

WATTSAYER®
Inverter-Duty Premium Efficiency Motor

The WATTSAYER® line of premium efficiency motors is now *inverter capable*. LEESON's unique IRIS™ voltage-spike-resistant insulation system is standard at no extra cost. WATTSAYER® motors carry a three-year warranty in general purpose and inverter fed applications. These motors meet or exceed most utility rebate programs and the EPACT federally mandated efficiency levels. The efficiency ratings

have been verified to IEEE 112B test standards by LEESON's NVLAP-Certified lab. Cast iron 170 series motors can be field modified for forced ventilation service to extend the inverter-fed operating range and an encoder package is stocked for closed-loop vector inverter systems. These motors can be converted to IEEE841 compliant using the Custom PDQ Program. Contact LEESON.

Rugged cast iron construction on three phase, 3-100 HP models. These motors share features with normal efficiency 150 Series motors detailed on page 14. Add an optional cast iron fan guard for severe duty applications.

Efficiencies meet or exceed NEMA Premium on all WATTSAYER® motors except as noted.

Both 3/4 and full load efficiencies are listed on the stainless steel nameplate for your convenience in calculating realistic energy savings. Unique serial number identifies each motor and is stamped clearly on the metal nameplate.

Independently verified efficiencies by the Canadian Standards Association, an internationally recognized testing laboratory. CSA Report Number EEV78720-1.

Premium efficiency motors finished with primer and chemical resistant green acrylic matte enamel.

Modification to meet IEEE 841 available through Custom PDQ. (See page 64). Includes addition of watertight Inpro shaft seals, two-part epoxy finish, and plated hardware.

One-way, corrosion resistant condensate drains. (TEFC models) release condensation and moisture.

Second-generation, high temperature, spike-resistant magnet wire for extended motor life. Stator impregnated with extra-heavy varnish system. 1.15 Service Factor. All WATTSAYER® motors have Class F insulation with a Class B rise.

Connections include red leads for NC thermostats attached to windings for over-temperature protection.

Meets or exceeds the 1997 mandated efficiency standards of the Energy Policy Act of 1992. Also meets or exceeds efficiency requirements of most electric utility rebate programs.

Three phase models suitable for inverter duty, as well as both 50 Hz and 60 Hz operation.

Rugged cast iron construction on three phase, 3-100 HP models. These motors share features with normal efficiency 150 Series motors detailed on page 14. Add an optional cast iron fan guard for severe duty applications.



LEESON's Inverter Rated Insulation System (IRIS™) provides superior protection against voltage spikes induced by variable frequency drives. This *total insulation system* protects better than spike-resistant magnet wire alone. Specially formed phase insulation, cushioned and sleeved connections (from the leads all the way into the turns), and deep-penetrating, non-

hygroscopic, high temperature varnish are just a few features contributing to extra protection. All this plus second generation spike-resistant magnet wire. The IRIS™ *total insulation system* is standard at no extra cost in all LEESON stock NEMA three-phase motors, 1 HP and larger.

UL and CSA Recognition

CSA certified under report number LR62104
 CSA Energy Efficiency Verification report number EEV78720-1
 UL recognized insulation system, file number E55555
 UL recognized construction, file number E57948



