$3,528	E9	91.7	21.4	550	27.84		A618
25	3600	460	284TS	E607 *	284TSTFNA6501	2:1	\$2,644	E9	93.6	28.1	481	24.97		A618
	3600	575	284TS	E660 *	284TSTFNA6502	2:1	\$2,644	E9	93.6	22.5	481	24.97		A618
	1800	460	284T	E622	284TTFNA6526	20:1	\$2,413	E9	93.6	31.0	478	26.34		A618
	1800	230/460	284T	E488 *	284TTFNA6837	20:1	\$2,413	E9	93.6	62.0/31.0	478	26.34		A618
	1800	575	284T	E675 *	284TTFNA6527	20:1	\$2,413	E9	93.6	24.8	478	26.34		A618
	1200	460	324T	E640 *	324TTFS6576	20:1	\$4,276	E9	93.0	32.5	675	28.87		A214
	1200	575	324T	E696	324TTFS6577	20:1	\$4,276	E9	93.0	26.0	675	28.87		A214
30	3600	460	286TS	E608 *	286TSTFNA6501	2:1	\$3,087	E9	93.6	34.1	500	26.47		A618
	3600	230/460	286TS	E490 *	286TSTFNA6804	2:1	\$3,087	E9	93.6	67.5/34.0	500	26.47		A618
	1800	460	286T	E623 *	286TTFNA6526	20:1	\$2,805	E9	94.1	36.5	525	27.84		A618
	1800	230/460	286T	E491 *	286TTFNA6570	20:1	\$2,805	E9	94.1	73.0/36.5	525	27.84		A618
	1800	575	286T	E676 *	286TTFNA6527	20:1	\$2,805	E9	94.1	29.2	525	27.84		A618
	1200	460	326T	E641 *	326TTFS6576	20:1	\$4,926	E9	93.0	38.5	725	30.37		A214
	1200	575	326T	E400	326TTFS6580	20:1	\$4,926	E9	93.0	31.0	725	30.37		A214
40	3600	460	324TS	E609 *	324TSTFS6501	2:1	\$4,072	E9	93.6	47.0	656	27.37		A214
	3600	575	324TS	E662	324TSTFS6505	2:1	\$4,072	E9	93.6	37.5	656	27.37		A214
	1800	460	324T	E624 *	324TTFS6526	20:1@	\$3,726	E9	94.1	47.5	700	30.37		A214
	1800	575	324T	E677 *	324TTFS6527	20:1@	\$3,726	E9	94.1	38.0	700	30.37	d	A214
	1200	460	364T	E642 *	364TTFS6586	20:1@	\$6,675	E9	93.6	50.0	950	31.50	NP	A395
	1200	575	364T	E401	364TTFS6590	20:1@	\$6,675	E9	93.6	40.0	950	31.50	NP	A395
50	3600	460	326TS	E610 *	326TSTFS6501	2:1	\$5,268	E9	93.6	58.0	725	28.87		A214
	3600	575	326TS	E663	326TSTFS6502	2:1	\$5,268	E9	93.6	46.5	725	28.87		A214
	1800	460	326T	E625 *	326TTFS6526	20:1@	\$4,576	E9	94.5	60.0	775	31.87		A214
	1800	460	326TS	E453	326TSTFS6536	20:1@	\$4,576	E9	94.5	60.0	775	28.87		A214
	1800	575	326T	E678 *	326TTFS6527	20:1@	\$4,576	E9	94.5	48.0	775	30.37		A214
	1200	460	365T	E643 *	365TTFS6586	20:1@	\$7,666	E9	93.6	61.5	955	32.50	NP	A395
	1200	575	365T	E402	365TTFS6590	20:1@	\$7,666	E9	93.6	49.0	955	32.50	NP	A395
60	3600	460	364TS	E611 *	364TSTFS6501	2:1	\$6,929	E9	94.5	67.0	954	29.38		A396
	3600	575	364TS	E664	364TSTFS6505	2:1	\$6,929	E9	94.5	53.5	954	29.38		A396
	1800	460	364T	E626 *	364TTFS6536	20:1@	\$6,565	E9	95.0	69.0	980	31.50		A395
	1800	460	364TS	E454	364TSTFS6526	20:1@	\$6,565	E9	95.0	69.0	980	29.38		A396
	1800	575	364T	E679 *	364TTFS6537	20:1@	\$6,565	E9	95.0	55.0	980	31.50		A395

