Electro Static Technology™
An ITW Company

AEGIS®
SHAFT GROUNDING RING

Motor Manufacturers with AEGIS® Rings Installed

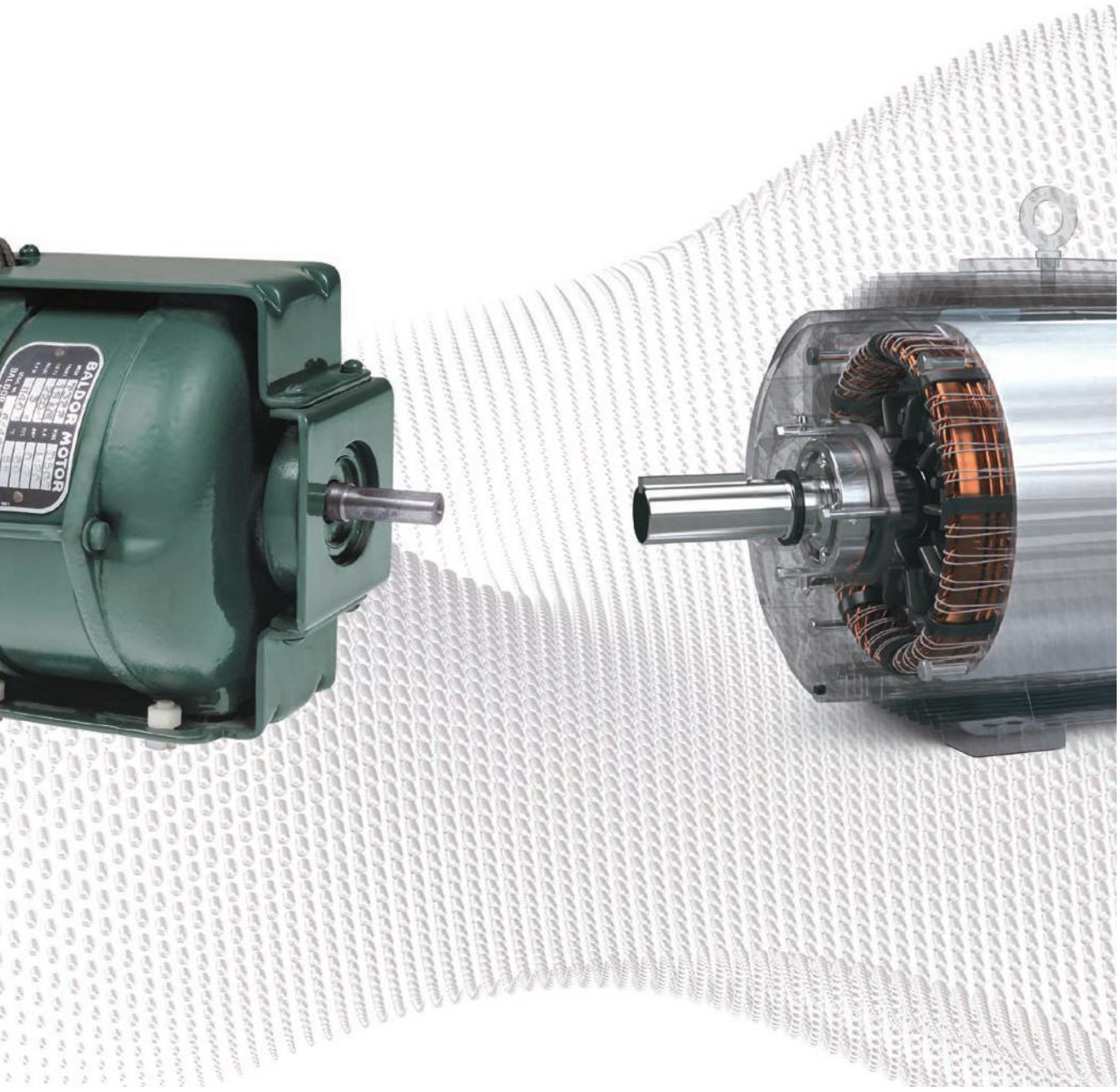
31 Winterbrook Road
Mechanic Falls, ME 04256-5724
Toll free: 1-866-738-1857
Ph: 207-998-5140
Fax: 207-998-5143

www.est-aegis.com

sales@est-aegis.com

Table of Contents

- ABB (Baldor)
- WEG
- REGAL (Marathon)
- REGAL (Leeson)
- TECO (Westinghouse)
- WOLONG (GE)
- NIDEC (U.S. Motors)


BALDOR MOTOR

Close-coupled pump, three phase, foot mounted, with internal Aegis® Bearing Protection Ring

1 thru 50 hp

AEGIS INSTALLED

TEFC IP44 **ODP IP23**

Features:

- Internal grounding brush for bearing current mitigation on DE retainer ring
- Class H insulation for increased protection on Inverter use
- Oversize ball bearings for the pump industry
- Locked DE bearing to allow mounting in any configuration
- Designed for longevity with a 3 year warranty on premium efficient Super-E® motors
- Suitable for Inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Commercial pumps
- Pairing with a speed drive
- General purpose pumps
- Industrial pumps
- Food and beverage
- Agricultural

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
Totally enclosed fan cooled											
1	1800	143JM	**EJMM3546T-G**	922	PC3	15.41	37	85.5	230/460	1.5	30
1 1/2	3600	143JM	**EJMM3550T-G**	917	PC3	15.41	38	86.5	230/460	1.9	30
	1800	143JM	**EJMM3554T-G**	1,066	PC3	15.41	41	84	230/460	2.2	30
2	3600	145JM	**EJMM3555T-G**	1,041	PC3	15.41	41	85.5	230/460	2.5	30
	1800	145JM	**EJMM3558T-G**	1,113	PC3	15.41	45	86.5	230/460	2.9	30
3	3600	182JM	**EJMM3610T-G**	1,157	PC3	16.91	60	86.5	230/460	3.6	30
	1800	182JM	**EJMM3611T-G**	1,252	PC3	18.06	76	89.5	230/460	4.2	30
5	3600	184JM	**EJMM3613T-G**	1,333	PC3	18.06	81	88.5	230/460	5.9	30
	1800	184JM	**EJMM3615T-G**	1,255	PC3	19.56	93	89.5	230/460	6.7	30
7 1/2	3600	213JM	**EJMM3709T-G**	1,735	PC3	19.76	124	89.5	230/460	9	30
	1800	213JM	**EJMM3710T-G**	1,854	PC3	20.89	134	91.7	230/460	9.4	30
10	3600	215JM	**EJMM3711T-G**	1,953	PC3	19.76	124	90.2	230/460	11.8	30
	1800	215JM	**EJMM3714T-G**	2,133	PC3	22.38	165	91.7	230/460	12	30
15	3600	254JM	**EJMM2394T-G**	3,384	PC3	25.30	260	91	230/460	17.5	30
	1800	254JM	**EJMM2333T-G**	3,357	PC3	25.30	265	92.4	230/460	18.1	30
20	3600	256JM	**EJMM4106T-G**	3,697	PC3	25.30	274	91	230/460	23	30
	1800	256JM	**EJMM2334T-G**	3,750	PC3	25.30	308	93	230/460	24	30
25	3600	284JM	**EJMM4107T-G**	4,349	PC3	26.96	265	91.7	230/460	29	30
	1800	284JM	**EJMM4103T-G**	4,207	PC3	26.96	437	93.6	230/460	31	30
30	3600	286JM	**EJMM4108T-G**	6,046	PC3	26.96	299	91.7	230/460	34	30
	1800	286JM	**EJMM4104T-G**	5,691	PC3	28.64	437	93.6	230/460	38	30
40	3600	324JM	**EJMM4109T-G**	6,411	PC3	30.64	470	92.4	230/460	45	30
	1800	324JM	**EJMM4110T-G**	6,977	PC3	30.64	578	94.1	230/460	48	30
50	3600	326JM	**EJMM4114T-G**	7,733	PC3	30.65	575	93	230/460	56	30
	1800	326JM	**EJMM4115T-G**	7,837	PC3	30.65	700	94.5	230/460	58	30

(a) See notes on inside back flap.
Cast iron frame
Red catalog number indicates **NEW** product.

Close-coupled pump, three phase, foot mounted, with internal Aegis® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
Open drip proof											
1	1800	143JM	**EJMM3116T-G**	873	PC3	13.75	37	85.5	230/460	1.5	30
1 1/2	1800	145JM	**EJMM3154T-G**	931	PC3	13.75	41	86.5	230/460	2.2	30
2	1800	145JM	**EJMM3157T-G**	1,003	PC3	14.25	44	86.5	230/460	2.9	30
3	3600	145JM	**EJMM3158T-G**	1,116	PC3	15.13	51	85.5	230/460	3.8	30
	1800	182JM	**EJMM3211T-G**	1,134	PC3	16.50	74	89.5	230/460	4.2	30
5	3600	182JM	**EJMM3212T-G**	1,340	PC3	15.12	64	86.5	230/460	6	30
	1800	184JM	**EJMM3218T-G**	1,255	PC3	18.00	88	89.5	230/460	6.6	30
7 1/2	3600	184JM	**EJMM3219T-G**	1,546	PC3	16.50	78	88.5	230/460	8.6	30
	1800	213JM	**EJMM3311T-G**	1,831	PC3	18.19	120	91	230/460	9.7	30
10	3600	213JM	**EJMM3312T-G**	1,984	PC3	18.19	121	89.5	230/460	12	30
	1800	215JM	**EJMM3313T-G**	1,959	PC3	19.31	132	91.7	230/460	12.5	30
15	3600	215JM	**EJMM3314T-G**	2,479	PC3	18.19	134	90.2	230/460	17.5	30
	1800	254JM	**EJMM2513T-G**	2,804	PC3	23.19	213	93	230/460	17.7	30
20	3600	254JM	**EJMM2514T-G**	3,045	PC3	23.19	185	91	230/460	23.5	30
	1800	256JM	**EJMM2515T-G**	3,260	PC3	24.69	255	93	230/460	24	30
25	3600	256JM	**EJMM2516T-G**	3,850	PC3	23.19	233	91.7	230/460	28	30
	1800	284JM	**EJMM2531T-G**	3,958	PC3	25.94	377	93.6	230/460	30	30
30	3600	284JM	**EJMM2534T-G**	4,512	PC3	24.69	320	91.7	230/460	35	30
	1800	286JM	**EJMM2535T-G**	4,570	PC3	26.94	378	94.1	230/460	36	30
40	3600	286JM	**EJMM2538T-G**	5,493	PC3	24.69	330	92.4	230/460	46	30
	1800	324JM	**EJMM2539T-G**	5,820	PC3	27.44	378	94.1	230/460	49	30
50	3600	324JM	**EJMM2542T-G**	6,080	PC3	27.44	375	93	230/460	56	30
	1800	326JM	**EJMM2543T-G**	6,287	PC3	27.94	497	94.5	230/460	57	30

(a) See notes on inside back flap.
Red catalog number indicates **NEW** product.

NEW!

Super-E®, three phase, TEFC, C-Face, foot mounted, with internal AEGIS Bearing Protection Ring

1 thru 100 Hp

AEGIS® SGR BEARING PROTECTION RING
AEGIS INSTALLED

IP44*

Features:

- Class H insulation for increased protection on inverter use
- Internal grounding ring for bearing current mitigation
- Designed for longevity with 3 year warranty
- Suitable for inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Fans
- Pumps
- Blowers
- Unit handling
- HVAC systems
- Variable speed applications
- General purpose applications

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt											
	3600	56C	CEM3545-G	907	HV3	12.23	32	77	230/460	1.4	8, 12, 30
1	1800	143TC	CEM3546T-G	1,039	HV3	13.29	30	85.5	230/460	1.5	8, 30
	1200	145TC	CEM3556T-G	1,163	HV3	13.29	43	82.5	230/460	1.8	8, 30
	3600	143TC	CEM3550T-G	1,025	HV3	13.29	36	84	230/460	1.9	8, 30
1 1/2	1800	145TC	CEM3554T-G	1,133	HV3	13.29	42	86.5	230/460	2.2	8, 30
	1200	182TC	CEM3607T-G	1,374	HV3	16.54	76	87.5	230/460	2.4	8, 30
	3600	145TC	CEM3555T-G	1,105	HV3	13.29	46	85.5	230/460	2.5	8, 30
2	1800	145TC	CEM3558T-G	1,188	HV3	14.17	42	86.5	230/460	2.9	8, 30
	1200	184TC	CEM3614T-G	1,429	HV3	18.05	94	88.5	230/460	3.5	8, 30
	3600	145TC	CEM3559T-G	1,383	HV3	14.17	53	86.5	230/460	3.6	8, 30
		182TC	CEM3610T-G	1,470	HV3	15.16	50	86.5	230/460	3.6	8, 30
3	1800	182TC	CEM3611T-G	1,260	HV3	16.55	74	89.5	230/460	4.2	8, 30
	1200	213TC	CEM3704T-G	1,866	HV3	19.76	135	89.5	230/460	4.6	8, 30
	3600	184TC	CEM3613T-G	1,361	HV3	16.55	76	88.5	230/460	5.9	8, 30
5	1800	184TC	CEM3615T-G	1,293	HV3	18.05	92	89.5	230/460	6.7	8, 30
	1200	215TC	CEM3708T-G	2,067	HV3	19.20	154	89.5	230/460	7.3	8, 30
	3600	213TC	CEM3709T-G	1,999	HV3	18.63	133	89.5	230/460	9	8, 30
7 1/2	1800	213TC	CEM3710T-G	1,839	HV3	19.76	129	91.7	230/460	9.4	8, 30
	1200	254TC	CEM2276T-G	3,730	HV3	23.30	281	91	230/460	11	8, 30
	3600	215TC	CEM3711T-G	2,022	HV3	18.63	118	90.2	230/460	11.8	8, 30
10	1800	215TC	CEM3714T-G	2,036	HV3	21.26	156	91.7	230/460	12	8, 30
	1200	256TC	CEM2332T-G	4,143	HV3	23.30	322	91	230/460	14.1	8, 30
	3600	254TC	CEM2394T-G	3,696	HV3	23.78	239	91	230/460	17.5	8, 30
15	1800	254TC	CEM2333T-G	3,450	HV3	23.78	270	92.4	230/460	18.1	8, 30
	1200	284TC	CEM4100T-G	5,508	HV3	27.76	369	91.7	230/460	21	8, 30
	3600	256TC	CEM4106T-G	3,979	HV3	23.78	261	91	230/460	23	8, 30
20	1800	256TC	CEM2334T-G	4,014	HV3	23.78	295	93	230/460	24	8, 30
	1200	286TC	CEM4102T-G	6,987	HV3	27.76	393	91.7	230/460	27	8, 30
	3600	284TSC	CEM4107T-G	5,197	HV3	26.39	323	91.7	230/460	29	8, 30
25	1800	284TC	CEM4103T-G	5,252	HV3	27.76	400	93.6	230/460	30	8, 30
	1200	324TC	CEM4111T-G	7,908	HV3	30.39	507	93	230/460	32	8, 30

(a) See notes on inside back flap.
Cast iron frame
*IP54 when drain fitting kit #HA5027A03 is installed in the weep holes (48 thru 256T frame motors only)
Red catalog number indicates **NEW** product.