WATTS AVER® PREMIUM EFFICIENCY MOTORS

GENERAL PURPOSE • THREE PHASE



THREE PHASE • DRIP-PROOF • RIGID BASE 208-230/460V

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	S56	103017	\$348	A	23	N/A	1.3	73.5	77.0	10.24
1/2	1725	S56	103018	373	A	26	N/A	1.8	73.8	77.0	10.74
3/4	1725	56	116738	379	A	30	N/A	2.4	80.4	81.5	10.86
1	3450	56	116128	456	A	29	✓	2.8	78.5	80.0	10.18
	1725	56	116752	520	A	36	✓	3.2	84.7	85.5	11.68
	1725	143T	121003	520	B	36	✓	3.2	84.7	85.5	12.12
	1160	145T	121517	605	B	41	✓	3.8	81.5	82.5	12.62
1 1/2	3450	56	116753	508	A	36	✓	4.0	83.5	84.0	11.84
	3450	143T	121514	508	B	36	✓	4.0	83.5	84.0	12.28
	1725	56	116754	543	A	35	✓	4.8	86.1	86.5	12.22
	1725	145T	121004	543	B	35	✓	4.8	86.1	86.5	12.62
	1170	182T	131971	713	B	70	✓	5.6	86.0	86.5	14.69
2	3450	56	116755	599	A	43	✓	4.8	86.8	85.5	12.18
	3450	145T	121515	599	B	43	✓	4.8	86.8	85.5	12.62
	1725	56H	116756	615	A	37	✓	5.8	86.7	86.5	13.22
	1725	145T	121005	615	B	37	✓	5.8	86.7	86.5	13.62
	1170	184T	131972	725	B	81	✓	7.2	87.5	87.5	15.19
3	3450	145T	121516	605	B	45	✓	7.2	85.5	86.5	12.62
	1760	182T	131519	630	B	75	✓	7.8	90.2	89.5	13.69
	1190	213T	171574	940	C	154	✓	10.0	87.5	88.5	16.38
5	3450	184T	131986	664	B	92	✓	12.0	86.8	86.5	15.19
	1760	184T	131520	709	B	86	✓	12.8	89.4	89.5	14.69
	1190	215T	171575	1190	C	291	✓	15.0	89.5	90.2	16.38
7 1/2	3450	184T	131988	961	B	106	✓	17.6	88.0	88.5	16.19
	1760	213T	140470	890	B	133	✓	20.6	91.7	91.0	16.25
	1760	213T	170142	943	C	160	✓	19.8	91.7	91.0	16.38
	1170	254T	170145	1490	C	281	✓	22.4	91.0	91.7	20.94
10	3515	213T	140753	1012	B	160	✓	23.4	89.5	89.5	17.30
	3510	213T	170143	1078	C	150	✓	23.6	91.0	91.0	16.38
	1760	215T	140472	1051	B	144	✓	26.8	91.0	91.7	17.25
	1760	215T	170144	1113	C	200	✓	25.6	91.7	91.7	17.87
	1190	256T	170146	1856	C	305	✓	29.6	91.7	91.7	22.60
15	3510	215T	140754	1344	B	170	✓	35.0	91.0	91.0	18.55
	3510	215T	170064	1446	C	175	✓	34.6	91.0	91.0	17.87
	1770	254T	170065	1482	C	279	✓	37.0	93.0	93.0	20.94
	1170	284T	170067	2443	C	414	✓	39.4	92.4	92.4	23.54
20	3525	254T	170032	1817	C	275	✓	46.0	93.0	93.0	20.94
	1770	256T	170006	1810	C	324	✓	51.0	93.0	93.0	22.60
	1190	286T	170000	2977	C	467	✓	55.0	92.4	92.4	25.00
25	3525	256T	170034	2254	C	327	✓	57.4	93.0	93.0	22.60
	1770	284T	170009	2254	C	404	✓	59.6	93.6	93.6	23.54
	1190	324T	170002	3545	C	705	✓	67.0	93.0	93.0	26.02
30	3550	284TS	170036	2617	C	396	✓	67.0	94.1	94.1	22.17
	1770	286T	170013	2443	C	471	✓	71.0	94.5	94.1	25.00
	1190	326T	170004	3698	C	760	✓	78.0	93.6	93.6	27.52
40	3550	286TS	170038	3446	C	441	✓	91.2	94.1	93.6	23.62
	1780	324T	170017	3221	C	560	✓	96.0	94.1	94.1	26.02
	1190	364T	170147	5272	C	892	✓	103.0	94.1	94.1	28.01

All WATTS AVER® motors have normally closed thermostats for over-temperature alert.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