Blue shaded areas are Cast Iron Frames

* Stock Model

* Requires nameplate modification
@ Requires larger fan

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

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

Premium Severe Duty/Chemical Processing, Three Phase NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

SEVERE DUTY

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
60	1200	460	404T	E644 ★	404TTFS6586	20:1@	\$8,982	E9	94.5	72.0	1156	35.62		A223
	1200	575	404T	E403	404TTFS6592	20:1@	\$8,982	E9	94.5	57.5	1156	35.62		A223
75	3600	460	365TS	E612 ★	365TSTFS6501	2:1	\$8,702	E9	94.5	84.0	1002	30.38		A396
	3600	575	365TS	E665 ★	365TSTFS6502	2:1	\$8,702	E9	94.5	67.0	1002	30.38		A396
	1800	460	365T	E627 ★	365TTFS6536	20:1@	\$8,322	E9	95.4	86.0	1100	32.50		A395
	1800	460	365TS	E455 ★	365TSTFS6526	20:1@	\$8,322	E9	95.4	86.0	1100	30.38		A396
	1800	575	365T	E680	365TTFS6537	20:1@	\$8,322	E9	95.4	69.0	1100	32.50		A395
	1200	460	405T	E645 ★	405TTFS6586	20:1@	\$10,574	E9	94.5	90.0	1280	37.12		A223
	1200	575	405T	E404	405TTFS6587	20:1@	\$10,574	E9	94.5	71.5	1280	37.12		A223
100	3600	460	405TS	E613 ★	405TSTFS6501	2:1	\$11,660	E9	95.0	108	1295	34.12		A226
	3600	575	405TS	E493	405TSTFS6502	2:1	\$11,660	E9	95.0	87.0	1295	34.12		A226
	1800	460	405T	E628 ★	405TTFS6536	20:1@	\$10,282	E9	95.4	113	1330	37.12		A223
	1800	460	405TS	E456 ★	405TSTFS6526	20:1@	\$10,282	E9	95.4	113	1330	34.12		A226
	1800	575	405T	E681 ★	405TTFS6538	20:1@	\$10,282	E9	95.4	90.5	1330	37.12		A223
	1800	460	444T	E327	444TTFN16577	20:1@	\$14,451	E9	95.0	124	1970	41.25		A620
	1200	460	444T	E646 ★	444TTFS6586	20:1@	\$14,451	E9	94.5	119	1690	41.25	NP	A229
	1200	575	444T	E405	444TTFS6590	20:1@	\$14,451	E9	94.5	94.5	1690	41.25	NP	A229
	125	3600	460	444TS	E614 ★	444TSTFS6501	2:1	\$15,243	E9	95.4	136	1725	37.50	
3600		575	444TS	E494	444TSTFS6505	2:1	\$15,243	E9	95.4	109	1725	37.50		A232
1800		460	444T	E629 ★	444TTFS6536	20:1@	\$13,535	E9	95.4	141	1725	41.25		A229
1800		460	444TS	E457 ★	444TSTFS6526	20:1@	\$13,535	E9	95.4	141	1725	37.50		A232
1800		575	444T	E697	444TTFS6540	20:1@	\$13,535	E9	95.4	113	1725	41.25		A229
1200		460	445T	E647 ★	445TTFN6586	20:1@	\$17,750	E9	95.0	155	2000	43.26		A620
1200		575	445T	E406	445TTFN6590	20:1@	\$17,750	E9	95.0	124	2000	43.26		A620
150		3600	460	445TS	E615 ★	445TSTFN6501	2:1	\$18,311	E9	95.8	165	2187	39.44	
	3600	575	445TS	E495	445TSTFN6502	2:1	\$18,311	E9	95.8	132	2187	39.44		A621
	1800	460	445T	E630 ★	445TTFN6536	20:1@	\$15,736	E9	95.8	172	2070	43.26		A620
	1800	460	445TS	E458 ★	445TSTFN6526	20:1@	\$15,736	E9	95.8	172	2070	39.44		A621
	1800	575	445T	E682	445TTFN6537	20:1@	\$15,736	E9	95.8	138	2070	43.26		A620
	1200	460	445T	E448 ★	445TTFN6587	20:1@	\$19,859	E9	95.8	180	2500	43.26	H, RB	N/A
	1200	575	445T	E407	445TTFN6591	20:1@	\$19,859	E9	95.8	145	2500	43.26	RB	N/A
	200	3600	460	445TS	E449 ★	445TSTFN6505	2:1	\$23,164	E9	95.8	222	2300	39.44	H
3600		575	445TS	E496	445TSTFN6506	2:1	\$23,164	E9	95.8	178	2300	39.44		A621
1800		460	445T	E631 ★	445TTFN6538	20:1@	\$19,138	E9	96.2	226	2437	43.26	RB	N/A
1800		460	445TS	E459 ★	445TSTFN6528	20:1@	\$19,138	E9	96.2	226	2437	39.44	H	A621
1800		460	447/9T	E770 ★	449TTFS6530	20:1@	\$22,009	E9	96.5	225	2700	51.69	H	A623
1800		460	447/9T	E854 ★	449TTFS6540	20:1@	\$22,009	E9	96.5	225	2700	51.69	H, RB	N/A
1800		575	447/9T	E856 ★	449TTFS6564	20:1@	\$22,009	E9	96.5	180	2700	51.69	H, RB	N/A
1200		460	447/9T	E773 ★	449TTFS6578	20:1@	\$24,311	E9	95.8	240	2927	51.69	H	A623
1200		460	447/9T	E687 ★	449TTFS6588	20:1@	\$24,311	E9	95.8	240	2927	51.69	H, RB	N/A
1200		575	447/9T	E408	449TTFS6582	20:1@	\$24,311	E9	95.8	192	2927	51.69	H, RB	N/A
250		3600	460	447/9TS	E699	449TSTFS6503	2:1	\$29,214	E9	96.5	274	2700	47.88	H
	1800	460	445T	E450	445TTFN6540	20:1@	\$24,011	E9	95.8	285	2450	43.26	A, H, RB	N/A
	1800	460	447/9T	E771 ★	449TTFS6528	20:1@	\$27,612	E9	96.5	285	2830	51.69	H	A623
	1800	460	447/9T	E690 ★	449TTFS6538	20:1@	\$27,612	E9	96.5	285	2830	51.69	H, RB	N/A
	1200	460	447/9T	E774	449TTFS6577	20:1@	\$27,946	E9	95.8	300	3415	51.69	H	A623
	1200	460	447/9T	E688	449TTFS6587	20:1@	\$27,946	E9	95.8	300	3415	51.69	H, RB	N/A

