

Made in the U.S.A.

Super-E<sup>®</sup>  
Premium Efficient Motors

**BALDOR<sup>®</sup>**  
**MOTORS AND DRIVES**

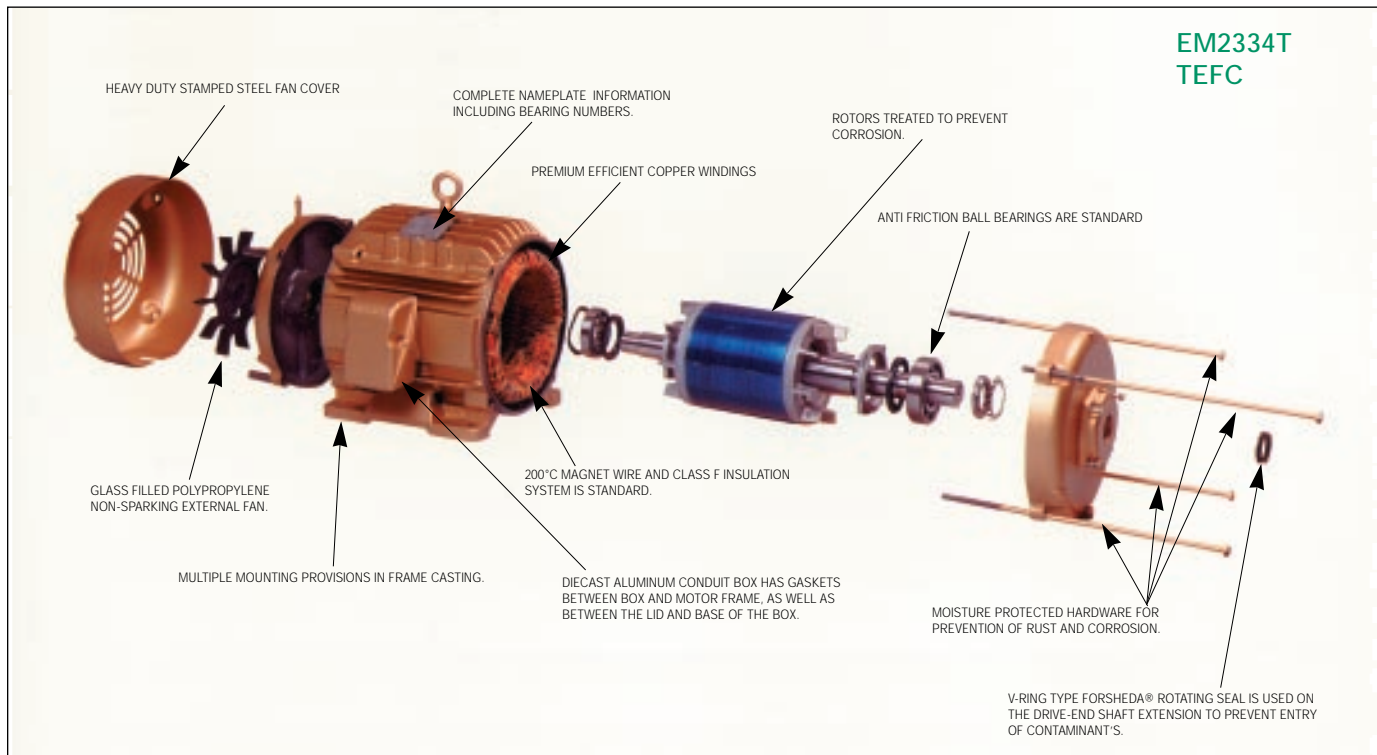
# Baldor Super-E<sup>®</sup> Premium Efficient Motors are designed to save energy.



Baldor Super-E<sup>®</sup> Premium Efficient motors are designed to save energy. By using the latest technological advances in rotor and stator designs, external cooling fan material and design, electrical grade steel characteristics, and all copper windings, Baldor Super-E<sup>®</sup> motors provide savings in operating costs and relatively short “payback” periods.

Since 1920, Baldor premium efficient motors have and continue to serve a variety of industrial electric motor applications with minimum maintenance and down-time, even under the most brutal of conditions. Begin conserving today with a Baldor Super-E<sup>®</sup> Premium Efficient motor.

All Baldor Super-E<sup>®</sup> Premium Efficient motors meet, and in most cases exceed, the efficiency requirements of the Energy Policy Act of 1992. These efficiency requirements become effective in October 1997.



## Electrical Design Characteristics

Specification	Description
Voltage	TEFC: 200, 230/460, 460, 575, 2300/4160 VAC. Explosion-Proof: 230/460 VAC. ODP: 200, 230/460, 460 and 575 VAC.
Frequency	60 Hz standard.
Rating	Continuous duty @ 40 degrees C ambient temperature.
Efficiencies	NEMA nominal efficiencies at full-load are stamped on all Baldor Super-E® nameplates. Baldor efficiencies determined by IEEE Standard 112, Test Method B.
Winding Design	NEMA Design B normal starting and operating torque requirements. Coil endturns are laced and tied every slot to prevent movement of coils which could result in premature failure.
Magnet Wire	200 degrees C moisture resistant multi-coated copper wire on motors below 20 HP, and ISR Inverter Spike Resistant™ wire on motors 20 HP and above. Random wound construction on low voltage motors and formed wound construction on motors 2300/4160 volts.
Insulation	Non-hygroscopic polyester high-temperature Class H varnish is used. Slot cell liners are extra heavy (15 mil) Class F Nomex-Mylar-Nomex. All 2300/4160 volt motors are insulated using an epoxy Vacuum Pressure Impregnation process.
Temperature Rise	Class B temperature rise at full load, assuring longer motor life.
Phase Insulation	Phase insulation between winding phase groups give maximum power surge protection.

## Mechanical Design Characteristics

Specification	Description
External Cooling	Non-sparking, non-corrosive glass filled, high density polypropylene on frames 143T through 5011L.
Fan	All fan hubs keyed to shaft.
Conduit Box	Cast conduit box is rotatable 360 degrees in 90 degree increments.
Nameplate	Stainless steel nameplate and securing pins with complete information including bearing numbers.
Hardware	S.A.E. standard, zinc or cadmium plated steel.
Lifting Provisions	Motors are equipped with forged eyebolts for ease in handling (frames 182T through 445T). Integral cast lugs provided on 447/9T through 5011L frames.
Bearings	Oversized regreasable ball bearings standard. Bearing is positively locked on frames 284T and larger for maximum load capacity.
Grease Provisions	Alemite® grease fittings are provided for ease in maintenance. Special internal shaft seals prevent grease from entering the inside of the motor on frames 284T and larger.
Lubrication	Chevron SRI-2 or equal.
Rotor Construction	High-pressure die-cast aluminum squirrel cage rotors are standard on frames 143T through 449T. Copper bar fabricated rotors are standard on frames 5007L through 5011L.
Mounting	Motors are designed with multiple mounting hole provisions in base. (Exceptions: 444T, 445T, 447T frames).
Shaft Material	Cold rolled steel shaft material is standard.

**THREE YEAR WARRANTY ON ALL BALDOR SUPER-E® MOTORS**



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## Energy Policy Act of 1992

The Energy Policy Act of 1992 established energy efficiency standards for all general purpose industrial motors from 1 to 200 HP. The regulations are effective for motors manufactured or imported for sale in the United States after October 24, 1997.

The Energy Policy Act of 1992 established the following nominal full-load efficiency standards:

Horsepower	Nominal Full-Load Efficiency					
	Open Drip Proof			Totally Enclosed Fan Cooled		
	Number of Poles					
	2	4	6	2	4	6
1	-	82.5	80.0	75.5	82.5	80.0
1.5	82.5	84.0	84.0	82.5	84.0	85.5
2	84.0	84.0	85.5	84.0	84.0	86.5
3	84.0	86.5	86.5	85.5	87.5	87.5
5	85.5	87.5	87.5	87.5	87.5	87.5
7.5	87.5	88.5	88.5	88.5	89.5	89.5
10	88.5	89.5	90.2	89.5	89.5	89.5
15	89.5	91.0	90.2	90.2	91.0	90.2
20	90.2	91.0	91.0	90.2	91.0	90.2
25	91.0	91.7	91.7	91.0	92.4	91.7
30	91.0	92.4	92.4	91.0	92.4	91.7
40	91.7	93.0	93.0	91.7	93.0	93.0
50	92.4	93.0	93.0	92.4	93.0	93.0
60	93.0	93.6	93.6	93.0	93.6	93.6
75	93.0	94.1	93.6	93.0	94.1	93.6
100	93.0	94.1	94.1	93.6	94.5	94.1
125	93.6	94.5	94.1	94.5	94.5	94.1
150	93.6	95.0	94.5	94.5	95.0	95.0
200	94.5	95.0	94.5	95.0	95.0	95.0