THREE PHASE • TEFC • RIGID BASE 208-230/460V

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	S56	103019	\$432	A	24	N/A	1.3	73.5	77.0	10.19
1/2	1725	S56	103020	458	A	27	N/A	1.8	73.8	77.0	10.69
3/4	1725	56	116739	482	A	31	N/A	2.4	80.2	81.5	11.31
1	3450	56	116129	532	A	29	✓	2.8	80.0	80.0	11.31
	1725	56	116757	592	A	32	✓	3.2	84.7	85.5	12.81
	1725	143T	120921	592	B	32	✓	3.2	84.7	85.5	13.25
	1725	143T	171640	635	B	50	✓	3.2	84.7	85.5	13.46
	1160	145T	121520	700	B	47	✓	3.8	81.5	82.5	13.75
	1140	145T	171643	747	B	58	✓	3.8	81.5	82.5	13.46
1 1/2	3450	56	116758	604	A	33	✓	4.0	83.0	84.0	12.81
	3450	143T	121518	604	B	33	✓	4.0	83.0	84.0	13.25
	3450	143T	171642	647	B	49	✓	4.0	83.0	84.0	13.46
	1725	56	116759	604	A	34	✓	4.8	86.1	86.5	13.31
	1725	145T	120922	614	B	34	✓	4.8	86.1	86.5	13.75
	1725	145T	171646	655	B	54	✓	4.8	86.1	86.5	13.46
	1170	182T	131980	1019	B	89	✓	5.6	87.4	87.5	15.96
2	3450	56	116760	661	A	44	✓	4.8	84.8	85.5	13.31
	3450	145T	121519	661	B	44	✓	4.8	84.8	85.5	13.75
	3450	145T	171648	706	B	56	✓	4.8	84.8	85.5	13.46
	1725	56H	116761	639	A	45	✓	5.8	86.7	86.5	14.32
	1725	145T	120923	639	B	45	✓	5.8	86.7	86.5	14.76
	1725	145T	171647	683	B	58	✓	5.8	86.5	86.5	13.46
	1170	184T	131981	1038	B	92	✓	7.2	88.4	88.5	15.96
3	3450	182T	131985	917	B	66	✓	7.6	86.1	86.5	13.96
	1760	182T	131463	723	B	80	✓	7.8	89.0	89.5	14.96
	1760	182T	171320	812	C	104	✓	7.8	89.5	90.2	16.14
	1180	213T	171378	1148	C	170	✓	9.4	88.5	89.5	18.19
5	3450	184T	131987	819	B	88	✓	12.0	89.0	88.5	16.46
	1760	184T	131464	794	B	94	✓	12.8	90.1	89.5	15.96
	1760	184T	171322	843	C	109	✓	12.8	89.9	89.5	16.80
	1180	215T	171379	1280	C	176	✓	14.4	89.5	89.5	19.61
7 1/2	3510	213T	140756	1105	C	156	✓	17.8	89.5	90.2	19.84
	3510	213T	170158	1170	C	147	✓	18.0	91.0	91.0	18.19
	1760	213T	140450	1021	C	144	✓	21.4	90.6	91.7	18.70
	1760	213T	170157	1128	C	155	✓	18.6	91.7	91.7	18.19
	1170	254T	170122	1668	C	249	✓	22.2	91.0	91.7	23.19
10	3510	215T	140755	1283	B	170	✓	23.6	92.4	91.7	21.09
	3510	215T	170159	1386	C	181	✓	23.0	91.7	91.7	19.61
	1760	215T	140451	1235	B	161	✓	26.6	91.6	91.7	19.70
	1760	215T	170140	1345	C	177	✓	25.0	91.7	91.7	19.61
	1170	256T	170123	2385	C	300	✓	29.0	91.7	91.7	24.92
15	3525	254T	170062	1883	C	282	✓	34.6	92.4	92.4	23.19
	1770	254T	170066	1822	C	280	✓	36.0	92.4	92.4	23.19
	1170	284T	170068	3228	C	333	✓	40.6	92.0	92.4	26.26
20	3525	256T	170033	2301	C	316	✓	46.0	92.4	92.4	24.92
	1770	256T	170007	2279	C	322	✓	49.0	93.0	93.0	24.92
	1170	286T	170001	4037	C	392	✓	54.0	92.4	92.4	27.83
25	3550	284TS	170035	2993	C	383	✓	56.8	93.0	93.0	24.88
	1770	284T	170011	2827	C	385	✓	59.0	93.6	93.6	26.26
	1190	324T	170003	4724	C	545	✓	66.0	92.4	93.0	29.53
30	3550	286TS	170037	3534	C	385	✓	67.6	93.6	93.0	26.46
	1770	286T	170015	3294	C	432	✓	70.0	94.1	94.1	27.83
	1190	326T	170005	5303	C	615	✓	77.2	93.6	93.6	31.02