Blue shaded areas are Cast Iron Frames

★ Stock Model

* Requires nameplate modification
@ Requires larger fan

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

Footnotes:

- A NEMA Design A
- H Class H Insulation
- NP Does not meet NEMA Premium® efficiency
- RB Roller Bearing on shaft end for belted loads only

Continued on next page.

Premium Severe Duty/Chemical Processing, Three Phase NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
300	3600	460	447/9TS	E698	449TSTFS6502	2:1	\$37,866	E9	96.2	330	2700	47.88	H	A626
	1800	460	447/9T	E691 ☆	449TTFS6537	20:1@	\$30,652	E9	96.5	339	3211	51.69	H,RB	N/A
	1800	460	447/9T	E772	449TTFS6527	20:1@	\$30,652	E9	96.5	339	3211	51.69	H	A623
	1800	575	447/9T	E345	449TTFS16534	20:1@	\$30,652	E9	96.5	271	3211	51.69	H,RB	N/A
	1200	460	5011LS	E360	-----	N/A	\$55,980	S6	95.8	355	5500	67.19	77,79,90	N/A
350	3600	460	447/9TS	E769	449TSTFS6501	2:1	\$43,424	E9	96.2	382	3064	47.88	H	A624
	1800	460	447/9T	E692 ☆	449TTFS6536	20:1@	\$35,804	E9	96.2	395	3350	51.69	H,RB	N/A
	1200	460	5011LS	E361	-----	N/A	\$60,474	S6	95.8	410	5500	67.19	77,79,90	N/A
400	3600	460	5011S	E369	-----	N/A	\$51,543	S6	95.8	432	5500	67.19	90	N/A
	1800	460	L447/9T	E776	449TTFS16553	20:1@	\$36,759	E9	96.2	448	3800	56.71	H,79	N/A
	1200	460	5011LS	E362	-----	N/A	\$64,470	S6	95.8	468	5500	67.19	77,79,90	N/A
450	1800	460	L447/9T	E777	-----	N/A	\$37,584	E9	96.5	515	3800	56.71	H,79	N/A
	1200	460	5013LS	E363	5013LSTFS6595	N/A	\$85,984	S6	96.2	525	7200	67.19	A,77,79,90	N/A
500	1800	460	5011LS	E364	5011LSTFS16031	N/A	\$59,263	S6	96.2	555	5500	67.19	77,79,90	N/A
	1200	460	5013LS	E365	-----	N/A	\$87,202	S6	96.2	580	7200	76.19	78,79,90	N/A
600	1800	460	5011LS	E366	5011LSTFS16033	N/A	\$70,218	S6	96.2	655	5500	67.19	A,77,79,90	N/A
700	1800	460	5013LS	E368	-----	N/A	\$102,291	S6	96.5	800	7200	76.19	A,78,79,90	N/A