NEW!

NEW!

Super-E®, three phase, TEFC, C-Face, foot mounted, with internal AEGIS® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt (continued)											
30	3600	286TSC	**CEM4108T-G**	5,978	HV3	26.39	336	91.7	230/460	34	8, 30
	1800	286TC	**CEM4104T-G**	6,035	HV3	27.76	410	93.6	230/460	38	8, 30
	1200	326TC	**CEM4117T-G**	8,952	HV3	30.28	604	93	230/460	39	8, 30
40	3600	324TSC	**CEM4109T-G**	7,945	HV3	28.78	532	92.4	230/460	46	8, 30
	1800	324TC	**CEM4110T-G**	7,710	HV3	30.28	596	94.1	230/460	48	8, 30
50	3600	326TSC	**CEM4114T-G**	8,597	HV3	28.78	584	93	230/460	56	8, 30
	1800	326TC	**CEM4115T-G**	8,315	HV3	30.28	648	94.5	230/460	58	8, 30
60	3600	364TSC	**CEM4310T-G**	11,717	HV3	31.36	900	95	230/460	66.3	8, 30
	1800	364TC	**CEM4314T-G**	11,586	HV3	33.48	907	95	230/460	68	8, 30
75	3600	365TSC	**CEM4313T-G**	13,413	HV3	31.36	966	94.5	230/460	81.9	8, 30
	1800	365TC	**CEM4316T-G**	13,323	HV3	33.48	956	95.4	230/460	85.9	8, 30
100	1800	405TC	**CEM4400T-G**	18,144	HV3	38.20	1214	95.4	230/460	112	8, 30

(a) See notes on inside back flap.:
Cast iron frame
*IP54 when drain fitting kit #HA5027A03 is installed in the weep holes (48 thru 256T frame motors only)
Red catalog number indicates **NEW** product.

Super-E®, three phase, TEFC, foot mounted, with internal AEGIS Bearing Protection Ring

1 thru 100 Hp

AEGIS INSTALLED

IP44*

Features:

- Class H insulation for increased protection on inverter use
- Internal grounding ring for bearing current mitigation on DE retainer ring
- Designed for longevity with 3 year warranty
- Suitable for inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Fans
- Pumps
- Blowers
- Unit handling
- HVAC systems
- Variable speed applications
- General purpose applications

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt											
	3600	56	**EM3545-G**	796	HV3	12.23	32	77	230/460	1.4	8,12, 30
	1800	143T	**EM3546T-G**	872	HV3	12.31	30	85.5	230/460	1.5	8,30
1	1800	143T	**EM3581T-G**	1,065	HV3	12.54	55	85.5	230/460	1.5	8,30
	1200	145T	**EM3556T-G**	1,012	HV3	13.31	43	82.5	230/460	1.8	8,30
	1200	145T	**EM3582T-G**	1,175	HV3	12.54	56	82.5	230/460	1.7	8,30
	3600	143T	**EM3550T-G**	892	HV3	12.29	36	84	230/460	1.9	8,30
	3600	143T	**EM3583T-G**	1,118	HV3	12.54	56	84	230/460	1.9	8,30
1 1/2	1800	145T	**EM3554T-G**	900	HV3	13.31	42	86.5	230/460	2.2	8,30
	1800	145T	**EM3584T-G**	1,099	HV3	12.54	61	86.5	230/460	2.3	8,30
	1200	182T	**EM3607T-G**	1,186	HV3	16.54	76	87.5	230/460	2.4	8,30
	1200	182T	**EM3667T-G**	1,381	HV3	15.24	99	87.5	230/460	2.5	8
	3600	145T	**EM3555T-G**	961	HV3	13.29	46	85.5	230/460	2.5	8,30
	3600	145T	**EM3586T-G**	1,166	HV3	12.54	62	85.5	230/460	2.5	8,30
2	1800	145T	**EM3558T-G**	927	HV3	13.31	42	86.5	230/460	2.9	8,30
	1800	145T	**EM3587T-G**	1,145	HV3	12.54	62	86.5	230/460	2.9	8,30
	1200	184T	**EM3614T-G**	1,234	HV3	18.04	94	88.5	230/460	3.5	8,30
	1200	184T	**EM3664T-G**	1,401	HV3	15.24	123	88.5	230/460	3.15	8,30
	3600	145T	**EM3559T-G**	1,037	HV3	14.17	53	86.5	230/460	3.6	8,30
	3600	182T	**EM3610T-G**	1,079	HV3	15.29	57	86.5	230/460	3.6	8,30
	3600	182T	**EM3660T-G**	1,260	HV3	15.24	58	86.5	230/460	3.8	8,30
3	1800	182T	**EM3611T-G**	1,037	HV3	16.54	74	89.5	230/460	4.2	8,30
	1800	182T	**EM3661T-G**	1,291	HV3	15.24	105	89.5	230/460	4.1	8,30
	1200	213T	**EM3704T-G**	1,570	HV3	19.01	135	89.5	230/460	4.6	8,30
	1200	213T	**EM3764T-G**	1,716	HV3	18.45	211	89.5	230/460	4.5	8,30
	3600	184T	**EM3613T-G**	1,175	HV3	16.54	76	88.5	230/460	5.9	8,30
	3600	184T	**EM3663T-G**	1,513	HV3	15.24	99	88.5	230/460	5.8	8,30
5	1800	184T	**EM3615T-G**	1,116	HV3	18.04	92	89.5	230/460	6.7	8,30
	1800	184T	**EM3665T-G**	1,317	HV3	15.24	115	89.5	230/460	6.6	8,30
	1200	215T	**EM3708T-G**	1,745	HV3	19.76	154	89.5	230/460	7.3	8,30
	1200	215T	**EM3768T-G**	1,963	HV3	18.45	198	89.5	230/460	7.4	8,30
	3600	213T	**EM3709T-G**	1,686	HV3	17.89	133	89.5	230/460	9	8,30
	3600	213T	**EM3769T-G**	1,963	HV3	18.45	169	89.5	230/460	9	8,30
7 1/2	1800	213T	**EM3710T-G**	1,547	HV3	19.01	129	91.7	230/460	9.4	8,30
	1800	213T	**EM3770T-G**	1,924	HV3	18.45	193	91.7	230/460	9.5	8,30
	1200	254T	**EM2276T-G**	2,842	HV3	23.30	281	91	230/460	11	8,30
	3600	215T	**EM3711T-G**	1,706	HV3	17.89	118	90.2	230/460	11.8	8,30
	3600	215T	**EM3771T-G**	2,035	HV3	18.45	164	90.2	230/460	11.8	8,30
10	1800	215T	**EM3714T-G**	1,718	HV3	20.51	156	91.7	230/460	12	8,30
	1800	215T	**EM3774T-G**	1,907	HV3	18.45	232	91.7	230/460	12.2	8
	1200	256T	**EM2332T-G**	3,202	HV3	23.30	322	91	230/460	14.1	8,30

(a) See notes on inside back flap. Cast iron frame **Red** catalog number indicates **NEW** product.
*IP54 when drain fitting kit #HA5027A03 is installed in the weep holes (48 thru 256T frame motors only)

Super-E®, three phase, TEFC, foot mounted, with internal AEGIS® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt (continued)											
15	3600	254T	**EM2394T-G**	2,813	HV3	23.30	239	91	230/460	17.5	8,30
	1800	254T	**EM2333T-G**	2,599	HV3	23.30	270	92.4	230/460	18.1	8,30
	1200	284T	**EM4100T-G**	4,257	HV3	27.76	369	91.7	230/460	21	8,30
20	3600	256T	**EM4106T-G**	3,059	HV3	23.30	261	91	230/460	23	8,30
	1800	256T	**EM2334T-G**	3,089	HV3	23.30	295	93	230/460	24	8,30
	1200	286T	**EM4102T-G**	5,543	HV3	27.76	393	91.7	230/460	27	8,30
25	3600	284TS	**EM4107T-G**	3,986	HV3	24.70	323	91.7	230/460	29	8,30
	1800	284T	**EM4103T-G**	4,034	HV3	27.76	400	93.6	230/460	30	8,30
	1200	324T	**EM4111T-G**	6,301	HV3	30.39	507	93	230/460	32	8,30
30	3600	286TS	**EM4108T-G**	4,665	HV3	24.70	336	91.7	230/460	34	8,30
	1800	286T	**EM4104T-G**	4,715	HV3	27.76	410	93.6	230/460	38	8,30
	1200	326T	**EM4117T-G**	7,209	HV3	30.28	604	93	230/460	39	8,30
40	3600	324TS	**EM4109T-G**	6,333	HV3	28.78	532	92.4	230/460	46	8,30
	1800	324T	**EM4110T-G**	6,129	HV3	30.28	596	94.1	230/460	48	8,30
	1200	364T	**EM4308T-G**	9,194	HV3	33.48	883	94.1	230/460	49.4	8,30
50	3600	326TS	**EM4114T-G**	6,885	HV3	28.78	584	93	230/460	56	8,30
	1800	326T	**EM4115T-G**	6,655	HV3	30.28	648	94.5	230/460	58	8,30
	1200	365T	**EM4312T-G**	11,035	HV3	33.48	910	94.1	230/460	61.7	8,30
60	3600	364TS	**EM4310T-G**	9,843	HV3	31.36	900	95	230/460	66.3	8,30
	1800	364T	**EM4314T-G**	9,724	HV3	33.48	907	95	230/460	68	8,30
75	3600	365TS	**EM4313T-G**	11,392	HV3	31.36	966	94.5	230/460	81.9	8,30
	1800	365T	**EM4316T-G**	11,310	HV3	33.48	956	95.4	230/460	85.9	8,30
100	1800	405T	**EM4400T-G**	14,152	HV3	38.20	1214	95.4	230/460	112	8,30
200 volt											
5	1800	184T	**EM3665T-8G**	1,350	HV3	15.23	119	89.5	200	15.1	8
7 1/2	1800	213T	**EM3770T-8G**	1,725	HV3	18.45	170	91.7	200	21.4	8
10	1800	215T	**EM3774T-8G**	1,908	HV3	18.45	231	91.7	200	28	8
15	1800	254T	**EM2333T-8G**	2,599	HV3	23.30	254	92.4	200	42.4	8
575 volt											
1	1800	143T	**EM3546T-5G**	872	HV3	12.31	35	85.5	575	1.2	8
1 1/2	1800	145T	**EM3554T-5G**	900	HV3	13.31	42	86.5	575	1.8	8
2	1800	145T	**EM3558T-5G**	927	HV3	13.31	46	86.5	575	2.3	8
3	1800	182T	**EM3611T-5G**	1,037	HV3	16.54	76	89.5	575	3.3	8
5	1800	184T	**EM3615T-5G**	1,116	HV3	18.04	84	89.5	575	5.3	8
7 1/2	1800	213T	**EM3710T-5G**	1,547	HV3	19.01	126	91.7	575	7.6	8
10	1800	215T	**EM3714T-5G**	1,718	HV3	20.51	165	91.7	575	9.6	8
15	1800	254T	**EM2333T-5G**	2,599	HV3	23.30	250	92.4	575	14.6	8
20	1800	256T	**EM2334T-5G**	3,089	HV3	23.30	293	93	575	19.2	8
25	1800	284T	**EM4103T-5G**	4,034	HV3	27.76	364	93.6	575	24	8
30	1800	286T	**EM4104T-5G**	4,715	HV3	27.76	423	93.6	575	29	8
40	1800	324T	**EM4110T-5G**	6,129	HV3	30.28	576	94.1	575	39	8
50	1800	326T	**EM4115T-5G**	6,655	HV3	30.28	644	94.5	575	46	8

(a) See notes on inside back flap.
Cast iron frame
*IP54 when drain fitting kit #HA5027A03 is installed in the weep holes (48 thru 256T frame motors only)

NEW!