All WATTS AVER® motors have normally closed thermostats for over-temperature alert.



THREE PHASE • DRIP-PROOF • RIGID BASE
208-230/460V • CONTINUED

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
50	3550	324TS	170040	\$4203	C	548	✓	112.0	95.0	94.1	24.53
	1780	326T	170021	3891	C	614	✓	118.0	94.5	94.5	27.52
	1190	365T	170148	6031	C	918	✓	128.0	94.7	94.5	31.18
60	3550	326TS	170042	5026	C	590	✓	136.0	95.0	94.1	26.02
	1780	364T	170025	4283	C	716	✓	139.0	95.0	95.4	28.01
	1190	404T	170149	6676	C	1031	✓	159.0	94.0	94.5	32.76
75	3570	364TS	170044	6641	C	720	✓	176.0	94.5	93.6	26.89
	1780	365T	170029	5282	C	766	✓	172.0	95.4	95.4	31.18
	1190	405T	170150	7913	C	1095	✓	196.0	94.0	94.5	34.25
100	3570	365TS	170151	7508	C	775	✓	234.0	94.5	94.5	29.06
	1780	404T	170152	7227	C	1141	✓	225.0	95.4	95.4	32.76
	1190	444T	170255*	9345	C	1975	✓	118.0♦	95.4	95.4	40.00
125	3570	404TS	170154	8678	C	1015	✓	284.0	94.5	94.5	29.76
	1780	405T	170155	9146	C	1236	✓	280.0	95.4	95.4	34.25
	1190	445T	170259*	12148	C	2022	✓	148.0♦	95.8	95.8	40.00
150	3570	405TS	171449*	10707	C	1085	✓	169.0♦	94.5	94.5	31.26
	1780	444T	171522*	10800	C	2000	✓	164.0♦	95.8	95.8	40.00
	1190	445T	171576*	13033	C	2040	✓	206.0♦	95.8	95.8	40.00
200	3570	444TS	171573*	12134	C	1765	✓	216.0♦	95.4	95.4	36.25
	1780	445T	171523*	12455	C	2037	✓	220.0♦	95.8	95.8	40.00
	1190	447T	171577*	17132	C	2820	✓	239.0♦	95.8	96.2	43.12

All WATSAVER® motors have normally closed thermostats for over-temperature alert.

BLOWER FAN KITS



Used for extended low speed operation of inverter-fed motors, these kits can be field-installed to provide constant velocity cooling.

The 115 volt single phase, fan-drive motor is totally enclosed. The blower is mounted after removing the standard fan and fan cover. No shaft or other modifications to the motor are required.

FOR CAST IRON 150 & 170 SERIES MOTORS

Blower Motor Voltage	Phase	For NEMA Frame	Catalog Number	List Price	Disc. Sym.	Blower CFM	App. Wgt. (lbs.)
115	1	180T	175674	\$744	C	260	10
115	1	210T	175675	777	C	260	11
115	1	250T	175676	835	C	260	17
115	1	280T	175677	1004	C	500	24
115	1	320T	175678	1069	C	500	28
230/460	3	360T	175879	2221	C	500	35
230/460	3	400T	175880	2464	C	500	45
230/460	3	440T	175558G	2819	C	500	55