Blue shaded areas are Cast Iron Frames

☆ **Stock Model*** **Requires nameplate modification**
@ **Requires larger fan**

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

Footnotes:

- A NEMA Design A
- H Class H Insulation
- RB Roller Bearing on shaft end for belted loads only
- 17 1.0 Service Factor
- 77 Frame size is drilled with three sets of footholes, 5010, 5011, and 5012 as standard. Foothole drilling for 5009 available upon request, as a build-up
- 78 Frame size is drilled with two sets of footholes, 5012 and 5013 standard
- 79 Ball bearings on both ends suitable for direct connection
For belted applications, contact Customer Service
- 90 Not UL Recognized

Premium Severe Duty/Chemical Processing/IEEE-841, Three Phase, NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

SEVERE DUTY

Applications: For extreme applications in the process industries such as chemical plants, pulp and paper mills, refineries, above-ground mines, food processing, foundries, and other severe duty environments where long life and ultra-high efficiency are required. Guaranteed efficiencies offer an eXtra Return on your Investment when using these premium efficiency motors on high cycle or long run time applications.



Features:

- 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.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
3/4	1200	460	143T	W500	-----	---	\$808	E9	80.0	1.4	53	10.43	75,76,N	----
1	1800	460	143T	W501 ★	143THTN9026	1000:1	\$618	E9	85.5	1.5	55	10.43	75,76,N	A181
	1800	575	143T	W502	143THTN19033	1000:1	\$618	E9	85.5	1.2	55	10.43	75,76,N	A181
	1200	460	145T	W503	145THTN9076	1000:1	\$778	E9	80.0	1.65	60	11.43	75,76,N,NP	A262
	1200	575	145T	W638	145THTN19079	1000:1	\$778	E9	80.0	1.3	60	11.43	75,76,N,NP	A262
	900	460	182T	W504	182THFS9102	20:1	\$1,367	E9	74.0	2.2	110	15.19	75,NE	A182
1 1/2	3600	460	143T	W505	143THTN9001	1000:1	\$774	E9	86.5	2.0	58	10.43	75,76,N	A181
	3600	575	143T	W506	143THTN9005	1000:1	\$774	E9	86.5	1.6	58	10.43	75,76,N	A181
	1800	460	145T	W507 ★	145THTN9026	1000:1	\$670	E9	84.0	2.2	65	11.43	75,76,N,NP	A262
	1800	575	145T	W508 ★	145THTN19045	1000:1	\$670	E9	84.0	1.75	65	11.43	75,76,d,N,NP	A262
	1200	460	182T	W509 ★	182THTS9076	1000:1	\$996	E9	87.5	2.2	100	12.71	75,d,N	A182
	900	460	184T	W510	-----	---	\$1,577	E9	80.0	3.0	120	16.19	75,NE	A182
2	3600	460	145T	W511	145THTN9001	1000:1	\$811	E9	85.5	2.5	68	11.43	75,76,N	A262
	3600	575	145T	W512	145THTN19002	1000:1	\$811	E9	85.5	2.0	68	11.43	75,76,N	A262
	1800	460	145T	W513 ★	145THTN9027	1000:1	\$736	E9	85.5	3.0	68	11.43	75,76,N,NP	A262
	1800	575	145T	W514 ★	145THTN19033	1000:1	\$736	E9	85.5	2.4	68	11.43	75,76,d,N,NP	A262
	1200	460	184T	W515	184THTS9076	1000:1	\$1,230	E9	88.5	3.0	112	13.71	75,N	A182
	900	460	213T	W516	-----	---	\$1,837	E9	84.0	3.8	170	18.22	NE	----
3	3600	460	182T	W517 ★	182THTS9001	1000:1	\$1,114	E9	87.5	3.8	105	12.71	d,75,N	A182
	3600	575	182T	W518	-----	---	\$1,114	E9	87.5	3.0	105	12.71	75,N	----
	1800	460	182T	W519 ★	182THTS9026	1000:1	\$999	E9	90.2	4.0	100	12.71	75,N	A182
	1800	575	182T	W520 ★	182THTS19033	1000:1	\$999	E9	90.2	3.2	100	12.71	d,75,N	A182
	1200	460	213T	W521 ★	213THFS9076	20:1	\$1,515	E9	89.5	4.4	176	18.22	75	A183
	900	460	215T	W522	215THFS9101	20:1	\$2,269	E9	86.5	5.0	180	19.72	75,NE	A183