## Totally Enclosed Fan Cooled Rigid Base, 230/460 Volts 1 Through 75 HP - Nema Frames 143T Through 405T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143T	EM3546T	3524M	35S396	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1	1750	143T	EM3581T	0524M	05W52	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	1750	145T	EM3554T	3528M	35S745	1.15	79.7	86.4	87.7	87.5	36	57	71	78
1 1/2	1750	145T	EM3584T	0528M	05W53	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	1750	145T	EM3558T	3535M	35S746	1.15	83.0	87.6	88.0	86.5	43	64	77	83
2	1750	145T	EM3587T	0535M	05W54	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	3500	182T	EM3610T	3628M	36X670	1.15	80.9	87.5	89.1	88.5	65	83	89	92
3	3500	182T	EM3660T	0628M	06W36	1.15	80.9	87.5	89.1	88.5	65	83	89	92
3	1760	182T	EM3611T	3628M	36X566	1.15	80.2	87.0	88.9	89.5	32	51	64	71
3	1760	182T	EM3661T	0628M	06W14	1.15	79.0	86.9	88.4	89.5	33	54	62	72
3	1160	213T	EM3704T	3735M	37X830	1.15	78.4	85.9	88.6	88.5	28	44	57	65
3	1160	213T	EM3764T	0735M	07W37	1.15	78.4	85.9	88.6	88.5	28	44	57	65
5	3500	184T	EM3613T	3634M	36X418	1.15	86.6	90.5	90.8	89.5	63	83	90	93
5	3500	184T	EM3663T	0634M	06W18	1.15	86.8	90.5	90.8	89.5	69	85	91	93
5	1760	184T	EM3665T	0640M	06W09	1.15	82.8	88.8	90.3	90.2	37	58	70	78
5	1750	184T	EM3615T	3640M	36X332	1.15				90.2	37	58	70	78
5	1160	215T	EM3708T	3750M	37X638	1.15	85.7	89.7	90.0	89.5				69
5	1160	215T	EM3768T	0750M	07W33	1.15	83.3	88.4	89.1	89.5	34	54	65	69
7 1/2	3525	213T	EM3709T	3733M	37Y216	1.15	81.3	88.0	89.8	90.2	58	75	84	87
7 1/2	3525	213T	EM3769T	0733M	07W280	1.15	84.2	90.0	91.4	91.0	59	79	87	90
7 1/2	1760	213T	EM3710T	3735M	37X635	1.15	84.4	89.7	90.8	91.0				80
7 1/2	1760	213T	EM3770T	0735M	07W35	1.15	84.7	89.5	90.4	91.0	43	64	74	80
7 1/2	1170	254T	EM2276T	0940M	09W275	1.15	83.1	88.7	89.6	89.5	41	61	73	77
10	3525	215T	EM3711T	3738M	37Y168	1.15	85.0	89.1	89.9	89.5	64	81	87	93
10	3525	215T	EM3771T	0738M	07W279	1.15	85.5	90.2	91.2	91.0	51	74	84	93
10	1760	215T	EFM3714T	3746M	37X954	1.15	84.5	89.9	91.0	91.0	40	63	74	80
10	1760	215T	EM3714T	3746M	37X954	1.15	84.5	89.9	91.0	91.0	40	63	74	80
10	1760	215T	EM3774T	0746M	07W268	1.15	85.6	90.6	91.8	91.7	42	64	76	80
10	1170	256T	EM2332T	0952M	09W276	1.15	83.8	89.4	90.4	90.2	37	59	69	75
15	3525	254T	EM2394T	0940M	09W274	1.15	88.6	92.5	92.8	91.7	63	83	89	93
15	1765	254T	EFM2333T	0942M	09W980	1.15	87.9	92.1	93.0	92.4	49	71	81	84
15	1765	254T	EM2333T	0942M	09W980	1.15	87.9	92.1	93.0	92.4	49	71	81	84
15	1170	286T	EM4100T	1050M	10W130	1.15	87.0	91.2	91.7	91.0	46	65	74	79
20	3525	256T	EM4106T	0948M	09W244	1.15	91.6	93.4	93.2	92.4	70	83	88	91
20	1765	256T	EM2334T	0952M	09W772	1.15	89.6	92.9	93.5	93.0	45	67	79	84
20	1170	286T	EM4102T	1060M	10W145	1.15	88.0	91.7	92.0	91.7	50	70	78	80
25	3550	284TS	EM4107T	1044M	10W167	1.15	88.8	92.2	92.8	92.4	71	86	90	90
25	1780	284T	EFM4103T	1050M	10W717	1.15	85.8	91.0	92.7	93.6	49	70	79	82
25	1780	284T	EM4103T	1050M	10W717	1.15	85.8	91.0	92.7	93.6	49	70	79	82
25	1180	324T	EM4111T	1256M	12Z81	1.15	88.9	92.6	93.2	93.0	53	73	81	83
30	3550	286TS	EM4108T	1050M	10W120	1.15	90.2	93.2	93.5	93.0	70	85	89	89
30	1780	286T	EFM4104T	1056M	10W586	1.15	87.1	91.6	92.6	94.1	55	75	83	84
30	1780	286T	EM4104T	1056M	10W586	1.15	87.1	91.6	92.6	94.1	55	75	83	84
30	1180	326T	EM4117T	1262M	12Z41	1.15	89.4	92.7	93.2	93.0	54	75	82	83
40	3550	324TS	EM4109T	1252M	12W558	1.15	87.4	91.6	92.7	93.0	68	85	90	92
40	1780	324T	EM4110T	1258M	12Z48	1.15	91.4	94.4	95.0	94.5	56	76	83	86
40	1180	364T	EM4308T	1458M	14Z17	1.15	89.5	92.9	93.4	93.6	52	72	79	83
50	3550	326TS	EM4114T	1268M	12W131	1.15	89.6	92.8	93.6	93.6	79	88	94	92
50	1780	326T	EM4115T	1272M	12Z49	1.15	89.7	93.5	94.2	94.5	58	78	84	86
50	1180	365T	EM4312T	1468M	14Y84	1.15	90.3	93.3	93.6	93.6	51	71	80	84
60	3550	364TS	EM4310T	1458M	14Z04	1.15	88.9	93.0	94.0	94.1	70	85	91	92
60	1780	364T	EM4314T	1462M	14W303	1.15	92.0	94.5	94.9	94.5	52	72	81	83
60	1180	404T	EM4403T	1672M	16X56	1.15	92.0	94.4	94.5	94.1	44	66	75	79
75	3550	365TS	EM4313T	1472M	14Z03	1.15	89.8	93.1	93.7	94.1	70	85	89	91
75	1780	365T	EM4316T	1480M	14Y16	1.15	91.8	94.5	94.8	95.0	53	75	82	88
75	1180	405T	EM4404T	1684M	16X86	1.15	89.7	93.0	93.5	93.6	44	65	75	79