⊗ For 444T/445T motors

FOR ROLLED STEEL TEFC MOTORS

Blower Motor Voltage	Phase	For NEMA Frame	Catalog Number	List Price	Disc. Sym.	Blower CFM	App. Wgt. (lbs.)
115	1	56-145T	175876	\$664	C	115	4
115	1	56-145T	175775 ⊗	664	A	115	4
115	1	182-4T	175895	744	C	115	4
115	1	213-5T	175896	777	C	235	5

⊗ For 56/145T motors having face mounted (plastic) fan guards.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

THREE PHASE • TEFC • RIGID BASE
208-230/460V • CONTINUED

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
40	3550	324TS	170039	\$4408	C	504	✓	90.0	93.6	93.6	28.03
	1780	324T	170019	4375	C	528	✓	92.0	93.6	94.1	29.53
	1180	364T	170096	7269	C	636	✓	102.0	94.1	94.1	32.64
50	3550	326TS	170041	5353	C	554	✓	111.0	95.0	94.5	29.53
	1780	326T	170023	5284	C	587	✓	117.0	94.5	94.5	31.02
	1180	365T	170097	8724	C	672	✓	124.0	94.1	94.1	33.62
60	3570	364TS	170043	7939	C	735	✓	136.0	93.6	94.1	30.51
	1780	364T	170027	7516	C	666	✓	137.0	95.0	95.4	32.64
	1190	404T	170098	10290	C	870	✓	142.0	94.5	94.5	36.42
75	3570	365TS	170045	9725	C	780	✓	169.0	94.5	94.5	31.50
	1780	365T	170031	9380	C	733	✓	171.0	95.8	95.8	33.62
	1190	405T	170099	10846	C	975	✓	176.0	95.0	95.0	37.91
100	3570	405TS	170160	10975	C	955	✓	218.0	94.5	95.0	34.92
	1780	405T	170087	11664	C	1070	✓	225.0	95.4	95.4	37.91
	1190	444T	170256*	15440	C	1457	✓	121.0♦	95.0	95.0	42.87
125	1790	444T	170369*	15486	C	1950	✓	137.5♦	95.4	95.4	42.87
	1190	445T	170260*	17445	C	1596	✓	155.0♦	95.4	95.4	44.88
	3570	444TS	171580*	14298	C	1316	✓	132.0	94.5	95.0	39.10
150	1790	445T	170371*	17718	C	1627	✓	163.0♦	95.8	95.8	44.88
	1190	447T	171315*	19672	C	2230	✓	185.5♦	95.8	95.8	48.00
	3570	445TS	171578*	17647	C	1445	✓	161.0	94.5	95.0	44.88
200	1790	447T	170352*	20294	C	2227	✓	216.0♦	96.2	96.2	48.00
	1190	449T	171316*	25766	C	2542	✓	241.5♦	95.8	95.8	52.80
	3570	447TS	171579*	20325	C	1977	✓	216.5	95.0	95.4	48.00

All WATSAVER® motors have normally closed thermostats for over-temperature alert.

* 460V only
♦ Full Load Amps 460V

ENCODER KITS • 150 & 170 SERIES



These kits include the parts and encoder for field assembly of a slim-line, through-shaft encoder to LEESON standard TEFC Motors. Designed to slip over the motor's fan end shaft. Blower kit sold separately.

Output is 1024 pulses per revolution, quadrature, 5 to 28 VDC line driver output. Short circuit protection is standard. Inputs are over voltage and reverse voltage protected. Electrical noise immunity exceeds international standards. Encoders are isolated from shaft currents using hard anodized sleeves and non metallic anti-rotation hardware. Designed for long life in industrial environments using an all metal, shock resistant code disk. The encoder is protected by the motor's fan cover after mounting. Using a blower fan kit is suggested for proper motor cooling.