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. EPA and/or NRC Canadian standards.

Footnotes:

- d Will become build-up item when current stock is gone
- N Totally Enclosed, Non-Ventilated
- NE Exempt NEMA Premium efficiency requirement
- 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.

Premium Severe Duty/Chemical Processing/IEEE-841, Three Phase, NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
5	3600	460	184T	W523 *	184THFS9001	2:1	\$1,238	E9	89.5	5.9	142	16.19	75	A182
	3600	575	184T	W524	184THFS19006	2:1	\$1,238	E9	89.5	4.7	142	16.19	75	A182
	1800	460	184T	W525 *	184THFS9026	20:1	\$1,158	E9	90.2	6.2	130	16.19	75	A182
	1800	575	184T	W526 *	184THFS9030	20:1	\$1,158	E9	90.2	5.0	130	16.19	75	A182
	1200	460	215T	W527 *	215THFS9076	20:1	\$1,860	E9	89.5	6.9	202	19.72	75	A183
	1200	575	215T	W528	215THFS19077	20:1	\$1,860	E9	89.5	5.5	202	19.72	75	A183
	900	460	254T	W529	254THFNA9101		\$2,958	E9	88.5	7.5	375	23.52	75,NE	A184
7 1/2	3600	460	213T	W530 *	213THTS9001	2:1	\$1,495	E9	91.7	8.9	200	17.18	75,N	A183
	3600	575	213T	W531	213THTS19005	2:1	\$1,495	E9	91.7	7.1	200	17.18	75,N	A183
	1800	460	213T	W532 *	213THFS9026	20:1	\$1,419	E9	91.7	9.6	200	19.73	75	A183
	1800	575	213T	W533 *	213THFS9030	20:1	\$1,419	E9	91.7	7.7	200	19.72	75	A183
	1200	460	254T	W534 *	254THFNA9076	20:1	\$2,233	E9	91.0	9.9	326	23.52	75	A184
	1200	575	254T	W535	-----		\$2,233	E9	91.0	7.9	326	23.52	75	
	900	460	256T	W536	256THFNA9101	20:1	\$3,668	E9	88.5	11.0	425	25.27	75,NE	A185
10	3600	460	215T	W537 *	215THFS9001	2:1	\$1,746	E9	91.7	11.9	218	19.72	75	A183
	3600	575	215T	W538	215THFS19006	2:1	\$1,746	E9	91.7	9.5	218	19.72	75	A183
	1800	460	215T	W539 *	215THFS9026	20:1	\$1,709	E9	91.7	12.5	225	19.72	75	A183
	1800	575	215T	W540 *	215THFS19033	20:1	\$1,709	E9	91.7	10.0	225	19.73	75	A183
	1200	460	256T	W541	256THFNA9076	20:1	\$2,727	E9	91.0	13.1	405	25.27	75	A184
	1200	575	256T	W542	256THFNA19081	20:1	\$2,727	E9	91.0	10.5	405	25.27	75	A184
	900	460	284T	W543	284THFNA19102	20:1	\$4,459	E9	90.2	16.0	550	27.88	NE	A185
15	3600	460	254T	W544 *	254THFNA9001	20:1	\$2,165	E9	91.7	17.5	345	23.52		A184
	3600	575	254T	W545	-----		\$2,165	E9	91.7	14.2	345	23.52		
	1800	460	254T	W546 *	254THFNA9026	20:1	\$2,033	E9	92.4	18.8	350	23.52		A184
	1800	575	254T	W547 *	254THFNA9030	20:1	\$2,033	E9	92.4	15.1	350	23.52		A184
	1200	460	284T	W548 *	284THFNA9076	20:1	\$3,620	E9	91.7	20.4	479	27.88		A186
	1200	575	284T	W549 *	284THFNA16585	20:1	\$3,620	E9	91.7	16.3	479	26.34		A186
	900	460	286T	W550	286THFNA19101	20:1	\$5,594	E9	90.2	22.0	575	27.84	NE	A186