Super-E, three phase, ODP, C-Face, foot mounted, with internal AEGIS® Bearing Protection Ring

1 thru 100 Hp

AEGIS INSTALLED

IP22

Features:

- Class H insulation for increased protection on inverter use
- Internal grounding ring for bearing current mitigation
- Designed for longevity with 3 year warranty
- Suitable for inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Fans
- Pumps
- Blowers
- Unit handling
- HVAC systems
- Variable speed applications
- General purpose applications

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt											
	3600	56C	**CEM31115-G**	800	HV3	11.75	37	78.5	230/460	1.6	8, 12, 15, 30
1	1800	143TC	**CEM3116T-G**	970	HV3	11.12	34	85.5	230/460	1.5	8, 30
	1200	145TC	**CEM3156T-G**	988	HV3	11.62	40	82.5	230/460	1.8	8, 30
	3600	143TC	**CEM3120T-G**	856	HV3	11.12	34	84	230/460	2	8, 30
1 1/2	1800	145TC	**CEM3154T-G**	1,006	HV3	11.62	38	86.5	230/460	2.2	8, 30
	1200	182TC	**CEM3207T-G**	1,143	HV3	15.00	67	86.5	230/460	2.5	8, 30
	3600	143TC	**CEM3155T-G**	978	HV3	11.62	41	85.5	230/460	2.5	8, 30
2	1800	145TC	**CEM3157T-G**	1,068	HV3	12.12	41	86.5	230/460	2.9	8, 30
	1200	184TC	**CEM3215T-G**	1,165	HV3	16.50	79	87.5	230/460	3.4	8, 30
	3600	145TC	**CEM3158T-G**	988	HV3	13.00	51	85.5	230/460	3.8	8, 30
3	1800	182TC	**CEM3211T-G**	1,151	HV3	15.00	72	89.5	230/460	4.2	8, 30
	1200	213TC	**CEM3305T-G**	1,448	HV3	16.32	131	88.5	230/460	4.5	8, 30
	3600	182TC	**CEM3212T-G**	1,077	HV3	13.62	63	86.5	230/460	6	8, 30
5	1800	184TC	**CEM3218T-G**	1,245	HV3	16.50	84	89.5	230/460	6.6	8, 30
	1200	215TC	**CEM3309T-G**	1,844	HV3	17.45	141	89.5	230/460	7.4	8, 30
	3600	184TC	**CEM3219T-G**	1,612	HV3	15.00	75	88.5	230/460	8.6	8, 30
7 1/2	1800	213TC	**CEM3311T-G**	1,764	HV3	16.32	130	91	230/460	9.7	8, 30
	1200	254TC	**CEM2506T-G**	2,215	HV3	23.19	243	90.2	230/460	11	8, 30
	3600	213TC	**CEM3312T-G**	1,831	HV3	16.32	121	89.5	230/460	12	8, 30
10	1800	215TC	**CEM3313T-G**	2,098	HV3	17.45	148	91.7	230/460	12.5	8, 30
	1200	256TC	**CEM2511T-G**	2,818	HV3	23.19	255	91.7	230/460	14.3	8, 30
	3600	215TC	**CEM3314T-G**	2,527	HV3	16.32	131	90.2	230/460	17.5	8, 30
15	1800	254TC	**CEM2513T-G**	2,937	HV3	21.69	251	93	230/460	17.7	8, 30
	1200	284TC	**CEM2524T-G**	3,781	HV3	23.81	280	91.7	230/460	20.5	8, 30
	3600	254TC	**CEM2514T-G**	2,978	HV3	21.69	185	91	230/460	23.5	8, 30
20	1800	256TC	**CEM2515T-G**	3,202	HV3	21.69	250	93	230/460	24	8, 30
	1200	286TC	**CEM2528T-G**	4,542	HV3	23.81	299	92.4	230/460	27	8, 30
	3600	256TC	**CEM2516T-G**	4,252	HV3	21.69	233	91.7	230/460	28	8, 30
25	1800	284TC	**CEM2531T-G**	4,704	HV3	25.06	314	93.6	230/460	30	8, 30
	1200	324TC	**CEM2532T-G**	5,451	HV3	27.69	384	93	230/460	34	8, 30
	3600	284TSC	**CEM2534T-G**	4,187	HV3	22.44	320	91.7	230/460	35	8, 30
30	1800	286TC	**CEM2535T-G**	5,119	HV3	25.06	340	94.1	230/460	35	8, 30
	1200	326TC	**CEM2536T-G**	5,673	HV3	28.69	457	93.6	230/460	38	8, 30
40	3600	286TSC	**CEM2538T-G**	5,315	HV3	22.44	328	92.4	230/460	46	8, 30
	1800	324TC	**CEM2539T-G**	5,487	HV3	27.19	392	94.1	230/460	49	8, 30

(a) See notes on inside back flap.
Red catalog number indicates **NEW** product.

NEW!

NEW!

Super-E®, three phase, ODP, C-Face, foot mounted, with internal AEGIS® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt (continued)											
50	3600	324TSC	**CEM2542T-G**	5,785	HV3	25.69	392	93	230/460	56	8, 30
	1800	326TC	**CEM2543T-G**	6,024	HV3	27.69	497	94.5	230/460	57	8, 30
60	3600	326TSC	**CEM2546T-G**	7,243	HV3	30.69	616	95	230/460	68	8, 30
	1800	364TC	**CEM2547T-G**	7,756	HV3	30.69	565	95	230/460	68	8, 30
75	3600	364TSC	**CEM2549T-G**	9,655	HV3	33.72	750	95	230/460	87	8, 30
	1800	365TC	**CEM2551T-G**	9,397	HV3	33.72	597	95	230/460	85	8, 30
100	3600	365TSC	**CEM2550T-4G**	13,402	HV3	36.97	898	95.4	460	115	8, 30
	1800	404TC	**CEM2555T-4G**	13,597	HV3	36.97	898	95.4	460	115	8, 30

(a) See notes on inside back flap.
Red catalog number indicates **NEW** product.

Super-E, three phase, ODP, foot mounted, with internal AEGIS® Bearing Protection Ring

1 thru 100 Hp

AEGIS® SGR BEARING PROTECTION RING
AEGIS INSTALLED

IP22

Features:

- Class H insulation for increased protection on inverter use
- Internal grounding ring for bearing current mitigation on DE retainer ring
- Designed for longevity with 3 year warranty
- Suitable for inverter use per NEMA MG1 Part 31.4.4.2

Applications:

- Fans
- Pumps
- Blowers
- Unit handling
- HVAC systems
- Variable speed applications
- General purpose applications

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt											
	3600	56	**EM31115-G**	703	HV3	11.75	27	77	230/460	1.6	8, 12, 15, 30
1	1800	143T	**EM3116T-G**	877	HV3	11.12	34	85.5	230/460	1.5	8, 30
	1200	145T	**EM3156T-G**	893	HV3	11.62	40	82.5	230/460	1.8	8, 30
	3600	143T	**EM3120T-G**	778	HV3	11.12	34	84	230/460	2	8, 30
1 1/2	1800	145T	**EM3154T-G**	909	HV3	11.62	38	86.5	230/460	2.2	8, 30
	1200	182T	**EM3207T-G**	1,048	HV3	15.00	67	86.5	230/460	2.5	8, 30
	3600	143T	**EM3155T-G**	884	HV3	11.62	41	85.5	230/460	2.5	8, 30
2	1800	145T	**EM3157T-G**	962	HV3	12.12	41	86.5	230/460	2.9	8, 30
	1200	184T	**EM3215T-G**	1,067	HV3	16.50	79	87.5	230/460	3.4	8, 30
	3600	145T	**EM3158T-G**	893	HV3	13.00	46	85.5	230/460	3.8	8, 30
3	1800	182T	**EM3211T-G**	1,055	HV3	15.00	72	89.5	230/460	4.2	8, 30
	1200	213T	**EM3305T-G**	1,328	HV3	16.32	110	88.5	230/460	4.5	8, 30
	3600	182T	**EM3212T-G**	991	HV3	13.62	63	86.5	230/460	6	8, 30
5	1800	184T	**EM3218T-G**	1,137	HV3	16.50	84	89.5	230/460	6.6	8, 30
	1200	215T	**EM3309T-G**	1,672	HV3	17.45	141	89.5	230/460	7.4	8, 30
	3600	184T	**EM3219T-G**	1,456	HV3	15.00	75	88.5	230/460	8.6	8, 30
7 1/2	1800	213T	**EM3311T-G**	1,602	HV3	16.32	115	91	230/460	9.7	8, 30
	1200	254T	**EM2506T-G**	2,032	HV3	23.19	243	90.2	230/460	11	8, 30
	3600	213T	**EM3312T-G**	1,661	HV3	16.32	113	89.5	230/460	12	8, 30
10	1800	215T	**EM3313T-G**	1,893	HV3	17.45	127	91.7	230/460	12.5	8, 30
	1200	256T	**EM2511T-G**	2,556	HV3	23.19	255	91.7	230/460	14.3	8, 30
	3600	215T	**EM3314T-G**	2,266	HV3	16.32	126	90.2	230/460	17.5	8, 30
15	1800	254T	**EM2513T-G**	2,660	HV3	21.69	210	93	230/460	17.7	8, 30
	1200	284T	**EM2524T-G**	3,428	HV3	23.81	280	91.7	230/460	20.5	8, 30
	3600	254T	**EM2514T-G**	2,695	HV3	21.69	195	91	230/460	23.5	8, 30
20	1800	256T	**EM2515T-G**	2,890	HV3	21.69	227	93	230/460	23.5	8, 30
	1200	286T	**EM2528T-G**	4,090	HV3	23.81	299	92.4	230/460	27	8, 30
	3600	256T	**EM2516T-G**	3,177	HV3	21.69	212	91.7	230/460	28	8, 30
25	1800	284T	**EM2531T-G**	3,543	HV3	25.06	314	93.6	230/460	30	8, 30
	1200	324T	**EM2532T-G**	4,941	HV3	27.69	384	93	230/460	34	8, 30
	3600	284TS	**EM2534T-G**	3,781	HV3	22.44	310	91.7	230/460	35	8, 30
30	1800	286T	**EM2535T-G**	3,839	HV3	25.06	340	94.1	230/460	35	8, 30
	1200	326T	**EM2536T-G**	5,134	HV3	28.69	457	93.6	230/460	38	8, 30
	3600	286TS	**EM2538T-G**	4,762	HV3	22.44	328	92.4	230/460	46	8, 30
40	1800	324T	**EM2539T-G**	4,972	HV3	27.19	392	94.1	230/460	49	8, 30
	1200	364T	**EM2540T-G**	7,170	HV3	30.69	606	94.1	230/460	51	8, 30
50	3600	324TS	**EM2542T-G**	5,232	HV3	25.69	392	93	230/460	56	8, 30
	1800	326T	**EM2543T-G**	5,439	HV3	27.69	473	94.5	230/460	57	8, 30

(a) See notes on inside back flap.

Super-E®, three phase, ODP, foot mounted, with internal AEGIS® Bearing Protection Ring

Hp	RPM	NEMA Frame	Catalog Number	List Price	Disc. Sym.	"C" Dim.	Aprx. Wt. (lb)	Full Load Efficiency	Voltage	Full Load Amps	Notes (a)
230/460 volt (continued)											
60	1800	364T	**EM2547T-G**	7,117	HV3	30.69	616	95	230/460	68	8, 30
75	1800	365T	**EM2551T-G**	8,543	HV3	33.72	750	95	230/460	87	8, 30
100	1800	404T	**EM2555T-4G**	10,158	HV3	36.97	898	95.4	460	115	8
200 volt											
1	1800	143T	**EM3116T-8G**	877	HV3	11.12	38	85.5	200	3.5	8
1 1/2	1800	145T	**EM3154T-8G**	909	HV3	11.62	37	86.5	200	5.1	8
2	1800	145T	**EM3157T-8G**	962	HV3	12.12	43	86.5	200	6.5	8
3	1800	182T	**EM3211T-8G**	1,055	HV3	15.00	74	89.5	200	9.7	8
5	1800	184T	**EM3218T-8G**	1,137	HV3	16.50	92	89.5	200	15.3	8
7 1/2	1800	213T	**EM3311T-8G**	1,602	HV3	16.32	120	91	200	22.2	8
10	1800	215T	**EM3313T-8G**	1,893	HV3	17.45	132	91.7	200	29.5	8
15	1800	254T	**EM2513T-8G**	2,660	HV3	21.69	234	93	200	40.7	8
20	1800	256T	**EM2515T-8G**	2,890	HV3	21.69	250	93	200	54.3	8
25	1800	284T	**EM2531T-8G**	3,543	HV3	25.06	330	93.6	200	70	8
30	1800	286T	**EM2535T-8G**	3,839	HV3	25.06	340	94.1	200	81	8
40	1800	324T	**EM2539T-8G**	4,972	HV3	27.19	390	94.1	200	109	8
575 volt											
1	1800	143T	**EM3116T-5G**	877	HV3	11.12	38	85.5	575	1.2	8
1 1/2	1800	145T	**EM3154T-5G**	909	HV3	11.62	37	86.5	575	1.8	8
2	1800	145T	**EM3157T-5G**	962	HV3	12.12	43	86.5	575	2.3	8
3	1800	182T	**EM3211T-5G**	1,055	HV3	15.00	74	89.5	575	3.4	8
5	1800	184T	**EM3218T-5G**	1,137	HV3	16.50	92	89.5	575	5.3	8
7 1/2	1800	213T	**EM3311T-5G**	1,602	HV3	16.32	114	91	575	7.8	8
10	1800	215T	**EM3313T-5G**	1,893	HV3	17.45	132	91.7	575	10	8
15	1800	254T	**EM2513T-5G**	2,660	HV3	21.69	210	93	575	14.1	8
20	1800	256T	**EM2515T-5G**	2,890	HV3	21.69	250	93	575	18.9	8
25	1800	284T	**EM2531T-5G**	3,543	HV3	25.06	328	93.6	575	24.5	8
30	1800	286T	**EM2535T-5G**	3,839	HV3	25.06	340	94.1	575	28	8
40	1800	324T	**EM2539T-5G**	4,972	HV3	27.19	400	94.1	575	40	8

(a) See notes on inside back flap.