FOR CAST IRON 150 & 170 SERIES TEFC MOTORS

For NEMA Frame	Encoder Kit Catalog No.	List Price	Disc. Sym.
182-4T	175684	\$1157	C
213-5T	175685	1157	C
254-6T	175686	1869	C
284-6T	175687	1869	C
320T	175641	1906	C
360T	175642	1906	C
400T	175643	1906	C
440T (2 pole)	175644	1906	C
440T (4/6 pole)	175645	1906	C

FOR ROLLED STEEL TEFC MOTORS

For NEMA Frame	Encoder Kit Catalog Number	List Price	Disc. Sym.
56/145T	175960	\$934	A
182-4T	175897	1353	B
213-5T	175898	1353	B



WATTS AVER® PREMIUM EFFICIENCY MOTORS

GENERAL PURPOSE • THREE PHASE



THREE PHASE • DRIP-PROOF • C FACE LESS BASE 208-230/460V

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	S56C	102695	\$343	A	22	N/A	1.3	73.5	77.0	10.24
1/2	1725	S56C	102200	368	A	25	N/A	1.8	73.8	77.0	10.74
3/4	1725	56C	114934	394	A	29	N/A	2.4	80.4	81.5	10.86
1	1725	56C	116740	572	A	32	✓	3.4	84.7	85.5	11.68
	1725	143TC	121064	572	B	32	✓	3.4	84.7	85.5	12.12
1 1/2	1725	56C	116741	597	A	36	✓	5.6	86.1	86.5	12.68
	1725	145TC	121063	597	B	36	✓	5.6	86.1	86.5	13.12
2	1725	56C	116742	671	A	41	✓	5.8	86.7	86.5	13.18
	1725	145TC	121071	671	B	41	✓	5.8	86.7	86.5	13.62
3	1760	182TC	131518	719	B	75	✓	7.8	90.2	89.5	14.20
5	1760	184TC	131517	845	B	96	✓	12.8	90.1	89.5	15.20
7 1/2	1760	213TC	140483	936	B	132	✓	20.6	91.7	91.0	16.25
10	1760	215TC	140485	1058	B	144	✓	26.8	92.2	91.7	17.25

All WATTS AVER® motors have normally closed thermostats for over-temperature alert.

THREE PHASE • DRIP-PROOF • C FACE WITH BASE 208-230/460V

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	S56C	103021	\$361	A	23	N/A	1.3	73.5	77.0	10.24
1/2	1725	S56C	103022	381	A	26	N/A	1.8	73.8	77.0	10.74
3/4	1725	56C	116762	404	A	30	N/A	2.4	80.4	81.5	10.86
1	1725	56C	116763	577	A	33	✓	3.4	84.7	85.5	11.68
	1725	143TC	121674	577	B	34	✓	3.4	84.7	85.5	12.12
1 1/2	1725	56C	116764	599	A	37	✓	5.6	86.1	86.5	12.68
	1725	145TC	121675	599	B	37	✓	5.6	86.1	86.5	13.12
2	1725	56HC	116765	676	A	42	✓	5.8	86.7	86.5	13.18
	1725	145TC	121676	676	B	42	✓	5.8	86.7	86.5	13.62
3	1760	182TC	132081	732	B	76	✓	7.8	90.2	89.5	14.20
5	1760	184TC	132082	858	B	97	✓	12.8	90.1	89.5	15.20
7 1/2	1760	213TC	140767	943	B	132	✓	20.6	91.7	91.0	16.25
10	1760	215TC	140768	1070	B	144	✓	26.8	91.7	91.7	17.25

All WATTS AVER® motors have normally closed thermostats for over-temperature alert.