20	3600	460	256T	W551 *	256THFNA9001	2:1	\$2,683	E9	92.4	23.4	375	25.27	75	A184
	3600	575	256T	W552	-----		\$2,683	E9	92.4	18.7	375	25.27	75	
	1800	460	256T	W553 *	256THFNA9026	20:1	\$2,533	E9	93.0	24.1	425	25.27	75	A184
	1800	575	256T	W554 *	256THFNA19033	20:1	\$2,533	E9	93.0	19.3	425	25.27	75	A184
	1200	460	286T	W555	286THFNA9076	20:1	\$4,410	E9	91.7	26.8	550	27.84		A186
	1200	575	286T	W556	286THFNA19077	20:1	\$4,410	E9	91.7	21.4	550	27.84		A186
	900	460	324T	W557	-----		\$6,751	E9	89.5	29.0	625	28.75	NE	
25	3600	460	284TS	W558 *	284TSHFNA9001	2:1	\$3,305	E9	93.6	28.1	481	24.97		A186
	3600	575	284TS	W559	284TSHFNA9005	2:1	\$3,305	E9	93.6	22.4	481	24.97		A186
	1800	460	284T	W560 *	284THFNA9026	20:1	\$3,015	E9	93.6	31.0	478	26.44		A186
	1800	575	284T	W561 *	284THFNA19033	20:1	\$3,015	E9	93.6	24.8	478	26.34		A186
	1200	460	324T	W562	324THFS9076	20:1@	\$5,346	E9	93.0	32.5	675	28.87		A187
	1200	575	324T	W563	324THFS9080	20:1@	\$5,346	E9	93.0	26.0	675	28.87		A214
	900	460	326T	W564	-----		\$7,786	E9	90.2	36.5	690	30.25	NE	
30	3600	460	286TS	W565 *	286TSHFNA9001	2:1	\$3,860	E9	93.6	33.8	500	26.44		A186
	3600	575	286TS	W566	-----		\$3,860	E9	93.6	27.0	500	26.47		
	1800	460	286T	W567 *	286THFNA9026	20:1	\$3,507	E9	94.1	36.5	525	27.84		A186
	1800	575	286T	W568	286THFNA19033	20:1	\$3,507	E9	94.1	29.2	525	27.84		A186
	1200	460	326T	W569 *	326THFS9076	20:1@	\$6,157	E9	93.0	38.5	725	30.37		A187
	1200	575	326T	W643 *	326THFS19078	20:1@	\$6,157	E9	93.0	31.0	725	30.37	d	A187
	900	460	364T	W570	-----		\$9,115	E9	91.7	41.0	875	31.50	NE	
40	3600	460	324TS	W571 *	324TSHFS9001	2:1	\$5,090	E9	93.6	47.0	656	27.37		A187
	3600	575	324TS	W572	-----		\$5,090	E9	93.6	37.5	656	27.37		
	1800	460	324T	W573 *	324THFS9026	20:1@	\$4,657	E9	94.1	47.5	700	28.87		A187
	1800	575	324T	W574 *	324THFS19033	20:1@	\$4,657	E9	94.1	38.0	700	30.37	d	A187
	1200	460	364T	W575	364THFS9086	20:1@	\$7,677	E9	93.6	50.0	950	31.50	NP	A188
	1200	575	364T	W639	364THFS19077	20:1@	\$7,677	E9	93.6	40.0	950	31.50	NP	A188
	900	460	365T	W576	365THFS19101	20:1@	\$10,946	E9	91.7	53.0	975	32.50	NE	A188

Blue shaded areas are Cast Iron Frames

Footnotes:

d Will become build-up item when current stock is gone
N Totally Enclosed, Non-Ventilated

* **Stock Model*** **Requires nameplate modification**@ **Requires larger fan**

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

NE Exempt from NEMA Premium efficiency requirements
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

Premium Severe Duty/Chemical Processing/IEEE-841, Three Phase, NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