Shaded ratings are cast iron frames

## Chemical Processing, Totally Enclosed Fan Cooled Rigid Base, 460 Volts 1 Through 400 HP - Nema Frames 143T Through 449T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143T	ECP3581T-4	0524M	05W91	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	1750	145T	ECP3584T-4	0528M	05W76	1.15	79.9	86.5	87.8	87.5	37	58	71	78
2	1750	145T	ECP3587T-4	0535M	05W88	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	3500	182T	ECP3660T-4	0628M	06W109	1.15	80.9	87.5	89.1	88.5	65	83	89	92
3	1760	182T	ECP3661T-4	0628M	06W53	1.15	79.0	86.9	88.4	89.5	33	54	62	72
3	1160	213T	ECP3764T-4	0735M	07X29	1.15	78.4	85.9	88.6	88.5	28	44	57	65
5	3500	184T	ECP3663T-4	0634M	06X65	1.15	86.8	90.5	90.8	89.5	69	85	91	93
5	1760	184T	ECP3665T-4	0640M	06X55	1.15	82.8	88.8	90.3	90.2	37	58	70	78
5	1160	215T	ECP3768T-4	0750M	07W81	1.15	83.3	88.4	89.1	89.5	34	54	65	69
7 1/2	3525	213T	ECP3769T-4	0733M	07W384	1.15	84.2	90.0	91.4	91.0	59	79	87	90
7 1/2	1760	213T	ECP3770T-4	0735M	07W80	1.15	84.7	89.5	90.4	91.0	43	64	74	80
7 1/2	1170	254T	ECP2276T-4	0940M	09W764	1.15	83.1	88.7	89.6	89.5	41	61	73	77
10	3525	215T	ECP3771T-4	0738M	07W381	1.15	85.5	90.2	91.2	91.0	51	74	84	93
10	1760	215T	ECP3774T-4	0750M	07X17	1.15	87.0	91.1	91.6	91.7	49	70	81	81
10	1170	256T	ECP2332T-4	0952M	09W765	1.15	83.8	89.4	90.4	90.2	37	59	69	75
15	3525	254T	ECP2394T-4	0940M	09W755	1.15	88.6	92.5	92.8	91.7	63	83	89	93
15	1765	254T	ECP2333T-4	0942M	09X129	1.15	87.9	92.1	93.0	92.4	49	71	81	84
15	1170	284T	ECP4100T-4	1050M	10W482	1.15	87.0	91.2	91.7	91.0	46	65	74	79
20	3525	256T	ECP4106T-4	0948M	09W767	1.15	91.6	93.4	93.2	92.4	70	83	88	91
20	1765	256T	ECP2334T-4	0952M	09X126	1.15	89.6	92.9	93.5	93.0	45	67	79	84
20	1170	286T	ECP4102T-4	1060M	10W483	1.15	88.0	91.7	92.0	91.7	50	70	78	80
25	3550	284TS	ECP4107T-4	1044M	10W117	1.15	88.8	92.2	92.8	92.4	71	86	90	90
25	1780	284T	ECP4103T-4	1050M	10W725	1.15	85.8	91.0	92.7	93.6	49	70	79	82
25	1180	324T	ECP4111T-4	1256M	12Z90	1.15	88.9	92.6	93.2	93.0	53	73	81	83
30	3550	286TS	ECP4108T-4	1050M	10Z92	1.15	90.2	93.2	93.5	93.0	70	85	89	89
30	1780	286T	ECP4104T-4	1056M	10W724	1.15	87.1	91.6	92.6	94.1	55	75	83	84
30	1180	326T	ECP4117T-4	1262M	12Z91	1.15	89.4	92.7	93.2	93.0	54	75	82	83
40	3550	324TS	ECP4109T-4	1252M	12W601	1.15	87.4	91.6	92.7	93.0	68	85	90	92
40	1780	324T	ECP4110T-4	1258M	12Z55	1.15	91.4	94.4	95.0	94.5	56	76	83	86
40	1180	364T	ECP4308T-4	1458M	14Z85	1.15	89.5	92.9	93.4	93.6	52	72	79	83
50	3550	326TS	ECP4114T-4	1264M	12W605	1.15	87.1	91.6	92.8	93.6	65	83	90	89
50	1780	326T	ECP4115T-4	1272M	12Z54	1.15	89.7	93.5	94.2	94.5	58	78	84	86
50	1180	365T	ECP4312T-4	1468M	14Z86	1.15	90.3	93.3	93.6	93.6	51	71	80	84
60	3550	364TS	ECP4310T-4	1458M	14Z87	1.15	88.9	93.0	94.0	94.1	70	85	91	92
60	1780	364T	ECP4314T-4	1462M	14W491	1.15	92.0	94.5	94.9	94.5	52	72	81	83
60	1180	404T	ECP4403T-4	1672M	16X91	1.15	92.0	94.4	94.5	94.1	44	66	75	79
75	3550	365TS	ECP4313T-4	1472M	14Y90	1.15	88.8	92.6	93.6	94.1	64	83	90	91
75	1780	365T	ECP4316T-4	1480M	14W362	1.15	91.8	94.4	94.8	95.0	53	74	82	86
75	1180	405T	ECP4404T-4	1684M	16X92	1.15	88.8	92.5	93.2	93.6	45	66	75	79
100	3570	405TS	ECP4402T-4	1668M	16Y07	1.15	91.8	94.2	94.5	94.5	72	86	89	91
100	1780	405T	ECP4400T-4	1680M	16X20	1.15	93.8	95.5	95.4	95.0	66	82	86	88
100	1180	444T	ECP4409T-4	1888M	18W199	1.15	90.7	94.3	95.1	95.4	51	72	80	82
125	3570	444TS	ECP4412T-4	1872M	18W170	1.15	89.5	93.2	94.3	94.5	74	87	91	92
125	1780	444T	ECP4410T-4	1880M	18W146	1.15	89.7	94.3	95.1	95.4	55	75	84	87
125	1180	445T	ECP4411T-4	18100M	18W142	1.15	91.6	94.6	95.2	95.0	44	66	76	81
150	3570	445TS	ECP4413T-4	1880M	18W171	1.15	89.1	93.2	94.0	94.5	72	86	90	92
150	1780	445T	ECP4406T-4	1892M	18W164	1.15	91.6	94.9	95.6	95.4	58	79	86	87
150	1180	447T	ECP44156T-4	18112M	18W144	1.15	92.2	95.2	95.8	95.8	47	49	79	82
200	3570	447TS	ECP4416T-4	1896M	18W109	1.15	91.3	94.4	95.2	95.4	74	87	91	92
200	1780	447T	ECP4407T-4	18112M	18W147	1.15	91.4	93.1	94.9	95.8	61	82	86	88
200	1180	449T	ECP44206T-4	18140M	18W145	1.15	91.1	94.5	95.2	95.8	47	70	80	81
250	1780	449T	ECP4408T-4	18136M	18W166	1.15	89.8	93.9	94.9	95.8	61	79	86	89
250	1180	449T	ECP44256T-4	18164M	18W167	1.15	92.0	95.0	95.6	95.8	52	73	80	83
300	1785	449T	ECP44304T-4	18160M	18W228	1.15	92.2	95.1	95.8	95.8	63	81	86	88
300	1185	449T	ECP44306T-4	18188M	18W168	1.15	90.8	94.3	95.0	95.0	50	71	80	83
350	1785	449T	ECP44354T-4	18168M	18W487	1.15	92.8	95.3	95.6	95.8	66	83	87	89
400	1780	449T	ECP44404T-4	18180M	18W344	1.15	93.5	95.6	95.9	95.8	64	83	88	89

Shaded ratings are cast iron frames

## Chemical Processing, Totally Enclosed Fan Cooled, Rigid Base, 2300/4160 Volts 250 Through 500 HP - Nema Frames 5007L Through 5011L

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
250	1790	5007L	ECP50254L-2341	20113M	200107	1.15		92.7	94.3	95.0		81	87	89
250	1185	5009L	ECP50256L-2341	20133M	200128	1.15		93.3	94.2	94.5		74	82	86
300	1790	5009L	ECP50304L-2341	20133M	200106	1.15		93.4	94.9	95.4		83	88	90
300	1185	5011L	ECP50306L-2341	20165M	200127	1.15		93.7	94.5	94.5		76	84	86
350	1790	5011L	ECP50354L-2341	20137M	200105	1.15		93.7	94.9	95.4		82	88	89
350	1185	5011L	ECP50356L-2341	20193M	200126	1.15		93.9	94.8	95.0		75	83	86
400	1790	5011L	ECP50404L-2341	20141M	200104	1.15		93.8	95.0	95.4		82	87	89
400	1185	5011L	ECP50406L-2341	20225M	200124	1.15		93.9	94.8	95.0		74	82	86
450	1790	5011L	ECP50454L-2341	20153M	200103	1.15		94.1	95.2	95.4		83	88	89
450	1190	5011L	ECP50456L-2341	20209M	200134	1.15		93.7	95.0	95.4		60	70	77
500	1790	5011L	ECP50504L-2341	20169M	20075	1.15		96.1	96.2	95.8		85	89	90
500	1190	5011L	ECP50506L-2341	20229M	200133	1.15		95.2	95.2	95.4		59	69	77

Shaded ratings are cast iron frames

## IEEE 841, Totally Enclosed Fan Cooled Rigid Base, 460 Volts 15 Through 200 HP - Nema Frames 254T Through 447T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
15	1765	254T	ECP82333T-4	0942M	09X129	1.15	87.9	92.1	93.0	92.4	49	71	81	84
20	1765	256T	ECP82334T-4	0952M	09X126	1.15	89.6	92.9	93.5	93.0	45	67	79	84
25	1780	284T	ECP84103T-4	1050M	10W725	1.15	85.8	91.0	92.7	93.6	49	70	79	82
30	1780	286T	ECP84104T-4	1056M	10W724	1.15	87.1	91.6	92.6	94.1	55	75	83	84
40	1780	324T	ECP84110T-4	1258M	12Z55	1.15	91.4	94.4	95.0	94.5	56	76	83	86
50	1780	326T	ECP84115T-4	1272M	12Z54	1.15	89.7	93.5	94.2	94.5	58	78	84	86
60	1780	364T	ECP84314T-4	1462M	14W491	1.15	92.0	94.5	94.9	94.5	52	72	81	83
75	1780	365T	ECP84316T-4	1480M	14W362	1.15	91.8	94.4	94.8	95.0	53	74	82	86
100	1780	405T	ECP84400T-4	1680M	16X20	1.15	93.8	95.5	95.4	95.0	66	82	86	88
125	1780	444T	ECP84410T-4	1880M	12Z55	1.15	91.4	94.4	95.0	94.5	56	76	83	86
150	1780	445T	ECP84406T-4	1892M	18W164	1.15	91.6	94.9	95.6	95.4	58	79	86	87
200	1780	447T	ECP84407T-4	18112M	18W147	1.15	91.4	93.1	94.9	95.8	61	82	86	88

Shaded ratings are cast iron frames

## Explosion Proof Rigid Base, 230/460 Volts 1 Through 100 HP - Nema Frames 143T Through 405T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143T	EM7014T	3524M	35S396	1.00	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	1750	145T	EM7034T	3528M	35S397	1.00	79.9	86.9	88.3	88.5	36	57	69	74
2	1750	145T	EM7037T	3540M	35S398	1.00	82.4	88.0	89.2	88.5	39	60	73	80
3	1760	182T	EM7142T	0628M	06W14	1.00	79.0	86.9	88.4	89.5	33	54	62	72
5	1760	184T	EM7144T	0640M	06W09	1.00	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	1760	213T	EM7147T	0734M	07W326	1.00	71.7	81.5	84.6	90.2	39	59	71	80
10	1760	215T	EM7170T	0746M	07W268	1.00	85.6	90.6	91.8	91.7	42	64	76	80
15	1765	254T	EM7054T	0942M	09W980	1.00	87.9	92.1	93.0	92.4	49	71	81	84
20	1765	256T	EM7056T	0952M	09W772	1.00	89.6	92.9	93.5	93.0	45	67	79	84
25	1780	284T	EM7058T	1050M	10W717	1.00	85.8	91.0	92.7	93.6	49	70	79	82
30	1780	286T	EM7060T	1056M	10W586	1.00	87.1	91.6	92.6	94.1	55	75	83	84
40	1780	324T	EM7062T	1256M	12W375	1.00	97.7	92.7	94.1	94.5	55	74	82	84
50	1780	326T	EM7064T	1272M	12Z49	1.00	89.7	93.5	94.2	94.5	58	78	84	86
60	1780	364T	EM7066T	1462M	14W303	1.00	92.0	94.5	94.9	94.5	52	72	81	83
100	1780	405T	EM7090T	1676M	16Y127	1.00	91.4	94.1	94.6	95.0	64	82	87	86