TEFC & ODP NEMA Premium Motors

with AEGIS® Bearing Protection Ring **INSIDE**

TEFC NEMA Premium Efficiency Motors with AEGIS® Bearing Protection Ring **INSIDE**

W22 - Cast Iron

- 50/60 Hz rated (380V on nameplate - 400/415 available)
- Rated 50HZ at same horsepower up to 250HP 1.0 Service Factor
- Class F insulation (impregnation resin and magnet wire are class H)
- F1 mounted (cast iron frames are F2 convertible).
- Cast iron frames: regreasable ball bearings (frames 254T and up)
- Gasketed conduit box

Inverter Rated (Cast Iron):
1000:1 for variable torque
12:1 for constant torque

Features that make a difference:

- All NEMA Premium ratings have a 1.25 service factor (up to 100 HP) resulting in cooler operation and extended life of the motor
- All Cast Iron Construction, including Terminal Box and Fan Cover (*)
- Solid feet for reduced vibration levels and impact absortion
- Optimized ventilation system for cooler operation and extended life
- High Grade FC200 cast iron provides superior mechanical strength and heat dissipation
- All WEG W22 motors are Totally Enclosed Fan Cooled with a true IP55 rating against dust and moisture. (IPW56, IPW65 and IPW66 available as optional)
- Exclusive W-Seal 364T and larger provides superior bearing protection
- Exclusive WEG painting system exceed 200hrs ASTM 117 corrosion test (Exceeds IEEE841 standard)
- Balanced to 0.08 inches per second vibration limits (Meets IEEE841 standard)
- Four Bolt Conduit Cover with glued Neoprene Gasket
- Impregnation Resin and magnet wire are insulation class H
- Stainless Steel Nameplate - Laser edged with high contrast background
- Corrosion Proof Drains
- Inverter Duty per NEMA MG1, Part 31

*cast iron fan cover available as an option on 143-215T frames

You do not need a special motor for severe duty.
Severe Duty is standard with WEG.

All data subject to change without notice

TEFC NEMA Premium Efficiency Motors with AEGIS® Bearing Protection Ring **INSIDE**

Rolled Steel

Standard Features:

- Class F insulation (impregnation resin and magnet wire are class H)
- Frequency: 60 Hz (dual rated 50 Hz 190-220/380-415V)
- IP55 standard, IP56 optional
- F-1 mount as standard
- Foot mount / C-face / Footless availability
- Enclosure: TEFC, TEAO, and TENV as optional
- Aluminum endshields
- Cast Iron flanges for improved strength (182/4TC and larger)
- Internal bolts, giving a clean surface to the motor, avoiding trapping materials and allowing easy paint job after assembly to the load if required
- Doubled shielded ball bearings on frames 56 to 213/5T. Optional doubled sealed ball bearings and/or bearing cap
- Versions: General Purpose, Close-coupled Pump type “JM” and “JP”

Frames	Enclosure	Eff	Pole	Turndown Ratio		
				CT		VT
				<1HP	≥ 1HP	
143/5T up to 254/6T	TEFC	High	All	2:1		1000:1
		NEMA Premium	2	10:1		
			4-6	4:1		

Features that make a difference:

- New ventilation system for improved thermal performance
- Robust feet design suitable for tougher applications
- New and more robust eyebolts design (frames 182/4T and up) plus a second eyebolt on non-drive end allowing vertical lifting capability (frames 213/5T and 254/6T)
- Oversized diagonally split aluminum terminal box that exceeds IP55 requirements
- Terminal box rotatable in 90 degrees
- Color coded leads as standard for easy wiring
- Regreaseble ball bearings on 254/6T frame as standard (optional for 182/4T and 213/5T)
- IP55 Ingress Protection as standard, being appropriate for severe environments
- Bearing cap as standard on flanged motors, optional on non flanged
- Suitable for VFD operation as per NEMA MG1 part 31.4.4.2
- Motor frame painting system 500 hours salt spray resistant increments for flexibility during installation

TEFC NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
1	0.75	3600	143/5T	00136ET3E143T-SG	560	RSP	39	1.15	1.40	84.0	13.189	208-230/460	9
				00136ET3H143T-SG	560	RSP	39	1.15	1.12	84.0	13.189	575	9
		1800	143/5T	00118ET3E143T-SG	599	RSP	43	1.15	1.47	85.5	13.583	208-230/460	9;34
				00118ET3H143T-SG	599	RSP	43	1.15	1.18	85.5	13.583	575	9;34
				00118ET3V143T-SG	599	RSP	43	1.15	1.69	85.5	13.583	200/400	9;34
		1200	143/5T	00112ET3E145T-SG	669	RSP	43	1.15	1.58	82.5	13.583	208-230/460	9;34
				00112ET3H145T-SG	669	RSP	43	1.15	1.26	82.5	13.583	575	9;34
1.5	1.1	3600	143/5T	00156ET3E143T-SG	613	RSP	39	1.15	1.87	84.0	13.189	208-230/460	9;34
			143/5T	00156ET3H143T-SG	613	RSP	39	1.15	1.49	84.0	13.189	575	9;34
		1800	143/5T	00158ET3E145T-SG	620	RSP	43	1.15	2.02	86.5	13.583	208-230/460	9;34
			143/5T	00158ET3H145T-SG	620	RSP	43	1.15	1.62	86.5	13.583	575	9;34
			143/5T	00158ET3V145T-SG	620	RSP	43	1.15	2.32	86.5	13.583	200/400	9;34
		1200	182/4T	00152ET3E182T-SG	826	RSP	73	1.15	2.22	87.5	16.339	208-230/460	9;34
			182/4T	00152ET3H182T-SG	826	RSP	73	1.15	1.78	87.5	16.339	575	9;34
2	1.5	3600	143/5T	00236ET3E145T-SG	654	RSP	45	1.15	2.47	85.5	13.976	208-230/460	9;34
			143/5T	00236ET3H145T-SG	654	RSP	45	1.15	1.98	85.5	13.976	575	9;34
		1800	143/5T	00218ET3E145T-SG	673	RSP	47	1.15	2.72	86.5	13.976	208-230/460	9;34
			143/5T	00218ET3E145T-W22G	708	N1	56	1.25	2.61	86.5	13.346	208-230/460	34
			143/5T	00218ET3H145T-SG	673	RSP	47	1.15	2.18	86.5	13.976	575	9;34
			143/5T	00218ET3V145T-SG	673	RSP	47	1.15	3.13	86.5	13.976	200/400	9;34
		1200	182/4T	00212ET3E184T-SG	883	RSP	83	1.15	3	88.5	17.126	208-230/460	9;34
			182/4T	00212ET3H184T-SG	883	RSP	83	1.15	2.40	88.5	17.126	575	9;34
3	2.2	3600	182/4T	00336ET3E182T-SG	835	RSP	71	1.15	3.67	86.5	16.339	208-230/460	9;34
			182/4T	00336ET3H182T-SG	835	RSP	71	1.15	2.94	86.5	16.339	575	9;34
		1800	182/4T	00318ET3E182T-SG	747	RSP	87	1.15	3.81	89.5	17.894	208-230/460	9;34
			182/4T	00318ET3E182TC-SG	780	RSP	87	1.15	3.81	89.5	17.894	208-230/460	9;34
			182/4T	00318ET3H182T-SG	747	RSP	87	1.15	3.05	89.5	17.894	575	9;34
			182/4T	00318ET3V182T-SG	747	RSP	87	1.15	4.38	89.5	17.894	200/400	9;34
		1200	213/5T	00312ET3E213T-SG	1,183	RSP	142	1.15	4.17	89.5	19.291	208-230/460	9;34
			213/5T	00312ET3H213T-SG	1,183	RSP	142	1.15	3.34	89.5	19.291	575	9;34
5	3.7	3600	182/4T	00536ET3E184T-SG	930	RSP	86	1.15	5.90	88.5	17.894	208-230/460	9;34
			182/4T	00536ET3E184TC-SG	963	RSP	86	1.15	5.90	88.5	17.894	208-230/460	9;34
			182/4T	00536ET3H184T-SG	930	RSP	86	1.15	4.72	88.5	17.894	575	9;34
		1800	182/4T	00518ET3E184T-SG	842	RSP	79	1.15	6.49	89.5	17.894	208-230/460	9;34
			182/4T	00518ET3E184T-W22G	882	N1	102	1.25	6.45	89.5	15.860	208-230/460	34
			182/4T	00518ET3E184TC-SG	876	RSP	79	1.15	6.49	89.5	17.894	208-230/460	9;34
			182/4T	00518ET3H184T-SG	842	RSP	79	1.15	5.19	89.5	17.894	575	9;34
			182/4T	00518ET3V184T-SG	842	RSP	79	1.15	7.46	89.5	17.894	200/400	9;34
		1200	213/5T	00512ET3E215T-SG	1,360	RSP	156	1.15	6.74	89.5	20.079	208-230/460	9;34
			213/5T	00512ET3H215T-SG	1,360	RSP	156	1.15	5.39	89.5	20.079	575	9;34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

continued next page

All data subject to change without notice

TEFC NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
7.5	5.5	3600	213/5T	00736ET3E213T-SG	1,180	RSP	144	1.15	8.67	89.5	20.079	208-230/460	9;34
			213T	00736ET3E213T-SRG	1,298	RSP	144	1.15	8.67	89.5		208-230/460	9;34
			213/5T	00736ET3E213TC-SG	1,225	RSP	144	1.15	8.67	89.5	20.079	208-230/460	9;34
			213/5T	00736ET3H213T-SG	1,180	RSP	144	1.15	6.93	89.5	20.079	575	9;34
		1800	213/5T	00718ET3E213T-SG	1,148	RSP	131	1.15	9.07	91.7	18.898	208-230/460	9;34
			213/5T	00718ET3E213TC-SG	1,194	RSP	131	1.15	9.07	91.7	18.898	208-230/460	9;34
			213/5T	00718ET3H213T-SG	1,148	RSP	131	1.15	7.26	91.7	18.898	575	9;34
			213/5T	00718ET3V213T-SG	1,148	RSP	131	1.15	10.4	91.7	18.898	200/400	9;34
		1200	254/6T	00712ET3E254T-SG	2,079	RSP	248	1.15	9.98	91.0	22.559	208-230/460	9;34
			254/6T	00712ET3H254T-SG	2,079	RSP	248	1.15	7.98	91.0	22.559	575	9;34
10	7.5	3600	213/5T	01036ET3E215T-SG	1,360	RSP	173	1.15	11.5	90.2	21.654	208-230/460	9;34
			215T	01036ET3E215T-SRG	1,496	RSP	173	1.15	11.5	90.2		208-230/460	9;34
			213/5T	01036ET3E215TC-SG	1,405	RSP	173	1.15	11.5	90.2	21.654	208-230/460	9;34
			213/5T	01036ET3H215T-SG	1,360	RSP	173	1.15	9.20	90.2	21.654	575	9;34
		1800	213/5T	01018ET3E215T-SG	1,310	RSP	142	1.15	12.2	91.7	19.291	208-230/460	9;34
			213/5T	01018ET3E215T-W22G	1,460	N1	190	1.25	12.4	91.7	19.517	208-230/460	34
			213/5T	01018ET3E215TC-SG	1,354	RSP	142	1.15	12.2	91.7	19.291	208-230/460	9;34
			213/5T	01018ET3H215T-SG	1,310	RSP	142	1.15	9.76	91.7	19.291	575	9;34
			213/5T	01018ET3V215T-SG	1,310	RSP	142	1.15	14.0	91.7	19.291	200/400	9;34
		1200	254/6T	01012ET3E256T-SG	2,368	RSP	277	1.15	13.8	91.0	23.346	208-230/460	9;34
			254/6T	01012ET3H256T-SG	2,368	RSP	277	1.15	11.0	91.0	23.346	575	9;34
15	11	3600	254/6T	01536ET3E254T-SG	1,869	RSP	220	1.15	17.4	91.0	22.559	208-230/460	9;34
			254/6T	01536ET3E254TC-SG	1,929	RSP	220	1.15	17.4	91.0	22.559	208-230/460	9;34
			254/6T	01536ET3H254T-SG	1,869	RSP	220	1.15	14.0	91.0	22.559	575	9;34
		1800	254/6T	01518ET3E254T-SG	1,890	RSP	242	1.15	18.2	92.4	22.559	208-230/460	9;34
			254/6T	01518ET3E254TC-SG	1,950	RSP	242	1.15	18.2	92.4	22.559	208-230/460	9;34
			254/6T	01518ET3H254T-SG	1,890	RSP	242	1.15	14.6	92.4	22.559	575	9;34
			254/6T	01518ET3V254T-SG	1,890	RSP	242	1.15	20.9	92.4	22.559	200/400	9;34
		1200	284/6T	01512ET3E284T-W22G	3,601	N1	402	1.25	17.9	91.7	27.929	208-230/460	34
			284/6TS	01512ET3E284TS-W22G	3,601	N1	360	1.25	17.9	91.7	26.557	208-230/460	34
			284/6TS	01512ET3H284TS-W22G	3,601	N1	360	1.25	14.3	91.7	26.557	575	34
20	15	3600	254/6T	02036ET3E256T-SG	2,356	RSP	256	1.15	22.7	91.0	23.346	208-230/460	9;34
			254/6T	02036ET3E256TC-SG	2,416	RSP	256	1.15	22.7	91.0	23.346	208-230/460	9;34
			254/6T	02036ET3H256T-SG	2,356	RSP	256	1.15	18.2	91.0	23.346	575	9;34
		1800	254/6T	02018ET3E256T-SG	2,198	RSP	271	1.15	24.5	92.4	23.346	208-230/460	9;34
			254/6T	02018ET3E256TC-SG	2,258	RSP	271	1.15	24.5	92.4	23.346	208-230/460	9;34
			254/6T	02018ET3H256T-SG	2,198	RSP	271	1.15	19.6	92.4	23.346	575	9;34
			254/6T	02018ET3V256T-SG	2,198	RSP	271	1.15	28.2	92.4	23.346	200/400	9;34
		1200	284/6T	02012ET3E286T-W22G	4,272	N1	450	1.25	24.2	91.7	27.929	208-230/460	34
			284/6T	02012ET3H286T-W22G	4,272	N1	450	1.25	19.4	91.7	27.929	575	34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