SEVERE DUTY

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
50	3600	460	326TS	W577	326TSHFS9001	2:1	\$6,584	E9	93.6	58.0	725	28.87		A187
	3600	575	326TS	W578	326TSHFS9005	2:1	\$6,584	E9	93.6	46.5	725	28.87		A187
	1800	460	326T	W580 *	326THFS9026	20:1@	\$5,720	E9	94.5	60.0	775	30.37		A187
	1800	460	326TS	W579	326TSHFS9036	20:1@	\$5,720	E9	94.5	60.0	775	28.87		A187
	1800	575	326T	W581	326THFS19033	20:1@	\$5,720	E9	94.5	48.0	775	30.37		A187
	1200	460	365T	W582 *	365THFS9086	20:1@	\$8,816	E9	93.6	61.5	975	32.50	NP	A188
	1200	575	365T	W640	365THFS19077	20:1@	\$8,816	E9	93.6	49.0	975	32.50	NP	A188
	900	460	404T	W583	404THFS9101	20:1@	\$12,316	E9	93.6	66.0	1264	35.62	NE	A190
60	3600	460	364TS	W584 *	364TSHFS9001	2:1	\$7,969	E9	94.5	67.0	925	29.38		A189
	3600	575	364TS	W585	-----	2:1	\$7,969	E9	94.5	54.0	925	29.38		A189
	1800	460	364T	W587 *	364THFS9036	20:1@	\$7,549	E9	95.0	69.0	1000	31.50		A188
	1800	460	364TS	W586	364TSHFS9026	20:1@	\$7,549	E9	95.0	69.0	1000	29.38		A189
	1800	575	364T	W588	364THFS19033	20:1@	\$7,549	E9	95.0	55.0	1000	31.50		A188
	1200	460	404T	W589	404THFS9086	20:1@	\$10,330	E9	94.5	72.0	1156	35.62		A190
	900	460	405T	W590	405THFS19101	20:1@	\$13,819	E9	93.6	80.0	1350	37.12	NE	A190
	75	3600	460	365TS	W591 *	365TSHFS9001	2:1	\$10,007	E9	94.5	84.0	1002	30.38	
3600		575	365TS	W592	365TSHFS19002	2:1	\$10,007	E9	94.5	67.0	1002	30.38		A189
1800		460	365T	W594 *	365THFS9036	20:1@	\$9,571	E9	95.4	86.0	1100	32.50		A188
1800		460	365TS	W593	365TSHFS9026	20:1@	\$9,571	E9	95.4	86.0	1100	30.38		A189
1800		575	365T	W595 *	365THFS9044	20:1@	\$9,571	E9	95.4	69.0	1100	32.50		A188
1200		460	405T	W596	405THFS9086	20:1@	\$12,159	E9	95.0	90.0	1280	37.12		A190
900		460	444T	W597	444THFS9101	20:1@	\$18,375	E9	93.6	100	1734	41.25	NE	A192
100		3600	460	405TS	W598 *	405TSHFS9001	2:1	\$13,409	E9	95.0	108	1295	34.12	
	1800	460	405T	W600 *	405THFS9036	20:1	\$11,824	E9	95.4	113	1330	37.12		A190
	1800	460	405TS	W599	405TSHFS9026	20:1@	\$11,824	E9	95.4	113	1330	34.12		N/A
	1800	575	405T	W601 *	405THFS9040	20:1@	\$11,824	E9	95.4	90.0	1330	37.12		A190
	1200	460	444T	W636	444THFN19081	20:1@	\$17,931	E9	95.0	124	2100	41.25		A192
	900	460	445T	W603	445THFN9106	20:1@	\$22,518	E9	94.1	142	2350	43.19	NE	A192
	125	3600	460	444TS	W604	444TSHFS9001	2:1@	\$17,530	E9	95.4	136	1725	37.50	
1800		460	444T	W606	444THFS9036	20:1@	\$15,566	E9	95.4	141	1725	41.25		A192
1800		575	444T	W607 *	444THFS9040	20:1@	\$15,566	E9	95.4	113	1725	41.25		A192
1200		460	445T	W608	445THFN9086	20:1@	\$20,412	E9	95.0	155	2000	43.19		A192
900		460	445T	W609	445THFN9102	20:1@	\$23,128	E9	94.5	172	2515	43.19	NE	A194
150	3600	460	445TS	W610	445TSHFN9001	2:1	\$21,058	E9	95.8	165	2187	39.37		A195
	1800	460	445T	W612 *	445THFN9036	20:1@	\$18,096	E9	95.8	172	2070	43.19		A194
	1800	575	445T	W641	445THFN19033	20:1@	\$18,096	E9	95.8	138	2070	43.19		A194
	1800	575	445T	W613	445THFN9037	20:1@	\$18,096	E9	95.8	138	2070	43.19		A194
	1200	460	445T	W614	445THFN9087	20:1@	\$22,839	E9	95.8	181	2500	43.19	H, RB	A194
	900	460	L447/9T	W615	449THFS9101	20:1@	\$29,415	E9	95.4	205	3150	51.88	NE	
200	3600	460	445TS	W616	445TSHFN9005	2:1@	\$26,639	E9	95.8	223	2300	39.37	H, SL	A195
	1800	460	445T	W618	445THFN9038	20:1@	\$22,009	E9	96.2	226	2437	43.19	RB	A194
	1800	460	445TS	W617	445TSHFN9028	20:1@	\$22,009	E9	96.2	226	2700	39.37		A195
	1800	460	447/9T	W619	449THFS9030	20:1@	\$25,310	E9	96.5	225	2700	51.69		
	1800	460	447/9T	W620	-----	20:1@	\$25,310	E9	96.5	225	2700	51.69	RB	
	1800	575	445T	W642 *	445THFN19034	20:1@	\$25,310	E9	96.2	181	2437	43.19		A194
	1200	460	447/9T	W621	449THFS19092	20:1@	\$27,957	E9	95.8	225	2927	51.84		
	1200	460	447/9T	W622	449THFS9088	20:1@	\$27,957	E9	95.8	240	2927	51.69	RB	
	1200	575	447/449T	W630	449THFS19079	20:1@	\$27,957	E9	95.8	192	2927	51.69	RB	