Shaded ratings are cast iron frames

**C-Face with Base**  
**Totally Enclosed Fan Cooled, 230/460 Volts**  
**1 Through 25 HP - Nema Frames 143TC Through 284TC**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143TC	CEM3581T	0524M	05W52	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	3450	143TC	CEM3583T	0524M	05W116	1.15	71.9	81.3	84.3	85.5	49	68	78	83
1 1/2	1750	145TC	CEM3584T	0528M	05W53	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	3450	145TC	CEM3586T	0532M	05W115	1.15	75.2	83.8	86.2	86.5	50	70	80	85
2	1750	145TC	CEM3587T	0535M	05W54	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	3500	182TC	CEM3660T	0628M	06W36	1.15	80.9	87.5	89.1	88.5	65	83	89	92
3	1760	182TC	CEM3661T	0628M	06W14	1.15	79.0	86.9	88.4	89.5	33	54	62	72
5	3500	184TC	CEM3663T	0634M	06W18	1.15	86.8	90.5	90.8	89.5	69	85	91	93
5	1760	184TC	CEM3665T	0640M	06W09	1.15	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	3525	213TC	CEM3769T	0733M	07W280	1.15	84.2	90.0	91.4	91.0	59	79	87	90
7 1/2	1760	213TC	CEM3770T	0735M	07W35	1.15	84.7	89.5	90.4	91.0	43	64	74	80
10	3525	215TC	CEM3771T	0738M	07W279	1.15	85.5	90.2	91.2	91.0	51	74	84	93
10	1760	215TC	CEM3774T	0746M	07W268	1.15	85.6	90.6	91.8	91.7	42	64	76	80
15	1765	254TC	CEM2333T	0942M	09W980	1.15	87.9	92.1	93.0	92.4	49	71	81	84
20	1765	256TC	CEM2334T	0952M	09W772	1.15	89.6	92.9	93.5	93.0	45	67	79	84
25	1780	284TC	CEM4103T	1050M	10W717	1.15	85.8	91.0	92.7	93.6	49	70	79	82

Shaded ratings are cast iron frames

**C-Face less Base**  
**Totally Enclosed Fan Cooled, 230/460 Volts**  
**1 Through 10 HP - Nema Frames 143TC Through 215TC**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143TC	VEM3581T	0524M	05W52	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	1750	145TC	VEM3584T	0528M	05W53	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	1750	145TC	VEM3587T	0535M	05W54	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	1760	182TC	VEM3661T	0628M	06W14	1.15	79.0	86.9	88.4	89.5	33	54	62	72
5	1760	184TC	VEM3665T	0640M	06W09	1.15	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	1760	213TC	VEM3770T	0735M	07W35	1.15	84.7	89.5	90.4	91.0	43	64	74	80
10	1760	215TC	VEM3774T	0750M	07W19	1.15	87.0	91.1	91.6	91.7	49	70	81	81

Shaded ratings are cast iron frames

**Automotive Approved**  
**Totally Enclosed Fan Cooled, Rigid Base, 460 Volts**  
**1 Through 100 HP - Nema Frames 182 Through 445U**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1760	182	AEM3683-4	0617M	06W54	1.00	74.2	83.1	85.8	85.5	34	54	68	76
1	1140	184	AEM3684-4	0628M	06X83	1.00	74.2	80.8	82.5	80.5	37	52	63	71
1 1/2	1740	184	AEM3686-4	0623M	06X82	1.00	75.4	83.5	86.5	85.5	40	58	71	77
1 1/2	1140	184	AEM3687-4	0634M	06X84	1.00	73.5	81.6	83.9	84.0	32	48	60	68
2	1740	184	AEM3689-4	0628M	06X85	1.00	85.7	86.5	87.3	86.0	66	71	84	85
2	1140	213	AEM3782-4	0726M	07W137	1.00	72.2	81.1	83.7	83.5	36	54	65	71
3	1760	213	AEM3783-4	0729M	07X28	1.00	85.6	88.8	89.7	87.5	58	72	80	83
3	1160	215	AEM3784-4	0740M	07W152	1.00	78.5	85.9	87.9	86.5	36	56	68	74
5	1750	215	AEM3787-4	0735M	07W138	1.00	85.4	89.4	89.9	87.5	51	70	80	84
5	1170	254U	AEM2275-4	0932M	09W694	1.00	77.3	85.3	87.8	88.5	44	63	72	75
7 1/2	1760	254U	AEM2237-4	0924M	09X153	1.00	80.4	87.3	89.1	89.5	53	73	82	84
7 1/2	1170	256U	AEM2276-4	0940M	09W693	1.00	80.5	85.9	86.3	89.5	47	65	74	81
10	1160	284U	AEM2332-4	1040M	10W436	1.00	80.2	87.5	89.0	88.5	48	67	76	80
15	1160	324U	AEM4100-4	1236M	12W321	1.00	86.0	90.2	90.6	89.5				83
20	1760	286U	AEM2334-4	1044M	10W769	1.00	82.2	88.6	90.5	90.2	55	74	82	86
20	1160	326U	AEM4102-4	1240M	12W322	1.15	87.1	90.7	91.1	89.0	53	73	81	83
30	1760	326U	AEM4104-4	1256M	12W323	1.00	84.1	90.4	92.3	93.0	54	74	83	86
30	1180	365U	AEM4117-4	1458M	14W255	1.00	90.1	93.0	93.1	91.7	60	77	84	83
40	1780	364U	AEM4307-4	1444M	14W256	1.00	85.8	91.6	92.8	92.4				88
40	1180	404U	AEM4308-4	1650M	16Y76	1.00	88.6	92.0	93.2	92.5	55	76	84	87
60	1780	405U	AEM4314-4	1654M	16Y75	1.00	90.3	93.2	93.8	92.5	63	77	87	89
60	1180	444U	AEM4403-4	1856M	18W376	1.00	86.9	91.8	93.0	93.0	52	72	80	85
100	1780	445U	AEM4400-4	1868M	18W375	1.00	92.3	94.8	95.1	94.5	64	81	86	89

Shaded ratings are cast iron frames



## Totally Enclosed Fan Cooled Rigid Base, 575 Volts 1 Through 50 HP - Nema Frames 145T Through 326TS

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	145T	EM3546T-5	3524M	35S494	1.15				85.5				78
1 1/2	1750	145T	EM3554T-5	3528M	35S843	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	1750	145T	EM3558T-5	3535M	35S812	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	1760	182T	EM3611T-5	3628M	36X756	1.15	80.2	87.0	88.9	89.5	32	51	64	66
3	1760	182T	EM3661T-5	0628M	06W27	1.15	79.0	86.9	88.4	89.5	33	54	62	72
5	1760	184T	EM3615T-5	3640M	36X554	1.15	86.3	90.7	91.0	90.2	47	67	77	78
5	1760	184T	EM3665T-5	0640M	06W26	1.15	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	3525	213T	EM3769T-5	0733M	07W385	1.15	84.2	90.0	91.4	91.0	59	79	87	90
7 1/2	1760	213T	EM3710T-5	3735M	37X834	1.15	84.7	89.5	90.4	91.0	43	64	74	80
7 1/2	1760	213T	EM3770T-5	0735M	07W46	1.15	84.7	89.5	90.4	91.0	43	64	74	80
10	1760	215T	EM3714T-5	3750M	37X715	1.15	86.6	90.9	91.5	91.0				81
10	1760	215T	EM3774T-5	0750M	07W36	1.15	87.0	91.1	91.6	91.7	49	70	81	81
15	3525	254T	EM2394T-5	0940M	09W324	1.15	88.6	92.5	92.8	91.7	63	83	89	93
20	3525	256T	EM4106T-5	0948M	09W399	1.15	91.6	93.4	93.2	92.4	70	83	88	91
25	3550	284TS	EM4107T-5	1044M	10W236	1.15	88.8	92.2	92.8	92.4	71	86	90	90
30	3550	286TS	EM4108T-5	1050M	10W233	1.15	90.2	93.2	93.5	93.0	70	85	89	89
40	3550	324TS	EM4109T-5	1252M	12W602	1.15	87.4	91.6	92.7	93.0	68	85	90	92
50	3550	326TS	EM4114T-5	1264M	12W606	1.15	87.1	91.6	92.8	93.6	65	83	90	89
50	1780	326T	EM4115T-5	1272M	12Z80	1.15	89.7	93.5	94.2	94.5	58	78	84	86