continued next page

TEFC NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
25	18.5	3600	284/6TS	02536ET3E284TS-W22G	3,308	N1	400	1.25	28.5	91.7	26.557	208-230/460	34
			284/6TS	02536ET3H284TS-W22G	3,308	N1	400	1.25	22.8	91.7	26.557	575	34
		1800	284/6T	02518ET3E284T-W22G	3,053	N1	433	1.25	29.5	93.6	27.929	208-230/460	34
			284/6T	02518ET3H284T-W22G	3,053	N1	433	1.25	23.6	93.6	27.929	575	34
			284/6T	02518ET3V284T-W22G	3,053	N1	433	1.25	33.9	93.6	27.929	200/400	34
		1200	324/6T	02512ET3E324T-W22G	5,137	N1	569	1.25	30.4	93.0	31.116	208-230/460	34
			324/6T	02512ET3H324T-W22G	5,137	N1	569	1.25	24.3	93.0	31.116	575	34
30	22	3600	284/6TS	03036ET3E286TS-W22G	3,871	N1	430	1.25	33.8	91.7	26.557	208-230/460	34
			284/6TS	03036ET3H286TS-W22G	3,871	N1	430	1.25	27.0	91.7	26.557	575	34
		1800	284/6T	03018ET3E286T-W22G	3,533	N1	482	1.25	35.1	93.6	27.929	208-230/460	34
			284/6T	03018ET3H286T-W22G	3,533	N1	482	1.25	28.1	93.6	27.929	575	34
			284/6T	03018ET3V286T-W22G	3,533	N1	482	1.25	40.4	93.6	27.929	200/400	34
		1200	324/6T	03012ET3E326T-W22G	5,673	N1	621	1.25	35.8	93.0	31.116	208-230/460	34
			324/6TC	03012ET3E326TC-W22G	5,794	N1	621	1.25	35.8	93.0	31.116	208-230/460	34
			324/6T	03012ET3H326T-W22G	5,673	N1	621	1.25	28.6	93.0	31.116	575	34
40	30	3600	324/6TS	04036ET3E324TS-W22G	5,125	N1	572	1.25	45.8	92.4	29.616	208-230/460	34
			324/6TS	04036ET3H324TS-W22G	5,125	N1	572	1.25	36.6	92.4	29.616	575	34
		1800	324/6T	04018ET3E324T-W22G	4,578	N1	595	1.25	48.2	94.1	31.116	208-230/460	34
			324/6T	04018ET3H324T-W22G	4,578	N1	595	1.25	38.6	94.1	31.116	575	34
			324/6T	04018ET3V324T-W22G	4,578	N1	595	1.25	55.4	94.1	31.116	200/400	34
		1200	364/5T	04012ET3E364T-W22G	8,124	N1	950	1.25	46.5	94.1	34.251	208-230/460	34
			364/5T	04012ET3H364T-W22G	8,124	N1	950	1.25	37.2	94.1	34.251	575	34
50	37	3600	324/6TS	05036ET3E326TS-W22G	5,716	N1	605	1.25	56.1	93.0	29.616	208-230/460	34
			324/6TS	05036ET3H326TS-W22G	5,716	N1	605	1.25	44.9	93.0	29.616	575	34
		1800	324/6T	05018ET3E326T-W22G	5,500	N1	634	1.25	59.2	94.5	31.116	208-230/460	34
			324/6T	05018ET3H326T-W22G	5,500	N1	634	1.25	47.4	94.5	31.116	575	34
			324/6T	05018ET3V326T-W22G	5,500	N1	634	1.25	68.1	94.5	31.116	200/400	34
		1200	364/5T	05012ET3E365T-W22G	9,358	N1	1,009	1.25	57.4	94.1	34.251	208-230/460	34
			365/5T	05012ET3H365T-W22G	9,358	N1	1,009	1.25	45.9	94.1	34.251	575	34
60	45	3600	364/5TS	06036ET3E364TS-W22G	8,392	N1	954	1.25	67.0	93.6	32.276	208-230/460	34
			364/5TS	06036ET3H364TS-W22G	8,392	N1	954	1.25	53.6	93.6	32.276	575	34
		1800	364/5T	06018ET3E364T-W22G	8,229	N1	1,027	1.25	68.3	95.0	34.251	208-230/460	34
			364/5T	06018ET3H364T-W22G	8,229	N1	1,027	1.25	54.6	95.0	34.251	575	34
		1200	404/5T	06012ET3E404T-W22G	11,697	N1	1,213	1.25	69.5	94.5	39.730	208-230/460	34
			404/5T	06012ET3H404T-W22G	11,697	N1	1,213	1.25	55.6	94.5	39.730	575	34
75	55	3600	364/5TS	07536ET3E365TS-W22G	9,931	N1	965	1.25	81.9	93.6	32.276	208-230/460	34
			364/5TS	07536ET3H365TS-W22G	9,931	N1	965	1.25	65.5	93.6	32.276	575	34
		1800	364/5T	07518ET3E365T-W22G	9,545	N1	1,044	1.25	84.1	95.4	34.251	208-230/460	34
			364/5TC	07518ET3E365TC-W22G	9,988	N1	1,041	1.25	84.1	95.4	34.251	208-230/460	34
			364/5T	07518ET3H365T-W22G	9,545	N1	1,044	1.25	67.3	95.4	34.251	575	34
		1200	404/5T	07512ET3E405T-W22G	13,258	N1	882	1.25	84.9	94.5	39.730	208-230/460	34
			404/5T	07512ET3H405T-W22G	13,258	N1	882	1.25	67.9	94.5	39.730	575	34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

continued next page

All data subject to change without notice

TEFC NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
100	75	3600	404/5TS	10036ET3E405TS-W22G	13,202	N1	1,193	1.25	110	94.1	36.732	208-230/460	34
		1800	404/5T	10018ET3E405T-W22G	12,889	N1	1,292	1.25	111	95.4	39.730	208-230/460	34
			404/5T	10018ET3H405T-W22G	12,889	N1	1,292	1.25	88.8	95.4	39.730	575	34
		1200	444/5T	10012ET3E444T-W22G	17,181	N1	1,885	1.25	121	95.0	44.950	208-230/460	34
			444/5T	10012ET3H444T-W22G	17,181	N1	1,885	1.25	96.8	95.0	44.950	575	34
125	90	3600	444/5TS	12536ET3E444TS-W22G	16,900	N1	1,836	1.15	134	95.0	41.200	208-230/460	34
			444/5TS	12536ET3H444TS-W22G	16,900	N1	1,836	1.15	107	95.0	41.200	575	34
		1800	444/5T	12518ET3E444T-W22G	16,298	N1	1,824	1.15	139	95.4	44.950	208-230/460	34
			444/5TC	12518ET3G444TC-W22G	17,768	N1	1,754	1.15	139	95.4	44.950	460	34
			444/5T	12518ET3H444T-W22G	16,298	N1	1,824	1.15	139	95.4	44.950	575	34
		1200	444/5T	12512ET3E445T-W22G	19,497	N1	2,004	1.15	143	95.0	44.950	208-230/460	34
			444/5T	12512ET3H445T-W22G	19,497	N1	2,004	1.15	114	95.0	44.950	575	34
150	110	1800	444/5TC	15018ET3G445TC-W22G	19,575	N1	1,960	1.15	170	95.8	44.950	460	34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

ODP NEMA Premium Efficiency Motors with AEGIS® Bearing Protection Ring **INSIDE**

Cast Iron

WEG Open Drip Proof motors are designed to meet demanding applications in environments where dirt and humidity are minimal. These motors are specifically designed to provide maximum ventilation and cool operation.

Inverter Rated:
1000:1 for variable torque
4:1 for constant torque

Features that make a difference:

- 50/60 Hz rated (Same Horse Power at 50 Hz with a 1.0 service factor)
- Class F insulation (Impregnation Resin and Magnet wire are class H)
- Class B Rise at 1.15 Service Factor
- F1 Mounted (Cast Iron Frame motors are F2 convertible)
- Stainless Steel Nameplate - Laser etched with high contrast background (Cast Iron Frames only)
- Cast Iron Frames: Regreasable ball bearings (Frames 254T and up)

All data subject to change without notice

ODP NEMA Premium Efficiency Motors with AEGIS® Bearing Protection Ring **INSIDE**

Rolled Steel

Standard Features:

- Class F insulation (impregnation resin and magnet wire are class H)
- Efficiency levels: NEMA Premium®
- Frequency: 60 Hz (dual rated 50 Hz 190-220/380-415V)
- F-1 mount as standard
- Foot mount / C-face / Footless availability
- Enclosure: ODP, ODPAO as optional
- Aluminum endshields
- Cast Iron flanges for improved strength (182/4TC and larger)
- Internal bolts, giving a clean surface to the motor, avoiding trapping materials and allowing easy paint job after assembly to the load if required
- Doubled shielded ball bearings on frames 56 to 213/5T. Optional doubled sealed ball bearings and/or bearing cap
- Versions: General Purpose, Close-coupled Pump type “JM” and “JP”

Frames	Enclosure	Eff	Pole	Turndown Ratio		
				CT		VT
				<1HP	≥ 1HP	
143/5T up to 254/6T	ODP	High	All	2:1		1000:1
		NEMA Premium	2	3:1		
			4-6	5:1		

Features that make a difference:

- New ventilation system for improved thermal performance
- Robust feet design suitable for tougher applications
- New and more robust eyebolts design (frames 182/4T and up) plus a second eyebolt on non-drive end allowing vertical lifting capability (frames 213/5T and 254/6T)
- Oversized diagonally split aluminum terminal box that exceeds IP55 requirements
- Terminal box rotatable in 90 degrees increments for flexibility during installation
- Color coded leads as standard for easy wiring
- Regreaseable ball bearings on 254/6T frame as standard (optional for 182/4T and 213/5T)
- Bearing cap as standard on flanged motors, optional on non flanged
- Suitable for VFD operation as per NEMA MG1 part 31.4.4.2
- Motor frame painting system 500 hours salt spray resistant

ODP NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
1	0.75	1800	143/5T	00118OT3E143T-SG	530	N1S	39	1.15	1.51	85.5	11.181	208-230/460	9;34
			143/5T	00118OT3H143T-SG	530	N1S	39	1.15	1.21	85.5	11.181	575	9;34
			143/5T	00118OT3V143T-SG	530	N1S	39	1.15	1.74	85.5	11.181	200/400	9;34
		1200	143/5T	00112OT3E145T-SG	586	N1S	40	1.15	1.65	82.5	11.181	208-230/460	9;34
			143/5T	00112OT3H145T-SG	586	N1S	40	1.15	1.32	82.5	11.181	575	9;34
1.5	1.1	3600	143/5T	00156OT3E143T-SG	582	N1S	34	1.15	1.85	84.0	11.181	208-230/460	9;34
		1800	143/5T	00158OT3E145T-SG	589	N1S	47	1.15	2.07	86.5	12.362	208-230/460	9;34
			143/5TC	00158OT3E145TC-SG	623	N1S	47	1.15	2.07	86.5	12.362	208-230/460	9;34
			143/5T	00158OT3H145T-SG	589	N1S	47	1.15	1.66	86.5	12.362	575	9;34
			143/5T	00158OT3V145T-SG	589	N1S	47	1.15	2.38	86.5	12.362	200/400	9;34
			143/5T	00158OT3V145TC-SG	623	N1S	47	1.15	2.38	86.5	12.362	200/400	9;34
		1200	182/4T	00152OT3E182T-SG	758	N1S	63	1.15	2.25	86.5	13.957	208-230/460	9;34
2	1.5	3600	143/5T	00236OT3E145T-SG	627	N1S	42	1.15	2.42	85.5	11.969	208-230/460	9;34
		1800	143/5T	00218OT3E145T-SG	632	N1S	44	1.15	2.69	86.5	12.362	208-230/460	9;34
			143/5TC	00218OT3E145TC-SG	666	N1S	44	1.15	2.69	86.5	12.362	208-230/460	9;34
			143/5T	00218OT3H145T-SG	632	N1S	44	1.15	2.15	86.5	12.362	575	9;34
			143/5T	00218OT3V145T-SG	632	N1S	44	1.15	3.09	86.5	12.362	200/400	9;34
		1200	182/4T	00212OT3E184T-SG	767	N1S	73	1.15	2.95	87.5	14.744	208-230/460	9;34
3	2.2	3600	143/5T	00336OT3E145T-SG	685	N1S	45	1.15	3.59	85.5	12.362	208-230/460	9;34
		1800	182/4T	00318OT3E182T-SG	694	N1S	73	1.15	3.86	89.5	15.138	208-230/460	9;34
			182/4T	00318OT3E182TC-SG	732	N1S	73	1.15	3.86	89.5	15.138	208-230/460	9;34
			182/4T	00318OT3H182T-SG	694	N1S	73	1.15	3.09	89.5	15.138	575	9;34
			182/4T	00318OT3V182T-SG	694	N1S	73	1.15	4.44	89.5	15.138	200/400	9;34
			182/4TC	00318OT3V182TC-SG	732	N1S	73	1.15	4.43	89.5	15.138	200/400	9;34
		1200	213/5T	00312OT3E213T-SG	975	N1S	110	1.15	4.16	88.5	16.575	208-230/460	9;34
			213/5T	00312OT3H213T-SG	975	N1S	110	1.15	3.33	88.5	16.575	575	9;34
5	3.7	3600	182/4T	00536OT3E182T-SG	821	N1S	66	1.15	6.10	86.5	14.764	208-230/460	9;34
			182/4T	00536OT3E182TC-SG	859	N1S	66	1.15	6.10	86.5	14.764	208-230/460	9;34
		1800	182/4T	00518OT3E184T-SG	800	N1S	87	1.15	6.33	89.5	16.319	208-230/460	9;34
			182/4T	00518OT3E184TC-SG	838	N1S	87	1.15	6.33	89.5	16.319	208-230/460	9;34
			182/4T	00518OT3H184T-SG	800	N1S	87	1.15	5.06	89.5	16.319	575	9;34
			182/4T	00518OT3V184T-SG	800	N1S	87	1.15	7.28	89.5	16.319	200/400	9;34
			182/4T	00518OT3V184TC-SG	838	N1S	87	1.15	7.28	89.5	16.319	200/400	9;34
		1200	213/5T	00512OT3E215T-SG	1,257	N1S	129	1.15	6.74	89.5	16.969	208-230/460	9;34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