THREE PHASE • TEFC • C FACE LESS BASE 208-230/460V

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	S56C	102696	\$430	A	22	N/A	1.3	73.5	77.0	10.19
1/2	1725	S56C	101780	461	A	25	N/A	1.8	73.8	77.0	10.69
3/4	1725	56C	114213	497	A	27	N/A	2.7	80.2	81.5	11.31
1	3450	56C	116748	545	A	29	✓	2.8	80.0	80.0	11.31
	1725	56C	114638	691	A	34	N/A	3.4	84.7	85.5	12.81
	1725	143TC	121067	691	B	36	✓	3.4	84.7	85.5	13.25
	1160	56C	116749	726	A	47	✓	3.8	81.5	82.5	13.75
1 1/2	3450	56C	116750	619	A	33	✓	4.0	83.0	84.0	13.25
	1725	56C	116743	729	A	41	✓	4.8	86.1	86.5	13.31
	1725	145TC	121066	729	B	41	✓	5.6	86.1	86.5	13.75
2	3450	56C	116751	717	A	44	✓	4.8	84.8	85.5	14.25
	1725	56C	116744	765	A	45	✓	5.8	86.7	86.5	13.82
	1725	145TC	121065	765	B	45	✓	5.8	86.7	86.5	14.26
3	1760	182TC	131503	819	B	72	✓	7.8	89.0	89.5	14.96
5	1760	184TC	131501	886	B	90	✓	12.8	90.1	89.5	15.97
7 1/2	1760	213TC	140486	1029	B	144	✓	21.4	90.6	91.7	18.70
10	1760	215TC	140484	1242	B	160	✓	26.6	91.6	91.7	19.70

All WATTS AVER® motors have normally closed thermostats for over-temperature alert.

All 180 and 210 frame Rolled Steel motors have Class F Insulation.

THREE PHASE • TEFC • C FACE WITH BASE 208-230/460V

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Meets NEMA Premium	F.L. Amps 230V	3/4 Load Eff.	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	S56C	102697	\$439	A	22	N/A	1.3	73.5	77.0	10.19
1/2	1725	S56C	102024	472	A	23	N/A	1.8	73.8	77.0	10.69
3/4	1725	56C	114624	507	A	25	N/A	2.7	80.2	81.5	11.31
1	1725	56C	116745	715	A	34	✓	3.4	84.7	85.5	12.81
	1725	143TC	121179	715	B	34	✓	3.4	84.7	85.5	13.25
1 1/2	3450	143TC	121672	645	B	33	✓	3.6	83.0	84.0	13.25
	1725	56C	116746	741	A	37	✓	5.6	86.1	86.5	13.31
	1725	145TC	121180	741	B	37	✓	5.6	86.1	86.5	13.75
2	3450	145TC	121673	661	B	44	✓	4.8	84.8	85.5	13.75
	1725	56HC	116747	775	A	43	✓	5.8	86.7	86.5	13.82
	1725	145TC	121181	775	B	43	✓	5.8	86.7	86.5	14.26
3	3450	182TC	132079	954	B	70	✓	7.6	86.1	86.5	13.96
	1760	182TC	131504	836	B	75	✓	7.8	89.0	89.5	14.96
5	3450	184TC	132080	943	B	100	✓	12.8	88.0	88.5	16.46
	1760	184TC	131502	905	B	99	✓	12.8	90.1	89.5	15.97
7 1/2	3450	213TC	140770	1166	B	160	✓	17.8	89.5	90.2	19.64
	1760	213TC	140521	1035	B	144	✓	21.4	90.6	91.7	18.70
10	3510	215TC	140769	1317	B	175	✓	23.6	92.4	91.7	21.09
	1760	215TC	140522	1250	B	160	✓	26.6	91.6	91.7	19.70
15	3525	254TC	171586	2084	C	292	✓	34.6	92.0	92.4	23.19
	1770	254TC	171587	2184	C	290	✓	36.0	92.4	92.4	23.19
20	3525	256TC	171588	2560	C	326	✓	46.0	93.0	92.4	24.92
	1770	256TC	171589	2608	C	332	✓	49.0	93.0	93.0	24.92
25	3550	284TSC	171590	3217	C	393	✓	56.8	93.3	93.0	24.88
	1770	284TC	171591	3328	C	395	✓	59.0	94.0	93.6	26.26
30	1770	286TC	171592	4010	C	442	✓	70.0	94.1	94.1	27.83
40	1780	324TC	171593	5184	C	538	✓	92.0	94.0	94.1	29.53
50	1780	326TC	171594	5695	C	597	✓	117.0	94.6	94.5	31.02
60	1780	364TC	171595	9032	C	676	✓	137.0	95.0	95.4	32.64
75	1780	365TC	171596	10392	C	743	✓	170.0	95.8	95.8	33.62
100	1780	405TC	171597	12725	C	1002	✓	225.0	95.4	95.4	37.91

All WATTS AVER® motors have normally closed thermostats for over-temperature alert.