Shaded ratings are cast iron frames

## Chemical Processing, Totally Enclosed Fan Cooled Rigid Base, 575 Volts 1 Through 350 HP - Nema Frames 143T Through 449T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143T	ECP3581T-5	0524M	05W55	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	1750	145T	ECP3584T-5	0528M	05W56	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	1750	145T	ECP3587T-5	0535M	05W57	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	1760	182T	ECP3661T-5	0628M	06W27	1.15	79.0	86.9	88.4	89.5	33	54	62	72
3	1160	213T	ECP3764T-5	0735M	07W87	1.15	78.4	85.9	88.6	88.5	28	44	57	65
5	1760	184T	ECP3665T-5	0640M	06W26	1.15	82.8	88.8	90.3	90.2	37	58	70	78
5	1160	215T	ECP3768T-5	0750M	07W88	1.15	83.3	88.4	89.1	89.5	34	54	65	69
7 1/2	1760	213T	ECP3770T-5	0735M	07W46	1.15	84.7	89.5	90.4	91.0	43	64	74	80
7 1/2	1170	254T	ECP2276T-5	0940M	09W398	1.15	83.1	88.7	89.6	89.5	41	61	73	77
10	1760	215T	ECP3774T-5	0750M	07W36	1.15	87.0	91.1	91.6	91.7	49	70	81	81
10	1170	256T	ECP2332T-5	0952M	09W396	1.15	83.8	89.4	90.4	90.2	37	59	69	75
15	1760	254T	ECP2333T-5	0942M	09X130	1.15	87.9	92.1	93.0	92.4	49	71	81	84
15	1170	284T	ECP4100T-5	1050M	10W234	1.15	87.0	91.2	91.7	91.0	46	65	74	79
20	1765	256T	ECP2334T-5	0952M	09X127	1.15	89.6	92.9	93.5	93.0	45	67	79	83
20	1170	286T	ECP4102T-5	1060M	10W235	1.15	88.0	91.7	92.0	91.7	50	70	78	80
25	1780	284T	ECP4103T-5	1050M	10W718	1.15	85.8	91.0	92.7	93.6	49	70	79	82
25	1180	324T	ECP4111T-5	1256M	12W107	1.15	88.9	92.6	93.2	93.0	53	73	81	83
30	1780	286T	ECP4104T-5	1056M	10W721	1.15	87.1	91.6	92.6	94.1	55	75	83	84
30	1180	326T	ECP4117T-5	1262M	12W108	1.15	89.4	92.7	93.2	93.0	54	75	82	83
40	1780	324T	ECP4110T-5	1258M	12Z95	1.15	91.4	94.4	95.0	94.5	56	76	83	86
50	1780	326T	ECP4115T-5	1272M	12Z80	1.15	89.7	93.5	94.2	94.5	58	78	84	86
60	1780	364T	ECP4314T-5	1462M	14W370	1.15	92.0	94.5	94.9	94.5	52	72	81	83
60	1180	404T	ECP4403T-5	1672M	16Y150	1.15	89.5	93.1	94.0	94.1	40	63	73	78
75	1780	365T	ECP4316T-5	1480M	14W504	1.15	91.8	94.4	94.8	95.0	53	74	82	88
100	1780	405T	ECP4400T-5	1680M	16X25	1.15	93.8	95.5	95.4	95.0	66	82	86	88
100	1180	444T	ECP4409T-5	1888M	18W131	1.15	90.7	94.3	95.1	95.4	51	72	80	82
125	1780	444T	ECP4410T-5	1880M	18W193	1.15	89.7	94.3	95.1	95.4	55	75	84	87
150	1780	445T	ECP4406T-5	1892M	18W165	1.15	91.6	94.9	95.6	95.4	58	79	86	87
150	1180	447T	ECP44156T-5	18112M	18W191	1.15	92.2	95.2	95.8	95.8	47	49	79	82
200	1780	447T	ECP4407T-5	18112M	18W148	1.15	91.4	93.1	94.9	95.8	61	82	86	88
200	1180	449T	ECP44206T-5	18140M	18W162	1.15	91.1	94.5	95.2	95.8	47	70	80	81
350	1785	449T	ECP44354T-5	18168M	18W595	1.15	92.8	95.3	95.6	95.8	66	83	87	89

Shaded ratings are cast iron frames

## C-Face less Base Totally Enclosed Fan Cooled, 575 Volts 1 Through 10 HP - Nema Frames 143TC Through 215TC

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143TC	VEM3581T-5	0524M	05W55	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	1750	145TC	VEM3584T-5	0528M	05W56	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	1750	145TC	VEM3587T-5	0535M	05W57	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	1760	182TC	VEM3661T-5	0628M	06W27	1.15	79.0	86.9	88.4	89.5	33	54	62	72
5	1760	184TC	VEM3665T-5	0640M	06W26	1.15	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	1760	213TC	VEM3770T-5	0735M	07W46	1.15	84.7	89.5	90.4	91.0	43	64	74	80
10	1760	215TC	VEM3774T-5	0750M	07W36	1.15	87.0	91.1	91.6	91.7	49	70	81	81

Shaded ratings are cast iron frames

## C-Face with Base Totally Enclosed Fan Cooled, 575 Volts 1 Through 25 HP - Nema Frames 143TC Through 284TC

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1750	143TC	CEM3581T-5	0524M	05W55	1.15	76.2	84.0	85.8	85.5	36	56	70	78
1 1/2	3450	143TC	CEM3583T-5	0524M	05W61	1.15	71.9	81.3	84.3	85.5	49	68	78	83
1 1/2	1750	145TC	CEM3584T-5	0528M	05W56	1.15	79.7	86.4	87.7	87.5	36	57	71	78
2	3450	145TC	CEM3586T-5	0532M	05W62	1.15	75.2	83.8	86.2	86.5	50	70	80	85
2	1750	145TC	CEM3587T-5	0535M	05W57	1.15	83.0	87.6	88.0	86.5	43	64	77	83
3	3500	182TC	CEM3660T-5	0628M	06W42	1.15	80.9	87.5	89.1	88.5	65	83	89	92
3	1760	182TC	CEM3661T-5	0628M	06W27	1.15	79.0	86.9	88.4	89.5	33	54	62	72
5	3500	184TC	CEM3663T-5	0634M	06W40	1.15	86.8	90.5	90.8	89.5	69	85	91	93
5	1760	184TC	CEM3665T-5	0640M	06W26	1.15	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	3525	213TC	CEM3769T-5	0733M	07W385	1.15	84.2	90.0	91.4	91.0	59	79	87	90
7 1/2	1760	213TC	CEM3770T-5	0735M	07W46	1.15	84.7	89.5	90.4	91.0	43	64	74	80
10	3525	215TC	CEM3771T-5	0738M	07W382	1.15	85.5	90.2	91.2	91.0	51	74	84	93
10	1760	215TC	CEM3774T-5	0746M	07W327	1.15	84.5	89.9	91.0	91.0	40	63	74	80
15	1760	254TC	CEM2333T-5	0942M	09X130	1.15	87.9	92.1	93.0	92.4	49	71	81	84
20	1765	256TC	CEM2334T-5	0952M	09X127	1.15	89.6	92.9	93.5	93.0	45	67	79	83
25	1780	284TC	CEM4103T-5	1050M	10W718	1.15	85.8	91.0	92.7	93.6	49	70	79	82

Shaded ratings are cast iron frames

## Totally Enclosed Fan Cooled Rigid Base, 200 Volts 3 Through 100 HP - Nema Frames 182T Through 405TS

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
3	3500	182T	EM3660T-8	0628M	06X76	1.15	80.9	87.5	89.1	88.5	65	83	89	92
3	1760	182T	EM3661T-8	0628M	06W51	1.15	79.0	86.9	88.4	89.5	33	54	62	72
5	3500	184T	EM3663T-8	0634M	06W79	1.15	86.8	90.5	90.8	89.5	69	85	91	93
5	1760	184T	EFM3665T-8	0640M	06X41	1.15	82.8	88.8	90.3	90.2	37	58	70	78
5	1760	184T	EM3665T-8	0640M	06X41	1.15	82.8	88.8	90.3	90.2	37	58	70	78
7 1/2	3525	213T	EM3769T-8	0733M	07W386	1.15	84.2	90.0	91.4	91.0	59	79	87	90
7 1/2	1760	213T	EM3770T-8	0735M	07W50	1.15	84.7	89.5	90.4	91.0	43	64	74	80
10	3525	213T	EM3771T-8	0738M	07W383	1.15	85.5	90.2	91.2	91.0	51	74	84	93
10	1760	215T	EM3774T-8	0750M	07W78	1.15	87.0	91.1	91.6	91.7	49	70	81	81
15	3525	254T	EM2394T-8	0940M	09W362	1.15	88.6	92.5	92.8	91.7	63	83	89	93
15	1760	254T	EM2333T-8	0942M	09X131	1.15	87.9	92.1	93.0	92.4	49	71	81	85
20	3525	256T	EM4106T-8	0948M	09X422	1.15				92.4				91
20	1765	256T	EM2334T-8	0952M	09X423	1.15	89.6	92.9	93.5	93.0	45	67	79	84
25	3550	284TS	EM4107T-8	1044M	10W854	1.15				92.4				90
25	1780	284T	EM4103T-8	1050M	10W855	1.15				93.6				82
30	3550	286TS	EM4108T-8	1050M	10W856	1.15				93.0				89
30	1780	286T	EM4104T-8	1056M	10W857	1.15				94.1				84
40	1780	324T	EM4110T-8	1258M	12W631	1.15				94.5				86
50	3550	326TS	EM4114T-8	1264M	12W607	1.15				93.6				89
50	1780	326T	EM4115T-8	1272M	12W315	1.15				94.5	58	78	84	86
60	3550	364TS	EM4310T-8	1458M	14W247	1.15	88.9	93.0	94.0	94.1	70	85	91	92
60	1780	364T	EM4314T-8	1462M	14W490	1.15	92.0	94.5	94.9	94.5	52	72	81	84
75	3550	365TS	EM4313T-8	1472M	14W248	1.15	89.8	93.1	93.7	94.1	70	85	89	91
75	1780	365T	EM4316T-8	1480M	14W503	1.15	91.8	94.5	94.8	95.0	53	75	82	88
100	3570	405TS	EM4402T-8	1668M	16Y63	1.15	91.8	94.2	94.5	94.5	72	86	89	91