continued next page

All data subject to change without notice

ODP NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
7.5	5.5	3600	182/4T	00736OT3E184T-SG	1,090	N1S	77	1.15	8.67	88.5	15.138	208-230/460	9;34
			182/4T	00736OT3E184TC-SG	1,128	N1S	77	1.15	8.67	88.5	15.138	208-230/460	9;34
		1800	213/5T	00718OT3E213T-SG	1,110	N1S	128	1.15	9.14	91.0	16.575	208-230/460	9;34
			213/5T	00718OT3E213TC-SG	1,161	N1S	128	1.15	9.14	91.0	16.575	208-230/460	9;34
			213/5T	00718OT3H213T-SG	1,110	N1S	128	1.15	7.31	91.0	16.575	575	9;34
			213/5T	00718OT3V213T-SG	1,110	N1S	128	1.15	10.5	91.0	16.575	200/400	9;34
			213/5TC	00718OT3V213TC-SG	1,161	N1S	128	1.15	10.5	91.0	16.575	200/400	9;34
		1200	254/6T	00712OT3E254T-SG	1,747	N1S	231	1.15	10.2	90.2	20.472	208-230/460	9;34
			254/6TC	00712OT3E254TC-SG	1,815	N1S	231	1.15	10.2	90.2	20.472	208-230/460	9;34
			254/6T	00712OT3H254T-SG	1,747	N1S	231	1.15	8.16	90.2	20.472	575	9;34
10	7.5	3600	213/5T	01036OT3E213T-SG	1,281	N1S	128	1.15	12.0	89.5	16.969	208-230/460	9;34
			213/5T	01036OT3E213TC-SG	1,332	N1S	128	1.15	12.0	89.5	16.969	208-230/460	9;34
		1800	213/5T	01018OT3E215T-SG	1,302	N1S	149	1.15	12.4	91.7	17.756	208-230/460	9;34
			213/5T	01018OT3E215TC-SG	1,353	N1S	149	1.15	12.4	91.7	17.756	208-230/460	9;34
			213/5T	01018OT3H215T-SG	1,302	N1S	149	1.15	9.92	91.7	17.756	575	9;34
			213/5T	01018OT3V215T-SG	1,302	N1S	149	1.15	14.3	91.7	17.756	200/400	9;34
			213/5TC	01018OT3V215TC-SG	1,353	N1S	149	1.15	14.3	91.7	17.756	200/400	9;34
		1200	254/6T	01012OT3E256T-SG	1,997	N1S	254	1.15	13.9	91.7	20.472	208-230/460	9;34
			254/6T	01012OT3H256T-SG	1,997	N1S	254	1.15	11.1	91.7	20.472	575	9;34
15	11	3600	213/5T	01536OT3E215T-SG	1,692	N1S	143	1.15	17.2	90.2	17.756	208-230/460	9;34
			213/5T	01536OT3E215TC-SG	1,743	N1S	143	1.15	17.2	90.2	17.756	208-230/460	9;34
		1800	254/6T	01518OT3E254T-SG	1,757	N1S	220	1.15	18.3	93.0	20.472	208-230/460	9;34
			254/6T	01518OT3E254TC-SG	1,825	N1S	220	1.15	18.3	93.0	20.472	208-230/460	9;34
			254/6T	01518OT3H254T-SG	1,757	N1S	220	1.15	14.6	93.0	20.472	575	9;34
			254/6T	01518OT3V254T-SG	1,757	N1S	220	1.15	21.0	93.0	20.472	200/400	9;34
		1200	284T	01512OT3E284T-G	2,722	N1B	360	1.15	17.7	91.7	23.386	208-230/460	34
20	15	3600	254/6T	02036OT3E254T-SG	2,040	N1S	196	1.15	23.8	91.0	20.472	208-230/460	9;34
			254/6T	02036OT3E254TC-SG	2,108	N1S	196	1.15	23.8	91.0	20.472	208-230/460	9;34
		1800	254/6T	02018OT3E256T-SG	2,112	N1S	243	1.15	24.7	93.0	20.472	208-230/460	9;34
			254/6T	02018OT3E256TC-SG	2,180	N1S	243	1.15	24.7	93.0	20.472	208-230/460	9;34
			254/6T	02018OT3H256T-SG	2,112	N1S	243	1.15	19.8	93.0	20.472	575	9;34
			254/6T	02018OT3V256T-SG	2,112	N1S	243	1.15	28.4	93.0	20.472	200/400	9;34
			254/6TC	02018OT3V256TC-SG	2,180	N1S	243	1.15	28.4	93.0	20.472	200/400	9;34
		1200	286T	02012OT3E286T-G	3,344	N1B	418	1.15	24.0	92.4	24.882	208-230/460	34
25	18.5	3600	254/6T	02536OT3E256T-SG	2,419	N1S	219	1.15	29.1	91.7	20.472	208-230/460	9;34
			254/6T	02536OT3E256TC-SG	2,487	N1S	219	1.15	29.1	91.7	20.472	208-230/460	9;34
		1800	284T	02518OT3E284T-G	2,470	N1B	382	1.15	29.9	93.6	23.386	208-230/460	34
			284TC	02518OT3E284TC-G	2,555	N1B	382	1.15	29.9	93.6	23.386	208-230/460	34
			284T	02518OT3H284T-G	2,470	N1B	382	1.15	23.9	93.6	23.386	575	34
			284T	02518OT3V284T-G	2,470	N1B	382	1.15	34.4	93.6	23.386	200/400	34
		1200	324T	02512OT3E324T-G	3,919	N1B	556	1.15	30.4	93.0	26.181	208-230/460	34

Notes: **9** Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

continued next page

ODP NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
30	22	3600	284TS	030360T3E284TS-G	2,797	N1B	373	1.15	35.2	92.4	220	208-230/460	34
		1800	286T	030180T3E286T-G	2,840	N1B	459	1.15	35.4	94.1	24.882	208-230/460	34
			286TC	030180T3E286TC-G	2,925	N1B	459	1.15	35.4	94.1	24.882	208-230/460	34
			286T	030180T3H286T-G	2,840	N1B	459	1.15	28.3	94.1	24.882	575	34
			286T	030180T3V286T-G	2,840	N1B	459	1.15	40.7	94.1	24.882	200/400	34
		1200	326T	030120T3E326T-G	4,290	N1B	578	1.15	36.0	93.6	27.667	208-230/460	34
40	30	3600	286TS	040360T3E286TS-G	3,618	N1B	457	1.15	47.1	93.0	23.504	208-230/460	34
			286TSC	040360T3E286TSC-G	3,703	N1B	372	1.15	47.1	93.0	23.504	208-230/460	34
		1800	324T	040180T3E324T-G	3,495	N1B	574	1.15	48.2	94.1	26.181	208-230/460	34
			324TC	040180T3E324TC-G	3,595	N1B	574	1.15	48.2	94.1	26.181	208-230/460	34
			324TS	040180T3E324TS-G	3,372	N1B	574	1.15	48.2	94.1	24.685	208-230/460	34
			324T	040180T3H324T-G	3,495	N1B	574	1.15	38.6	94.1	26.181	575	34
			324T	040180T3V324T-G	3,495	N1B	574	1.15	55.4	94.1	26.181	200/400	34
			324T	040180T3V324TC-G	3,595	N1B	574	1.15	55.4	94.1	26.181	200/400	34
		1200	364/5T	040120T3E364T-G	6,384	N1B	910	1.15	48.2	94.1	29.764	208-230/460	34
50	37	3600	324TS	050360T3E324TS-G	4,097	N1B	541	1.15	59.1	93.6	24.685	208-230/460	34
		1800	326T	050180T3E326T-G	4,188	N1B	595	1.15	61.4	94.5	27.667	208-230/460	34
			326TC	050180T3E326TC-G	4,288	N1B	595	1.15	61.4	94.5	27.667	208-230/460	34
			326T	050180T3H326T-G	4,188	N1B	595	1.15	49.1	94.5	27.667	575	34
			326T	050180T3V326T-G	4,188	N1B	595	1.15	70.6	94.5	27.667	200/400	34
		1200	364/5T	050120T3E365T-G	7,232	N1B	924	1.15	60.2	94.1	29.764	208-230/460	34
60	45	3600	326TS	060360T3E326TS-G	4,858	N1B	627	1.15	71.0	93.6	26.181	208-230/460	34
		1800	364/5T	060180T3E364T-G	5,283	N1B	935	1.15	69.9	95.0	29.764	208-230/460	34
			364/5TC	060180T3E364TC-G	5,677	N1B	935	1.15	69.9	95.0	29.764	208-230/460	34
			364/5T	060180T3H364T-G	5,283	N1B	935	1.15	55.9	95.0	29.764	575	34
		1200	404/5T	060120T3E404T-G	8,762	N1B	1,095	1.15	71.2	94.5	34.133	208-230/460	34
75	55	3600	364/5TS	075360T3E364TS-G	6,172	N1B	805	1.15	81.5	94.1	27.638	208-230/460	34
			364/5TSC	075360T3E364TSC-G	6,566	N1B	873	1.15	81.5	94.1	27.638	208-230/460	34
		1800	364/5T	075180T3E365T-G	6,498	N1B	935	1.15	85.5	95.0	29.764	208-230/460	34
			364/5TC	075180T3E365TC-G	6,892	N1B	935	1.15	85.5	95.0	29.764	208-230/460	34
			364/5T	075180T3H365T-G	6,498	N1B	935	1.15	68.4	95.0	29.764	575	34
		1200	404/5T	075120T3E405T-G	9,558	N1B	1,121	1.15	85.9	94.5	34.133	208-230/460	34
100	75	3600	364/5TS	100360T3E365TS-G	7,484	N1B	905	1.15	111	94.5	27.638	208-230/460	34
		1800	404/5T	100180T3E404T-G	8,341	N1B	1,207	1.15	115	95.4	34.133	208-230/460	34
			404/5TS	100180T3E404TS-G	7,751	N1B	1,207	1.15	115	95.4	31.141	208-230/460	34
			404/5T	100180T3H404T-G	8,341	N1B	1,207	1.15	92.0	95.4	34.133	575	34
		1200	444/5T	100120T3E444T-G	13,463	N1B	1,521	1.15	125	95.0	39.803	208-230/460	34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

continued next page

All data subject to change without notice

ODP NEMA Premium Motors with AEGIS® Bearing Protection Ring INSIDE

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
125	90	3600	404/5TS	125360T3E404TS-G	**10,026**	N1B	1,049	1.15	136	94.5	31.141	208-230/460	34
			404/5T	125180T3E405T-G	**9,181**	N1B	1,189	1.15	142	95.4	34.133	208-230/460	34
			404/5TC	125180T3E405TC-G	**9,627**	N1B	1,217	1.15	142	95.4	34.133	208-230/460	34
			404/5T	125180T3H405T-G	**9,181**	N1B	1,189	1.15	114	95.4	34.133	575	34
		1200	444/5T	125120T3G445T-G	**14,353**	N1B	1,602	1.15	158	95.0	39.803	460	34
150	110	3600	404/5TS	150360T3G405TS-G	**12,616**	N1B	1,114	1.15	162	94.5	31.141	460	34

Notes: **9** Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

Pump Motors

CLOSE-COUPLED PUMP MOTORS

TEFC

Standard Features:

- Class F insulation (impregnation resin and magnet wire class H)
- Frequency: 60 Hz (dual rated 50 Hz 190-220/380-415V)
- IP55 standard, IP56 optional
- F-1 mount as standard
- Aluminum endshields
- Cast Iron flanges for improved strength (182/4JM/JP and larger)
- Internal bolts, giving a clean surface to the motor, avoiding trapping materials and allowing easy paint job after assembly to the load if required
- Doubled shielded ball bearings on frames 143/5JM/JP to 213/5JM/JP. Optional doubled sealed ball bearings and/or bearing cap

are

Inverter Rated: 1000 : 1 for variable torque

Features that make a difference:

- New ventilation system for improved thermal performance
- Robust feet design suitable for tougher applications
- New and more robust eyebolts design (frames 182/4JM/JP and up) plus a second eyebolt on non-drive end allowing vertical lifting capability (frames 213/5JM/JP and 254/6JM/JP)
- Oversized diagonally split aluminum terminal box that exceeds IP55 requirements
- Terminal box rotatable in 90 degrees
- Color coded leads as standard for easy wiring
- Regreaseble ball bearings on 254/6JM/JP frame as standard (optional for 182/4JM/JP and 213/5JM/JP)
- IP55 Ingress Protection as standard, being appropriate for severe environments
- Bearing cap as standard on flanged motors, optional on non flanged
- Suitable for VFD operation as per NEMA MG1 part 31.4.4.2
- Motor frame painting system 500 hours salt spray resistant increments for flexibility during installation