Blue shaded areas are Cast Iron Frames

* **Stock Model**

* **Requires nameplate modification**
@ **Requires larger fan**

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

Footnotes:

- H Class H Insulation
- NE Exempt from NEMA Premium efficiency requirement
- NP Does not meet NEMA Premium efficiency
- RB Roller Bearing on shaft end for belted loads only.
- SL Sound level exceeds standard

Continued on next page.

Premium Severe Duty/Chemical Processing/IEEE-841, Three Phase, NEMA Premium® Efficiency, Blue Chip XRI®

Totally Enclosed, Rigid Base

HP	RPM	VOLTS	FRAME	CAT. NO.	MODEL NO.	CT SPEED RANGE*	LIST PRICE	MULT. SYMB.	NOM. EFF.	F.L. AMPS	APPROX. WGT. LBS.	"C" DIM.	FOOT NOTES	C FACE KIT
250	3600	460	447/9TS W624	449TSHFS9003	449TSHFS9003	2:1	\$33,596	E9	96.5	274	2700	47.94		N/A
	1800	460	445T W625	-----	-----	20:1@	\$27,612	E9	95.8	285	2450	43.19	H, RB, SL	A194
	1800	460	447/9T W626	449THFS9028	449THFS9028	20:1@	\$31,755	E9	96.5	285	2830	51.69		N/A
	1800	460	447/9T W627	-----	-----	20:1@	\$31,755	E9	96.5	285	2830	51.69	RB	N/A
	1200	460	447/9T W629	-----	-----	20:1@	\$32,138	E9	95.8	300	3415	51.69	RB	
	1200	460	447/9T W628	-----	-----	20:1@	\$32,138	E9	95.8	300	3415	51.69		
300	3600	460	447/9TS W631	-----	-----	2:1	\$43,547	E9	96.2	330	2700	47.94	SL	
	1800	460	447/9T W632	449THFS9027	449THFS9027	20:1@	\$32,390	E9	96.5	339	3211	51.84		
	1800	460	447/9T W633	-----	-----	20:1@	\$32,390	E9	96.5	339	3211	51.69	RB	
350	3600	460	447/9TS W634	449TSHFS9007	449TSHFS9007	2:1	\$49,938	E9	96.2	382	3064	47.94	SL	
	1800	460	447/9T W635	449THFS9036	449THFS9036	20:1@	\$41,174	E9	96.2	395	3350	51.84	RB, SL	

Blue shaded areas are Cast Iron Frames

* Requires nameplate modification
@ Requires "R164" rework (reduces efficiency)

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
- RB Roller Bearing on shaft end for belted loads only
- SL Sound level exceeds standard