Shaded ratings are cast iron frames

**Open Drip Proof  
Rigid Base, 230/460 Volts  
1 Through 100 HP - Nema Frames 56 Through 365TS**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	3450	56	EM3115	3516M	35W814	1.25	70.1	80.4	83.5	84.0	53	71	80	83
1	1740	145T	EFM3116T	3520M	35X912	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1	1740	143T	EM3116T	3520M	35X912	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1	1140	145T	EM3156T	3532M	35S486	1.15	76.9	82.6	83.1	82.0	31	52	65	70
1 1/2	3450	143T	EM3120T	3520M	35S253	1.15	76.8	83.9	85.4	85.5	51	71	80	85
1 1/2	1740	145T	EM3154T	3524M	35X913	1.15	73.0	81.5	83.5	84.0	40	59	70	77
1 1/2	1160	182T	EM3207T	3628M	36X569	1.15				86.5				62
2	3450	145T	EM3155T	3524M	35S254	1.15	78.2	84.9	86.2	85.5	54	73	82	85
2	1740	145T	EFM3157T	3528M	35X914	1.15	70.7	80.2	83.0	84.0	42	62	74	81
2	1740	145T	EM3157T	3528M	35X914	1.15	70.7	80.2	83.0	84.0	42	62	74	81
2	1160	184T	EM3215T	3634M	36X568	1.15	73.1	82.4	84.8	85.5	27	44	55	64
3	3450	145T	EM3158T	3535M	35S255	1.15	80.8	87.1	88.5	87.5	56	76	85	89
3	1760	182T	EFM3211T	3628M	36X566	1.15	80.2	87.0	88.9	89.5	32	51	64	71
3	1760	182T	EM3211T	3628M	36X566	1.15	80.2	87.0	88.9	89.5	32	51	64	71
3	1160	213T	EM3305T	3735M	37X637	1.15	81.9	88.6	90.3	90.2	30	48	60	67
5	3500	182T	EFM3212T	3634M	36X418	1.15	86.6	90.5	90.8	90.2	63	83	90	93
5	3500	182T	EM3212T	3634M	36X418	1.15	86.6	90.5	90.8	90.2	63	83	90	93
5	1760	184T	EFM3218T	3640M	36X567	1.15	86.3	90.7	91.0	90.2	47	67	77	81
5	1760	184T	EM3218T	3640M	36X567	1.15	86.3	90.7	91.0	90.2	47	67	77	81
5	1160	215T	EM3309T	3750M	37X638	1.15	85.7	89.7	90.0	89.5	37	56	67	73
7 1/2	3500	184T	EM3219T	3646M	36X419	1.15	87.9	91.3	91.6	90.2	68	85	90	93
7 1/2	1760	213T	EFM3311T	3735M	37X635	1.15	84.4	89.7	90.8	91.0	48	69	79	84
7 1/2	1760	213T	EM3311T	3735M	37X635	1.15	84.4	89.7	90.8	91.0	48	69	79	84
7 1/2	1170	254T	EM2506T	3940M	39W324	1.15	83.0	88.7	89.9	89.5	38	57	68	74
10	3525	213T	EM3312T	3735M	37W943	1.15	88.1	91.4	92.2	91.7	60	77	85	89
10	1760	215T	EFM3313T	3750M	37X636	1.15	86.6	90.9	91.5	91.7	44	65	76	83
10	1760	215T	EM3313T	3750M	37X636	1.15	86.6	90.9	91.5	91.7	44	65	76	83
10	1170	256T	EM2511T	3952M	39W323	1.15	85.0	90.0	91.1	91.0	43	62	72	76
15	3525	215T	EM3314T	3744M	37X895	1.15	91.8	93.3	93.0	91.7	69	85	90	92
15	1765	254T	EFM2513T	3938M	39W317	1.15	85.9	90.8	91.9	92.4	48	70	79	84
15	1765	254T	EM2513T	3938M	39W317	1.15	85.9	90.8	91.9	92.4	48	70	79	84
15	1170	284T	EM2524T	4044M	40Y43	1.15	83.2	89.1	90.6	91.7				75
20	3525	254T	EM2514T	3944M	39W526	1.15	83.8	89.4	90.7	91.7	65	82	88	90
20	1765	256T	EFM2515T	3946M	39W318	1.15	87.4	91.9	92.8	93.0	52	74	83	84
20	1765	256T	EM2515T	3946M	39W318	1.15	87.4	91.9	92.8	93.0	52	74	83	84
20	1170	286T	EM2528T	4056M	40Z90	1.15	88.2	92.3	93.2	93.0	40	61	72	77
25	3525	256T	EM2516T	3948M	39W527	1.15	88.3	91.9	92.5	92.4	69	84	89	90
25	1760	284T	EFM2531T	4040M	40W188	1.15	89.4	92.8	93.2	92.4	53	72	80	82
25	1760	284T	EM2531T	4040M	40W188	1.15	89.4	92.8	93.2	92.4	53	72	80	82
25	1180	324T	EM2532T	4248M	42X55	1.15	89.4	92.6	93.1	92.4				81
30	3525	284TS	EM2534T	4044M	40Y41	1.15	90.7	93.5	94.0	93.6	67	83	89	90
30	1780	286T	EFM2535T	4050M	40W136	1.15	87.8	92.1	93.1	92.4	50	71	79	81
30	1780	286T	EM2535T	4050M	40W136	1.15	87.8	92.1	93.1	92.4	50	71	79	81
30	1180	326T	EM2536T	4258M	42W112	1.15	90.6	93.7	94.2	93.6	45	67	77	81
40	3525	286TS	EM2538T	4056M	40Z88	1.15	91.7	94.1	94.4	94.1	67	82	88	89
40	1780	324T	EFM2539T	4254M	42W114	1.15	89.0	92.8	93.5	93.6	56	75	82	84
40	1780	324T	EM2539T	4254M	42W114	1.15	89.0	92.8	93.5	93.6	56	75	82	84
40	1180	364T	EM2540T	1458M	14Z17	1.15	89.5	92.9	93.4	93.6	52	72	79	83
50	3550	324TS	EM2542T	4248M	42X46	1.15	88.9	92.7	93.5	93.6	63	81	86	88
50	1780	326T	EFM2543T	4268M	42W115	1.15	88.0	92.5	93.6	93.6	51	72	80	84
50	1780	326T	EM2543T	4268M	42W115	1.15	88.0	92.5	93.6	93.6	51	72	80	84
50	1180	365T	EM2544T	1468M	14Y84	1.15	90.3	93.3	93.6	93.6	51	71	80	84
60	3550	326TS	EM2546T	4262M	42W221	1.15	90.5	93.5	94.2	94.1	61	81	88	89
60	1780	364T	EFM2547T	1444M	14Z09	1.15	92.7	94.7	94.6	93.6	52	73	81	83
60	1780	364T	EM2547T	1444M	14Z09	1.15	92.7	94.7	94.6	93.6	52	73	81	83
75	3550	364TS	EM2549T	1454M	14Z37	1.15	89.9	93.1	93.8	94.1	52	74	84	87
75	1780	365T	EM2551T	1462M	14W419	1.15	90.5	94.1	94.9	94.5	48	70	79	82
100	3560	365TS	EM2550T	1468M	14W432	1.15	90.6	93.8	94.4	94.1	72	85	89	90

Shaded ratings are cast iron frames

## Open Drip Proof Rigid Base, 460 Volts 75 Through 150 HP - Nema Frames 405T Through 445T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
75	1180	405T	EM2552T-4	1680M	16W183	1.15	90.4	93.7	94.1	93.6	43	64	74	82
100	1780	404T	EM2555T-4	1662M	16X23	1.15	92.4	94.7	94.8	94.1	55	75	81	85
100	1180	444T	EM2583T-4	1880M	18W132	1.15	90.2	94.3	95.0	95.0	45	68	77	82
125	3570	404TS	EM2554T-4	1666M	16W170	1.15	92.2	94.8	95.2	94.5	67	84	88	89
125	1785	405T	EM2559T-4	1684M	16W157	1.15	91.6	94.8	95.5	95.8	59	79	86	88
125	1180	445T	EM2557T-4	1892M	18W185	1.15	92.8	95.0	95.5	95.4	50	72	80	83
150	3570	405TS	EM2556T-4	1676M	16W169	1.15	93.1	95.2	95.5	95.4	69	85	89	90
150	1780	445T	EM2558T-4	1876M	18W181	1.15	92.0	94.9	95.4	95.4	61	81	87	88
150	1180	445T	EM2560T-4	18104M	18W186	1.15	92.0	95.2	95.8	95.8	54	75	82	83