All data subject to change without notice

Close-Coupled Pump Motors with AEGIS® Bearing Protection Ring INSIDE

JM - TEFC - Three Phase

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
1	0.75	1800	143/5JM	00118ET3E143JM-SG	764	P1S	43	1.15	1.47	85.5	15.709	208-230/460	9;34
			143/5JM	00118ET3H143JM-SG	764	P1S	43	1.15	1.17	85.5	15.709	575	9;34
1.5	1.1	3600	143/5JM	00156ET3E143JM-SG	850	P1S	39	1.15	1.87	84.0	15.709	208-230/460	9;34
			143/5JM	00156ET3H143JM-SG	850	P1S	39	1.15	1.50	84.0	15.709	575	9;34
		1800	143/5JM	00158ET3E145JM-SG	793	P1S	43	1.15	2.02	86.5	15.709	208-230/460	9;34
			143/5JM	00158ET3H145JM-SG	793	P1S	43	1.15	1.62	86.5	15.709	575	9;34
2	1.5	3600	143/5JM	00236ET3E145JM-SG	834	P1S	45	1.15	2.47	85.5	16.102	208-230/460	9;34
			143/5JM	00236ET3H145JM-SG	834	P1S	45	1.15	1.98	85.5	16.102	575	9;34
		1800	143/5JM	00218ET3E145JM-SG	858	P1S	47	1.15	2.72	86.5	16.102	208-230/460	9;34
			143/5JM	00218ET3H145JM-SG	858	P1S	47	1.15	2.18	86.5	16.102	575	9;34
3	2.2	3600	182/4JM	00336ET3E182JM-SG	1,103	P1S	71	1.15	3.67	86.5	17.835	208-230/460	9;34
			182/4JM	00336ET3H182JM-SG	1,103	P1S	71	1.15	2.94	86.5	17.835	575	9;34
		1800	182/4JM	00318ET3E182JM-SG	1,211	P1S	87	1.15	3.81	89.5	19.390	208-230/460	9;34
			182/4JM	00318ET3H182JM-SG	1,211	P1S	87	1.15	3.05	89.5	19.390	575	9;34
5	3.7	3600	182/4JM	00536ET3E184JM-SG	1,264	P1S	86	1.15	5.90	88.5	19.390	208-230/460	9;34
			182/4JM	00536ET3H184JM-SG	1,264	P1S	86	1.15	4.72	88.5	19.390	575	9;34
		1800	182/4JM	00518ET3E184JM-SG	1,331	P1S	79	1.15	6.49	89.5	19.390	208-230/460	9;34
			182/4JM	00518ET3H184JM-SG	1,331	P1S	79	1.15	5.19	89.5	18.209	575	9;34
7.5	5.5	3600	213/5JM	00736ET3E213JM-SG	1,645	P1S	144	1.15	8.67	89.5	21.220	208-230/460	9;34
			213/5JM	00736ET3H213JM-SG	1,645	P1S	144	1.15	6.94	89.5	21.220	575	9;34
		1800	213/5JM	00718ET3E213JM-SG	1,743	P1S	131	1.15	9.07	91.7	20.039	208-230/460	9;34
			213/5JM	00718ET3H213JM-SG	1,743	P1S	131	1.15	7.26	91.7	20.039	575	9;34
10	7.5	3600	213/5JM	01036ET3E215JM-SG	2,001	P1S	173	1.15	11.5	90.2	22.795	208-230/460	9;34
			213/5JM	01036ET3H215JM-SG	2,001	P1S	173	1.15	9.20	90.2	22.795	575	9;34
		1800	213/5JM	01018ET3E215JM-SG	2,023	P1S	142	1.15	12.2	91.7	20.433	208-230/460	9;34
			213/5JM	01018ET3H215JM-SG	2,023	P1S	142	1.15	9.76	91.7	20.433	575	9;34
15	11	3600	213/5JM	01536ET3E215JM-SG	2,258	P1S	181	1.15	17.1	91.0	22.795	208-230/460	9;34
			254/6JM	01536ET3E254JM-SG	2,909	P1S	220	1.15	17.4	91.0	24.055	208-230/460	9;34
			213/5JM	01536ET3H215JM-SG	2,258	P1S	181	1.15	13.7	91.0	22.795	575	9;34
			254/6JM	01536ET3H254JM-SG	2,909	P1S	220	1.15	14.0	91.0	24.055	575	9;34
		1800	254/6JM	01518ET3E254JM-SG	2,933	P1S	242	1.15	18.2	92.4	24.055	208-230/460	9;34
			254/6JM	01518ET3H254JM-SG	2,933	P1S	242	1.15	14.6	92.4	24.055	575	9;34
20	15	3600	254/6JM	02036ET3E256JM-SG	3,298	P1S	256	1.15	22.7	91.0	24.842	208-230/460	9;34
			254/6JM	02036ET3H256JM-SG	3,298	P1S	256	1.15	18.2	91.0	24.842	575	9;34
		1800	254/6JM	02018ET3E256JM-SG	3,188	P1S	271	1.15	24.5	92.4	24.843	208-230/460	9;34
		1800	254/6JM	02018ET3H256JM-SG	3,188	P1S	271	1.15	19.6	92.4	24.843	575	9;34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

Close-Coupled Pump Motors with AEGIS® Bearing Protection Ring INSIDE
JP - TEFC - Three Phase

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Ser-vice Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
1	0.75	1800	143/5JP	00118ET3E143JP-SG	764	P1S	43	1.15	1.47	85.5	18.780	208-230/460	9;34
1.5	1.1	3600	143/5JP	00156ET3E143JP-SG	850	P1S	39	1.15	1.87	84.0	18.780	208-230/460	9;34
		1800	143/5JP	00158ET3E145JP-SG	793	P1S	43	1.15	2.02	86.5	18.780	208-230/460	9;34
2	1.5	3600	143/5JP	00236ET3E145JP-SG	834	P1S	45	1.15	2.47	85.5	19.173	208-230/460	9;34
		1800	143/5JP	00218ET3E145JP-SG	858	P1S	47	1.15	2.72	86.5	19.173	208-230/460	9;34
3	2.2	3600	182/4JP	00336ET3E182JP-SG	1,103	P1S	71	1.15	3.67	86.5	20.906	208-230/460	9;34
		1800	182/4JP	00318ET3E182JP-SG	1,211	P1S	87	1.15	3.81	89.5	22.461	208-230/460	9;34
5	3.7	3600	182/4JP	00536ET3E184JP-SG	1,264	P1S	86	1.15	5.90	88.5	22.461	208-230/460	9;34
		1800	182/4JP	00518ET3E184JP-SG	1,331	P1S	79	1.15	6.49	89.5	22.461	208-230/460	9;34
7.5	5.5	3600	213/5JP	00736ET3E213JP-SG	1,645	P1S	144	1.15	8.67	89.5	25.079	208-230/460	9;34
		1800	213/5JP	00718ET3E213JP-SG	1,743	P1S	131	1.15	9.07	91.7	23.898	208-230/460	9;34
			213/5JP	00718ET3H213JP-SG	1,743	P1S	131	1.15	7.26	91.7	23.898	575	9;34
10	7.5	3600	213/5JP	01036ET3E215JP-SG	2,001	P1S	173	1.15	11.5	90.2	26.654	208-230/460	9;34
		1800	213/5JP	01018ET3E215JP-SG	2,023	P1S	142	1.15	12.2	91.7	24.291	208-230/460	9;34
			213/5JP	01018ET3H215JP-SG	2,023	P1S	142	1.15	9.80	91.7	24.291	575	9;34
15	11	3600	254/6JP	01536ET3E254JP-SG	2,909	P1S	220	1.15	17.4	91.0	26.929	208-230/460	9;34
		1800	254/6JP	01518ET3E254JP-SG	2,933	P1S	242	1.15	18.2	92.4	26.929	208-230/460	9;34
20	15	3600	254/6JP	02036ET3E256JP-SG	3,298	P1S	256	1.15	22.7	91.0	27.716	208-230/460	9;34
		1800	254/6JP	02018ET3E256JP-SG	3,188	P1S	271	1.15	24.5	92.4	27.717	208-230/460	9;34
50	37	1800	324/6JP	05018ET3E326JP-W22G	7,024	P1	476	1.25	59.2	94.5	34.021	208-230/460	34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

All data subject to change without notice

Pump Motors

CLOSE-COUPLED PUMP MOTORS
ODP

Inverter Rated: 1000 : 1 for variable torque

Standard Features:

- Class F insulation (impregnation resin and magnet wire are class H)
- Frame Sizes: NEMA 143/5JM/JP to 254/5JM/JP
- Frequency: 60 Hz (dual rated 50 Hz 190-220/380-415V)
- F-1 mount as standard
- Aluminum endshields
- Cast Iron flanges for improved strength (182/4JM/JP and larger)
- Internal bolts, giving a clean surface to the motor, avoiding trapping materials and allowing easy paint job after assembly to the load if required
- Doubled shielded ball bearings on frames 143/5JM/JP to 254/5JM/JP. Optional doubled sealed ball bearings and/or bearing cap

Features that make a difference:

- New ventilation system for improved thermal performance
- Robust feet design suitable for tougher applications
- New and more robust eyebolts design (frames 182/4T and up) plus a second eyebolt on non-drive end allowing vertical lifting capability (frames 213/5JM/JP and 254/6JM/JP)
- Oversized diagonally split aluminum terminal box that exceeds IP55 requirements
- Terminal box rotatable in 90 degrees increments for flexibility during installation
- Color coded leads as standard for easy wiring
- Regreaseble ball bearings on 254/6JM/JP frame as standard (optional for 182/4JM/JP and 213/5JM/JP)
- Bearing cap as standard on flanged motors, optional on non flanged
- Suitable for VFD operation as per NEMA MG1 part 31.4.4.2
- Motor frame painting system 500 hours salt spray resistant

Close-Coupled Pump Motors with AEGIS® Bearing Protection Ring INSIDE
JM - ODP - Three Phase

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
1	0.75	1800	143/5JM	001180T3E143JM-SG	626	P1S	39	1.15	1.51	85.5	13.701	208-230/460	9;34
			143/5JM	001180T3H143JM-SG	626	P1S	39	1.15	1.21	85.5	13.701	575	9;34
1.5	1.1	3600	143/5JM	001560T3E143JM-SG	674	P1S	34	1.15	1.85	84.0	13.701	208-230/460	9;34
			143/5JM	001560T3H143JM-SG	674	P1S	34	1.15	1.48	84.0	13.701	575	9;34
		1800	143/5JM	001580T3E145JM-SG	693	P1S	47	1.15	2.07	86.5	14.488	208-230/460	9;34
			143/5JM	001580T3H145JM-SG	693	P1S	47	1.15	1.66	86.5	14.488	575	9;34
2	1.5	3600	143/5JM	002360T3E145JM-SG	720	P1S	42	1.15	2.42	85.5	14.094	208-230/460	9;34
			143/5JM	002360T3H145JM-SG	720	P1S	42	1.15	1.94	85.5	14.094	575	9;34
			143/5JM	002360T3V145JM-SG	720	P1S	42	1.15	2.78	85.5	14.094	200/400	9;34
		1800	143/5JM	002180T3E145JM-SG	747	P1S	44	1.15	2.69	86.5	14.488	208-230/460	9;34
			143/5JM	002180T3H145JM-SG	747	P1S	44	1.15	2.15	86.5	13.701	575	9;34
3	2.2	3600	143/5JM	003360T3E145JM-SG	800	P1S	45	1.15	3.59	85.5	14.488	208-230/460	9;34
			143/5JM	003360T3H145JM-SG	800	P1S	45	1.15	2.87	85.5	14.488	575	9;34
			143/5JM	003360T3V145JM-SG	800	P1S	45	1.15	4.13	85.5	14.488	200/400	9;34
		1800	182/4JM	003180T3E182JM-SG	835	P1S	73	1.15	3.86	89.5	16.634	208-230/460	9;34
			182/4JM	003180T3H182JM-SG	835	P1S	73	1.15	3.09	89.5	16.634	575	9;34
			182/4JM	003180T3V182JM-SG	835	P1S	73	1.15	4.43	89.5	16.634	200/400	9;34
5	3.7	3600	182/4JM	005360T3E182JM-SG	962	P1S	66	1.15	6.10	86.5	16.260	208-230/460	9;34
			182/4JM	005360T3H182JM-SG	962	P1S	66	1.15	4.88	86.5	16.260	575	9;34
			182/4JM	005360T3V182JM-SG	962	P1S	66	1.15	7.02	86.5	16.260	200/400	9;34
		1800	182/4JM	005180T3E184JM-SG	1,019	P1S	87	1.15	6.33	89.5	17.815	208-230/460	9;34
			182/4JM	005180T3H184JM-SG	1,019	P1S	87	1.15	5.06	89.5	17.815	575	9;34
7.5	5.5	3600	182/4JM	007360T3E184JM-SG	1,256	P1S	77	1.15	8.67	88.5	16.634	208-230/460	9;34
			182/4JM	007360T3H184JM-SG	1,256	P1S	77	1.15	6.93	88.5	16.634	575	9;34
		1800	213/5JM	007180T3E213JM-SG	1,320	P1S	128	1.15	9.14	91.0	17.717	208-230/460	9;34
			213/5JM	007180T3H213JM-SG	1,320	P1S	128	1.15	7.31	91.0	17.717	575	9;34
10	7.5	3600	213/5JM	010360T3E213JM-SG	1,489	P1S	128	1.15	12.0	89.5	18.110	208-230/460	9;34
			213/5JM	010360T3H213JM-SG	1,489	P1S	128	1.15	9.60	89.5	18.110	575	9;34
		1800	213/5JM	010180T3E215JM-SG	1,566	P1S	149	1.15	12.4	91.7	18.898	208-230/460	9;34
			213/5JM	010180T3H215JM-SG	1,566	P1S	149	1.15	9.90	91.7	18.898	575	9;34
15	11	3600	213/5JM	015360T3E215JM-SG	1,907	P1S	143	1.15	17.2	90.2	18.898	208-230/460	9;34
			213/5JM	015360T3H215JM-SG	1,907	P1S	143	1.15	13.8	90.2	18.898	575	9;34
		1800	254/6JM	015180T3E254JM-SG	2,275	P1S	220	1.15	18.3	93.0	21.969	208-230/460	9;34
			254/6JM	015180T3H254JM-SG	2,275	P1S	220	1.15	14.7	93.0	21.969	575	9;34
20	15	3600	254/6JM	020360T3E254JM-SG	2,387	P1S	196	1.15	23.8	91.0	21.969	208-230/460	9;34
			254/6JM	020360T3H254JM-SG	2,387	P1S	196	1.15	19.0	91.0	21.969	575	9;34
		1800	254/6JM	020180T3E256JM-SG	2,693	P1S	243	1.15	24.7	93.0	21.969	208-230/460	9;34
20	15	1800	254/6JM	020180T3H256JM-SG	2,693	P1S	243	1.15	19.7	93.0	21.969	575	9;34
		3600	254/6JM	025360T3E256JM-SG	2,879	P1S	219	1.15	29.1	91.7	21.969	208-230/460	9;34
			254/6JM	025360T3H256JM-SG	2,879	P1S	219	1.15	23.3	91.7	21.969	575	9;34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