SHADED FRAME INDICATES CAST IRON CONSTRUCTION

WATTSAYER® PREMIUM EFFICIENCY MOTORS



GENERAL PURPOSE • SINGLE PHASE • FHP THREE PHASE

WATTSAYER®

WATTSAYER® PREMIUM EFFICIENCY HIGH TORQUE

WATTSAYER® Premium Efficiency Motors provide enhanced operating efficiencies, cooler operating temperatures, and reduced running amperage. See page 13 for complete list of features.



SINGLE PHASE • TEFC • RIGID BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)
1/3	1725	56	113765☆	\$425	A	27	115/208-230	Man.	1.7	76.0	10.81
1/2	1725	56	113766☆	472	A	30	115/208-230	Man.	2.5	78.0	11.31
3/4	1725	56	113767☆	557	A	35	115/208-230	Man.	3.2	82.0	11.81
1	1725	56	113768☆	639	A	37	115/208-230	Man.	4.2	83.0	12.31
1 1/2	1725	56H	113769☆□	726	A	43	115/208-230	Man.	6.5	84.0	13.31
2	1725	56HZ	113770☆■	999	A	49	230	Man.	8.2	85.0	14.25

WATTSAYER® PREMIUM EFFICIENCY FAN MOTORS

Premium efficiency motors for agricultural and industrial belted-fan applications.

Features include quiet bearings, resilient cradle base, and quiet flow-through ventilation. Class "F" insulated, with spade connectors on terminal board for quick and easy installation.



SINGLE PHASE • DRIP-PROOF • RESILIENT BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	Voltage	Over- load Prot.	F.L. Amps 115V	% F.L. Eff.	"C" Dim. (Inches)
1/4	1725	48	101602	\$319	A	19	115	Auto.	2.5	71.0	10.39
1/3	1725/ 1140	48	101405	378	A	19	115	Auto.	3.2	75.0	10.39
		56HZ	113771②D	505	A	30	115	Auto.	3.0	73.0	11.44
		56HZ	113970②D	464	A	30	115	Auto.	3.2	73.0	11.94
		56HZ	113674②D	505	A	30	115	Auto.	3.1	70.0	11.44
1/2	1725/ 850	56HZ	113969②D	464	A	30	115	Auto.	3.2	73.0	11.94
		48	101585	431	A	25	115	Auto.	4.6	76.0	11.39

- ② These combination 56H base motors have mounting holes for 56 and 143-5T, and a 1/2" diameter shaft with flat 1 1/2" long.
- ☆ Capacitor start/capacitor run design for reduced amperage, others are capacitor start/induction run.
- Combination 56 H base motors have mounting holes for NEMA 56 and NEMA 143-5T and a standard NEMA 56 shaft.
- Combination 56 HZ base has mounting holes for NEMA 56 and 143-5T and a standard NEMA 145T frame shaft of 7/8" diameter.
- D Motors are to be discontinued once the inventory is depleted.

FHP MOTORS FOR AC DRIVES

- Compact 48-frame design with keyed shaft
- Class F insulation
- 20:1 Constant torque rated
- Inverter IRIS™ insulation system
- 1/2" diameter keyed shaft with 48-C Face
- 115/230V 3-phase design optimized for FHP drives



THREE PHASE • TEFC • C FACE WITH BASE

HP	RPM 60 Hz	NEMA Frame	Catalog Number	List Price	Disc. Sym.	App. Wgt. (lbs.)	F.L. Amps 230V	% F.L. Eff.	"C" Dim. (Inches)
1/6	1725	48CZ	102792	\$273	A	25	1.25	56.0	8.94
1/4	1725	48CZ	102793	310	A	26	1.4	58.0	8.94
1/3	1725	48CZ	102794	339	A	28	1.6	64.3	9.19
1/2	1725	48CZ	102795	380	A	30	1.8	77.0	10.19