Shaded ratings are cast iron frames

## Close Coupled Pump Open Drip Proof, Rigid Base, 230/460 Volts 1 Through 50 HP - Nema Frames 143JM Through 324JM

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1740	143JM	EJMM3116T	3520M	35X912	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1 1/2	1740	145JM	EJMM3154T	3524M	35X913	1.15	73.0	81.5	83.5	84.0	40	59	70	77
2	3450	145JM	EJMM3155T	3524M	35S254	1.15	78.2	84.9	86.2	85.5	54	73	82	85
2	1740	145JM	EJMM3157T	3528M	35X914	1.15	70.7	80.2	83.0	84.0	42	62	74	81
3	3450	145JM	EJMM3158T	3535M	35S255	1.15	80.8	87.1	88.5	87.5	56	76	85	89
3	1760	182JM	EJMM3211T	3628M	36X566	1.15	80.2	87.0	88.9	89.5	32	51	64	71
5	3500	182JM	EJMM3212T	3634M	36X418	1.15	86.6	90.5	90.8	90.2	63	83	90	93
5	1760	184JM	EJMM3218T	3640M	36X567	1.15	86.3	90.7	91.0	90.2	47	67	77	81
7 1/2	3500	184JM	EJMM3219T	3646M	36X419	1.15	87.9	91.3	91.6	90.2	68	85	90	93
7 1/2	1760	213JM	EJMM3311T	3735M	37X635	1.15	84.4	89.7	90.8	91.0	48	69	79	84
10	3525	213JM	EJMM3312T	3735M	37W943	1.15	88.1	91.4	92.2	91.7	60	77	85	89
10	1760	215JM	EJMM3313T	3750M	37X636	1.15	86.6	90.9	91.5	91.7	44	65	76	83
15	3525	215JM	EJMM3314T	3744M	37X895	1.15	91.8	93.3	93.0	91.7	69	85	90	92
20	3525	254JM	EJMM2514T	3944M	39W526	1.15	83.8	89.4	90.7	91.7	65	82	88	90
25	3525	256JM	EJMM2516T	3948M	39W527	1.15	88.3	91.9	92.5	92.4	69	84	89	90
30	3525	284JM	EJMM2534T	4044M	40Y41	1.15	90.7	93.5	94.0	93.6	67	83	89	90
40	3525	286JM	EJMM2538T	4056M	40Z88	1.15	91.7	94.1	94.4	94.1	67	82	88	89
50	3550	324JM	EJMM2542T	4248M	42X46	1.15	88.9	92.7	93.5	93.6	63	81	86	88



## Open Drip Proof Rigid Base, 575 Volts 1 Through 60 HP - Nema Frames 143T Through 364T

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1740	143T	EM3116T-5	3520M	35Y433	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1 1/2	1740	145T	EM3154T-5	3524M	35Y434	1.15	73.0	81.5	83.5	84.0	40	59	70	77
2	1740	145T	EM3157T-5	3528M	35Y435	1.15	70.7	80.2	83.0	84.0	42	62	74	81
3	1760	182T	EM3211T-5	3628M	36X756	1.15	80.2	87.0	88.9	89.5	32	51	64	66
5	1760	184T	EM3218T-5	3640M	36X677	1.15	86.3	90.7	91.0	90.2	47	67	77	81
7 1/2	1760	213T	EM3311T-5	3735M	37X740	1.15	84.4	89.7	90.8	91.0	48	69	79	84
10	1760	215T	EM3313T-5	3750M	37X715	1.15	86.6	90.9	91.5	91.7	44	65	76	83
15	1760	254T	EM2513T-5	3938M	39W435	1.15	85.9	90.8	91.9	92.4	48	70	79	84
20	1760	256T	EM2515T-5	3946M	39W433	1.15	87.4	91.9	92.8	93.0	52	74	83	84
25	1760	284T	EM2531T-5	4040M	40W193	1.15	89.4	92.8	93.2	92.4	53	72	80	82
30	1780	286T	EM2535T-5	4050M	40W190	1.15	87.8	92.1	93.1	92.4	50	71	79	82
40	1780	324T	EM2539T-5	4254M	42W181	1.15	89.0	92.8	93.5	93.6	56	75	82	84
50	1780	326T	EM2543T-5	4268M	42W180	1.15	88.0	92.5	93.6	93.6	51	72	80	84
60	1780	364T	EM2547T-5	1444M	14W199	1.15	92.7	94.7	94.6	93.6	52	73	81	83

Shaded ratings are cast iron frames

## Close Coupled Pump Open Drip Proof, Rigid Base, 575 Volts 1 Through 50 HP - Nema Frames 143JM Through 324JM

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1740	143JM	EJMM3116T-5	3520M	35Y433	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1 1/2	1740	145JM	EJMM3154T-5	3524M	35Y434	1.15	73.0	81.5	83.5	84.0	40	59	70	77
2	3450	145JM	EJMM3155T-5	3524M	35S487	1.15	78.2	84.9	86.2	85.5	54	73	82	85
2	1740	145JM	EJMM3157T-5	3528M	35Y435	1.15	70.7	80.2	83.0	84.0	42	62	74	81
3	3450	145JM	EJMM3158T-5	3535M	35S709	1.15	80.8	87.1	88.5	87.5	56	76	85	89
3	1760	182JM	EJMM3211T-5	3628M	36X756	1.15	80.2	87.0	88.9	89.5	32	51	64	66
5	3500	182JM	EJMM3212T-5	3634M	36X519	1.15	86.6	90.5	90.8	90.2	63	83	90	93
5	1760	184JM	EJMM3218T-5	3640M	36X677	1.15	86.3	90.7	91.0	90.2	47	67	77	81
7 1/2	3500	184JM	EJMM3219T-5	3646M	36X579	1.15	87.9	91.3	91.6	90.2	68	85	90	93
7 1/2	1760	213JM	EJMM3311T-5	3735M	37X740	1.15	84.4	89.7	90.8	91.0	48	69	79	84
10	3525	213JM	EJMM3312T-5	3735M	37X274	1.15				91.7				89
10	1760	215JM	EJMM3313T-5	3750M	37X715	1.15	86.6	90.9	91.5	91.7	44	65	76	83
15	3525	215JM	EJMM3314T-5	3744M	37Y120	1.15	91.8	93.3	93.0	91.7	69	85	90	92
20	3525	254JM	EJMM2514T-5	3944M	39W540	1.15	83.8	89.4	90.7	91.7	65	82	88	90
25	3525	256JM	EJMM2516T-5	3948M	39W537	1.15	88.3	91.9	92.5	92.4	69	84	89	90
30	3525	284JM	EJMM2534T-5	4044M	40Z91	1.15	90.7	93.5	94.0	91.7	67	83	89	90
40	3525	286JM	EJMM2538T-5	4056M	40W144	1.15	91.7	94.1	94.4	94.1	67	82	88	89
50	3550	324JM	EJMM2542T-5	4248M	42W106	1.15	88.9	92.7	93.5	93.0	63	81	86	88

**Open Drip Proof  
Rigid Base, 200 Volts  
1 Through 100 HP - Nema Frames 143T Through 404T**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1	1740	143T	EFM3116T-8	3520M	35Y213	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1	1740	143T	EM3116T-8	3520M	35Y213	1.15	69.7	79.1	81.6	82.5	37	55	66	74
1 1/2	1740	145T	EFM3154T-8	3524M	35Y212	1.15	73.0	81.5	83.5	84.0	40	59	70	77
1 1/2	1740	145T	EM3154T-8	3524M	35Y212	1.15	73.0	81.5	83.5	84.0	40	59	70	77
2	1740	145T	EFM3157T-8	3528M	35Y211	1.15	70.7	80.2	83.0	84.0	42	62	74	81
2	1740	145T	EM3157T-8	3528M	35Y211	1.15	70.7	80.2	83.0	84.0	42	62	74	81
3	1760	182T	EFM3211T-8	3628M	36X538	1.15	80.2	87.0	88.9	88.5	32	51	64	66
3	1760	182T	EM3211T-8	3628M	36X675	1.15	80.2	87.0	88.9	89.5	32	51	64	72
5	1760	184T	EFM3218T-8	3640M	36X678	1.15	86.3	90.7	91.0	90.2	47	67	77	81
5	1760	184T	EM3218T-8	3640M	36X678	1.15	86.3	90.7	91.0	90.2	47	67	77	81
7 1/2	1760	213T	EFM3311T-8	3735M	37X741	1.15	84.4	89.7	90.8	91.0	48	69	79	84
7 1/2	1760	213T	EM3311T-8	3735M	37X741	1.15	84.4	89.7	90.8	91.0	48	69	79	84
10	1760	215T	EFM3313T-8	3750M	37X742	1.15	86.6	90.9	91.5	91.7	44	65	76	83
10	1760	215T	EM3313T-8	3750M	37X742	1.15	86.6	90.9	91.5	91.7	44	65	76	83
15	1760	256T	EFM2513T-8	3938M	39W436	1.15	85.9	90.8	91.9	92.4	48	70	79	84
15	1760	254T	EM2513T-8	3938M	39W436	1.15	85.9	90.8	91.9	92.4	48	70	79	84
20	3525	254T	EM2514T-8	3944M	39W541	1.15	83.8	89.4	90.7	91.7	65	82	88	90
20	1760	256T	EM2515T-8	3946M	39W561	1.15	87.4	91.9	92.8	93.0	52	74	83	84
25	3525	256T	EM2516T-8	3948M	39W539	1.15	88.3	91.9	92.5	92.4	69	84	89	90
25	1760	284T	EM2531T-8	4040M	40W209	1.15	89.4	92.8	93.2	92.4	53	72	80	82
30	3525	284TS	EM2534T-8	4044M	40Z70	1.15				93.6	67	83	89	90
30	1780	286T	EM2535T-8	4050M	40W208	1.15	87.8	92.1	93.1	92.4	50	71	79	82
40	3525	286TS	EM2538T-8	4056M	40W112	1.15	91.7	94.1	94.4	94.1	67	82	88	89
40	1780	324T	EM2539T-8	4254M	42W209	1.15	89.0	92.8	93.5	93.6	56	75	82	84
50	3550	324TS	EM2542T-8	4248M	42Y35	1.15	88.9	92.7	93.5	93.6	63	81	86	88
50	1780	326T	EM2543T-8	4268M	42W210	1.15	88.0	92.5	93.6	93.6	51	72	80	84
60	1780	364T	EM2547T-8	1444M	14W545	1.15	92.7	94.7	94.6	93.6	52	73	81	83
75	1780	365T	EM2551T-8	1462M	14W546	1.15	90.5	94.1	94.9	94.5	48	70	79	83
100	1780	404T	EM2555T-8	1662M	16Y61	1.15	92.4	94.7	94.8	94.1	55	75	81	85

Shaded ratings are cast iron frames

**SINGLE PHASE**

**Totally Enclosed Fan Cooled,  
Rigid Base, 115/230 Volts  
1/4 Through 5 HP - Nema Frames 48 Through 184T**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1/4	1745	48	EL3403	3414LC	34W955	1.35	45.7	62.4	69.5	74.0	64	77	83	89
1/3	1740	56	EL3501	3418LC	34X28	1.35	50.6	68.6	75.5	77.0	60	80	83	88
1/2	1745	56	EL3504	3424LC	34X29	1.25	56.9	72.4	76.5	78.5	64	79	87	89
3/4	1755	56	EL3507	3528LC	35S757	1.25	66.4	79.4	83.6	82.5	65	80	87	90
1	1760	56H	EL3510	3532LC	35S758	1.15	66.3	76.9	83.2	82.5	65	81	88	91
1 1/2	1760	56H	EL3514	3540LC	35S759	1.15	72.9	84.4	86.2	84.0	71	85	92	94
2	1745	184T	EL3605T	3628LC	36X739	1.15	69.0	80.3	83.5	84.0	80	90	93	94
3	1755	184T	EL3609T	3640LC	36X698	1.15	65.7	79.1	83.9	85.5	98	98	98	97
5	1735	184T	EL3612T	3646LC	36X740	1.00	72.0	83.5	86.5	86.5	95	97	97	96

**Open Drip Proof  
Rigid Base, 115/230 Volts  
1/4 Through 5 HP - Nema Frames 48 Through 184T**

HP	RPM	NEMA FRAME	CATALOG NUMBER	TYPE	WINDING	S.F.	EFFICIENCY				POWER FACTOR			
							1/4	1/2	3/4	FL	1/4	1/2	3/4	FL
1/4	1745	48	EL1203	3414LC	34W955	1.35	45.7	62.4	69.5	74.0	64	77	83	89
1/3	1740	56	EL1301	3418LC	34W954	1.35	50.6	68.6	75.5	77.0	60	74	82	88
1/2	1745	56	EL1304	3424LC	34W959	1.25	60.1	73.8	77.7	78.5	68	82	89	89
3/4	1755	56	EL1307	3524LC	35S679	1.25				84.0				90
1	1755	56	EL1310	3528LC	35S680	1.15				84.0				91
1 1/2	1755	56H	EL1319	3535LC	35S681	1.15	79.4	84.9	86.5	85.5	56	80	86	94
2	1745	182T	EL1405T	3623LC	36X625	1.15	69.0	80.8	83.8	84.0	74	87	91	92
3	1755	184T	EL1408T	3628LC	36X629	1.15	71.5	82.5	85.4	85.5	79	89	92	93
5	1745	184T	EL1410T	3640LC	36X630	1.15	74.0	84.3	86.7	86.5	93	96	97	96

## What Energy-Efficiency Can Mean in Dollar Savings

The chart below demonstrates the substantial savings in annual operating costs which can be realized by utilizing Baldor SUPER-E® premium efficient motors. For purposes of illustration, we have used a set of circumstances in which motor sizes range from 15 to 200 hp, a continuous duty cycle of 8,760 hours per year and a typical utility rate of \$.07 per kilowatt-hour. Savings shown represent the differences in operating costs between industry average standard motors and Baldor's SUPER-E® premium efficient motors.

As can be seen from the chart, a Baldor 75 hp SUPER-E® Premium Efficient motor saves approximately \$1,671 a year in power costs as compared with an equivalent industry average standard motor.

## What is Higher Efficiency Worth?

HP @ 1800 RPM	EFFICIENCY		ANNUAL SAVINGS BALDOR SUPER-E®**
	BALDOR SUPER-E® (TEFC)	AVERAGE STANDARD MOTORS*	
15	92.4%	86.5%	\$ 507
20	93.0	87.5	618
25	94.1	88.5	769
30	94.1	88.1	993
40	94.5	89.4	1,105
50	95.0	90.4	1,225
60	95.0	90.3	1,504
75	95.0	90.8	1,670
100	95.0	91.6	1,787
125	95.4	91.8	2,351
150	95.8	92.3	2,716
200	95.8	93.3	2,559

\*Source for efficiencies of "average standard" industry motors: U. S. Department of Energy, Nov 1980 report, "Classification and Evaluation of Electric Motors and Pumps, Table 3-3".

\*\*Continuous duty. 8760 hours per year at 7 cents/KWH.

## How To Compare Two or More Brands of Motors Head To Head

It is important to recognize that motor operating costs are often many times higher than the original cost of the motor. There are several methods of evaluating the savings resulting from the use of energy-efficient motors. The following formulas represent a few simplified methods of calculating energy savings and payback. Although the formulas do not take into account such factors as changing power costs, the time value of money or depreciation, they can be used as a basic tool for making comparisons between competitive motors.

(1) Energy dollars saved = kw saved x cost per kwh x hours running time per year.

(2) kw saved = 0.746 x hp x  $\left[ \left( \frac{1}{\text{Efficiency Motor X}} \right) - \left( \frac{1}{\text{Efficiency Motor Y}} \right) \right]$

(3) Payback in years =  $\frac{\text{Price of Motor X} - \text{Price of Motor Y}}{\text{Total Dollars Saved Per Year}}$

For example, if you were comparing a Baldor 25 HP SUPER-E® premium efficient motor with an efficiency of 94.1% to another motor with an efficiency of only 88.5%, the energy dollars saved would be calculated as follows:

Energy dollars saved = kw saved (x) cost per kwh (x)hrs./yr.

Assume:

Power cost = \$.07 per kwh  
Duty cycle = 8,760 hrs./hr.

kw saved = 0.746 x 25 x  $\left[ \left( \frac{1}{.885} \right) - \left( \frac{1}{.941} \right) \right] = 1.253$

Energy dollars saved = 1.253 kw x \$.07/kwh x 8,760 hrs./yr. = \$768 per year

Assuming a price differential of \$300 between a SUPER-E® premium efficient motor and a less efficient model, the time in years to save the added cost of SUPER-E® motor would be calculated as follows:

Payback in years =

$\frac{\text{SUPER-E® Price} - \text{Less Efficient Model Price}}{\text{Total Dollars Saved per Year}}$

=  $\frac{\$300}{\$768} = 0.39$  years or about 4 1/2 months

Note: Calculation does not take into account possible increases in power costs, which would result in an even faster payback.

## A Word of Caution About Using Nameplate Efficiencies in comparing Motors

It is important to note that all manufacturers do not report efficiencies in the same manner. As a result, ratings stamped on the nameplate can be misleading. The National Electrical Manufacturers Association has recommended that U.S. manufacturers follow a standard procedure for measuring efficiency to assure that a comparison of motors will be meaningful. Baldor uses the test method recommended by NEMA, IEEE Standard 112, Test Method B. Although this method is complicated and expensive to apply, we feel it is by far the most accurate.

## Other quality products from Baldor to serve your Motor and Drive needs.

No one offers a broader line of motors and drives than Baldor—no one!



### Chemical Processing Motors

Baldor Chemical Processing Motors are designed to meet the demanding application requirements typically found in severe duty processing environments.

Standard features include:

- 1 to 600 horsepower
- Cast iron construction
- 460,575, 2300/4160 volts
- Class F insulation
- 1.15 service factor
- Class B temperature rise
- CSA approved

- Operator Keypad can be remote mounted to 100 feet
- Separate accel and decel rates
- Easy to read Alpha Numeric Display for setup and diagnostics
- Multiple Preset Speeds and Jog Speed
- Independent Skip Frequency Zones
- Programmable output indicators for control status
- Off the shelf ratings to 500 horsepower

- Ease of installation and setup
- Allows motor starts on marginal power systems and generators



### Solid State Soft Starters

Baldor stocks starters for motors 1 thru 700 HP in a variety of types and enclosures for retrofit and new applications. Features include:

- Control of inrush current to minimize stress on the electrical system, as well as on the motor and driven equipment.
- Ramp start and stop to prevent damage or spillage of product



### Baldor CD-ROM

The Baldor Electronic Catalog on CD-ROM is the first of its kind in the industry. And, as usual, Baldor leads the way, bringing you the only interactive motors and drives catalog that fits in the palm of your hand. It's easy to use, and it's packed with information. Here's what you'll find on the Baldor Electronic Catalog:

- The complete line of Baldor products -- easily accessible with the one-of-a-kind interactive Product Search feature.
- Comprehensive details and specifications on every product.
- Complete listing of Baldor Authorized Service Centers around the world
- Other Baldor software program offers

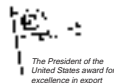


### Baldor Inverters

Baldor Inverter Drives provide adjustable speed operation from a three phase induction motor.

Inverter features include:

- Microprocessor controlled Pulse Width Modulated (PWM) output



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