All data subject to change without notice

Close-Coupled Pump Motors with AEGIS® Bearing Protection Ring INSIDE
JP - ODP - Three Phase

HP	KW	RPM	Frame Size	Catalog Number	List Price	Multiplier	Approx. Shipping Weight (lbs)	Service Factor	FL Amps @ High	FL. Eff (%)	"C" Dimension (in)	Voltage	Notes
1	0.75	1800	143/5JP	00118OT3E143JP-SG	626	P1S	39	1.15	1.51	85.5	16.772	208-230/460	9;34
1.5	1.1	3600	143/5JP	00156OT3E143JP-SG	674	P1S	34	1.15	1.85	84.0	16.772	208-230/460	9;34
		1800	143/5JP	00158OT3E145JP-SG	693	P1S	47	1.15	2.07	86.5	17.559	208-230/460	9;34
2	1.5	3600	143/5JP	00236OT3E145JP-SG	720	P1S	42	1.15	2.42	85.5	17.165	208-230/460	9;34
		1800	143/5JP	00218OT3E145JP-SG	747	P1S	44	1.15	2.69	86.5	17.559	208-230/460	9;34
3	2.2	3600	143/5JP	00336OT3E145JP-SG	800	P1S	45	1.15	3.59	85.5	17.559	208-230/460	9;34
		1800	182/4JP	00318OT3E182JP-SG	835	P1S	73	1.15	3.86	89.5	19.705	208-230/460	9;34
5	3.7	3600	182/4JP	00536OT3E182JP-SG	962	P1S	66	1.15	6.10	86.5	19.331	208-230/460	9;34
		1800	182/4JP	00518OT3E184JP-SG	1,019	P1S	87	1.15	6.33	89.5	20.886	208-230/460	9;34
7.5	5.5	3600	182/4JP	00736OT3E184JP-SG	1,256	P1S	77	1.15	8.67	88.5	19.705	208-230/460	9;34
		1800	213/5JP	00718OT3E213JP-SG	1,320	P1S	128	1.15	9.14	91.0	21.575	208-230/460	9;34
			213/5JP	00718OT3H213JP-SG	1,320	P1S	128	1.15	7.31	91.0	21.575	575	9;34
			213/5JP	00718OT3V213JP-SG	1,320	P1S	128	1.15	10.5	91.0	21.575	200/400	9;34
10	7.5	3600	213/5JP	01036OT3E213JP-SG	1,489	P1S	128	1.15	12.0	89.5	21.969	208-230/460	9;34
			213/5JP	01036OT3H213JP-SG	1,489	P1S	128	1.15	9.60	89.5	21.969	575	9;34
		1800	213/5JP	01018OT3E215JP-SG	1,566	P1S	149	1.15	12.4	91.7	22.756	208-230/460	9;34
			213/5JP	01018OT3H215JP-SG	1,566	P1S	149	1.15	9.90	91.7	22.756	575	9;34
			213/5JP	01018OT3V215JP-SG	1,566	P1S	149	1.15	14.2	91.7	22.756	200/400	9;34
15	11	3600	213/5JP	01536OT3E215JP-SG	1,907	P1S	143	1.15	17.2	90.2	22.756	208-230/460	9;34
			213/5JP	01536OT3H215JP-SG	1,907	P1S	143	1.15	13.8	90.2	22.756	575	9;34
		1800	254/6JP	01518OT3E254JP-SG	2,275	P1S	220	1.15	18.3	93.0	24.843	208-230/460	9;34
20	15	3600	254/6JP	02036OT3E254JP-SG	2,387	P1S	196	1.15	23.8	91.0	24.843	208-230/460	9;34
		1800	254/6JP	02018OT3E256JP-SG	2,693	P1S	243	1.15	24.7	93.0	24.843	208-230/460	9;34
25	18.5	3600	254/6JP	02536OT3E256JP-SG	2,879	P1S	219	1.15	29.1	91.7	24.843	208-230/460	9;34
		1800	284JP	02518OT3E284JP-G	3,221	P1C	392	1.15	29.9	93.6	27.141	208-230/460	34

Notes:
9 Rolled Steel Frame
34 AEGIS Installed. No changes in the useful "N-W" dimension

Air Handling Motors

COOLING TOWER MOTORS

Three-Phase TEFC & TEAO

WEG's cooling tower motors are designed for operation in 100% humidity and the most corrosive environments. They are designed to operate in either horizontal or vertical mounting.

WEG's W22 cast iron platform has a superior cooling system and solid feet for cool operation and low vibration and noise extending the life of the motor.

Features that make a difference:

- 1.25 Service Factor
- Multiple endbell drain plugs for shaft up, down or horizontal mounting
- Drain plugs in terminal box
- Rubber lead separator between terminal box and frame
- Internally and externally epoxy painted
- Double sealed bearings
- Double impregnation and bake

Standard Features:

- 50/60 Hz rated (380V on Nameplate - 400/415 Available - Same Horse Power at 50 Hz with a 1.0 Service Factor)
- Class F insulation (Impregnation Resin and magnet Wire are class H)
- Standard mounting is F2. F1 mounted motors are identified in the part number. (Both configurations are convertible).
- Stainless Steel Nameplate - Laser etched with high contrast background
- Double Sealed bearings
- Space Heaters 110-127/200-240V (200-240V 143/5T)

Inverter Rated:
1000:1 for variable torque

NEW

AEGIS®

FACTORY INSTALLED

New Offering: **WEG now factory installs AEGIS® Shaft Grounding Rings to cooling tower motors 254T and larger (15HP to 150HP).**

ADDITIONAL TECHNICAL DATA

ELECTRICAL DATA: B-27
MECHANICAL DATA: B-86; B-90

WEG Warranty

WEG Electric Corp's warranty covers manufacturing defects of our motor per our standard warranty policy. Electro Static Technology covers the performance of the AEGIS® Bearing Protection Ring with a separate warranty, as follows:

WEG Electric Corp. offers the following products, and more! With a full range of IEC/NEMA Global Certifications and a full line of products, WEG can supply the right solution for your needs anywhere in the world. To learn more about WEG's products and solutions or to locate a Distributor near you, please call 1-800-ASK-4WEG or visit www.weg.net/us.

Low Voltage Motors, Single and 3-Phase, 1/8 – 700HP
Large Electric Motors
Variable Frequency Drives
Soft Starters
Controls
Custom Panels
Generators
Power Transformers
Custom Solution Package Sales

WEG can package any of its products for ease of sale! Enjoy a single point of contact for the entire package of products and assistance from quote through after-sales support. Ask your WEG Sales Representative for details.

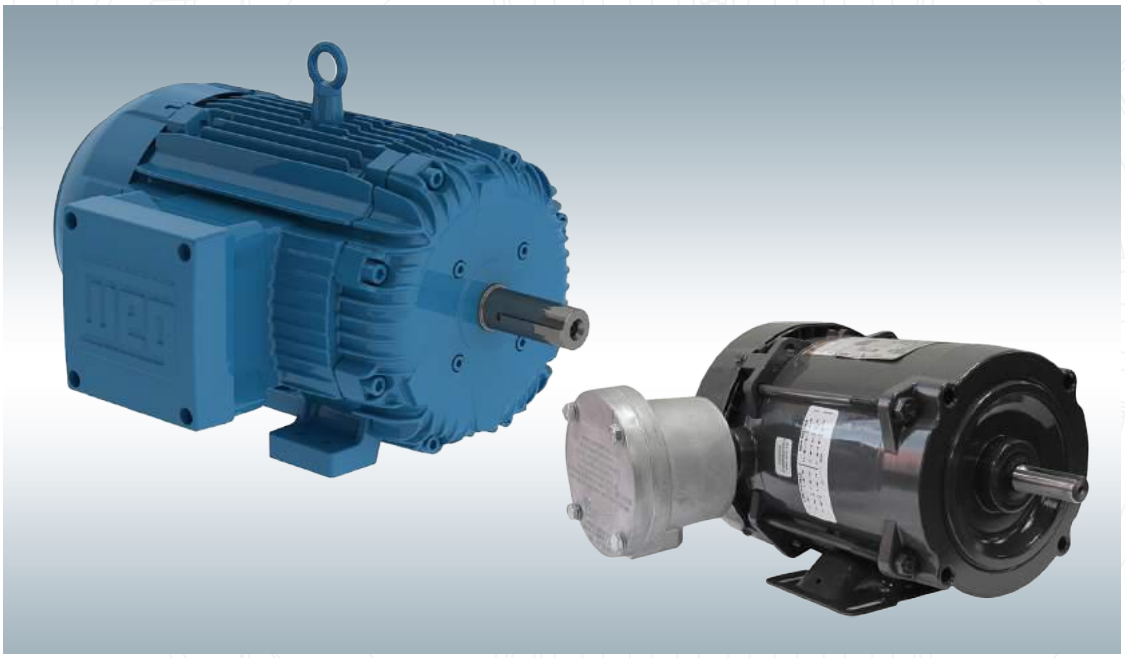
WEG ELECTRIC CORP.
6655 Sugarloaf Parkway
Duluth, GA 30097
Phone: 1-800-ASK-4WEG
info-us@weg.net
www.weg.net/us

Please contact your authorized distributor:

AEGISINSIDE 2/2016

Explosion Proof Motors

1/3 - 500 HP, 2,4,6,& 8 Pole



US.Explosion.Proof.2018

Explosion Proof - Three Phase

Three Phase

Foot Mount and Flange Mount

WEG Explosion Proof motors are suitable for applications requiring UL or CSA certification for hazardous locations. Thermally protected with thermostats, all motors manufactured are submitted to routine testing at the factory to ensure compliance to the required specifications. WEG Explosion Proof motors are specifically designed to meet or exceed all North American requirements for energy efficiency.

Standard Features:

- Efficiency Certification number CC029A according to US Department of Energy Regulations
- Three-phase, 60Hz
- Voltage: 208-230/460, 460 or 575V
- Squirrel cage rotor / Aluminum die cast
- Totally Enclosed Fan Cooled – TEFC (IP54 & IP55)
- Ball bearings are supplied as standard regreasable bearings 254T Frames & Larger
- Cast iron frame
- Class 'F' insulation
- Temperature rise: Class 'B' (80ºC) FL
- Service factor: 1.15
- Inverter Duty
- NEMA dimensions
- NEMA ratings design 'B'
- Continuous Duty (S1)
- 55° ambient @ 1.0SF through 150hp 2 and 4 pole
- 104ºF (40ºC) ambient temperature
- Altitude: 3300 ft (1000 m)
- 1045 Carbon Steel Shaft for frames up to 365T
- 4140 steel shaft for motors 404T and above.
- Class 'F' insulation for all frames
- 60/50Hz Nameplate
- Stainless steel nameplate
- Paint: Expoxy with Polyurethane top coat (exceeds ASTM B117 salt spray test 200 hours)
- Color: RAL 5009 – Blue
- NPT threaded terminal box
- Non-sparking fan
- Thermostats
- F1 mount

Optional Features:

- Flange mount
- AEGIS® inside
- Special voltages
- Space heaters
- Specially dimensioned shaft
- Double shaft
- Stainless steel shaft
- Footless
- Other mounting configurations
- IP66
- Encoders
- TENV

Applications:

- Petro Chem
- Flour / feed mills
- Grain elevators
- Fans
- Pumps
- Blowers
- Material handling equipment
- Other applications requiring motors UL or CSA listed for hazardous locations

CSA AND UL APPROVED
CSA approved - File LR 50962
Class I, Division I, groups C and D
Class II, Division I, groups F and G

IEC - Ex Certification Available

UL approved - File E 87848
Temperature code T3C
Frame 143T up to 326T
Class I, Division I, groups C and D
Class II, Division I, groups F and G

Frame 364T up to 586/7
Temperature code T3C
Class I, Division I, groups C and D
Class II, Division I, groups F and G*
* For group G, Service Factor 1.0

Fractional Explosion Proof - Three Phase

Great complement to our integral explosion proof offering, allowing us to come to customers with complete solution.

Standard Features:

- Class F insulation
- 50°C ambient temperature rating
- 1.0 service factor
- Foot mount motors with and without C-flange
- IP 55 rating
- Class I - Group C & D and Class II - Groups E, F & G – T3C
- Thermally Protected
- Three-Phase motors also rated for 50Hz
- Long leads for remote wiring
- Unassembled aluminum conduit box included
- Aluminum endshields

C UL US LISTED

Single-Phase motors

2-Pole - from 1/3HP to 2HP

4-Pole – from 1/3HP to 1.5HP

1/3HP 4-Pole is TENV

All others are TEFC

Three-Phase motors

2-Pole - from 1/3HP to 2HP

4-Pole – from 1/3HP to 2HP

1/3HP 2 & 4-Pole are TENV

All others are TEFC

Now available in Jet Pump 56J

Single-Phase motors

2-Pole - from 1/2HP to 1.5HP

TEFC

Three-Phase motors

2-Pole - from 1/2HP to 2HP

TEFC

WEG Electric Corp. offers the following products, and more! With a full range of IEC/NEMA Global Certifications and a full line of products, WEG can supply the right solution for your needs anywhere in the world. To learn more about WEG's products and solutions or to locate a Distributor near you, please call **1-800-ASK-4WEG** or visit **www.weg.net**.

Low Voltage Motors, Single and 3-Phase, 1/8 – 700HP

General Purpose Motors
Explosion Proof Motors
Crusher Duty Motors
IEC Tru-Metric Motors
Pump Motors including JP/JM
P-Base Pump Motors
Oil Well Pumping Motors
Pool & Spa Motors
Brake Motors
Compressor Duty Motors
Farm Duty Motors
Poultry Fan Motors
Auger Drive Motors
IEEE 841 Motors
Stainless Steel Wash Down Motors
Saw Arbor Motors
Cooling Tower Motors
Commercial HVAC Motors
Pad Mounted Motors
Vector Duty Motors

Large Electric Motors

Low Voltage 3-phase motors up to 2,500HP
Motors up to 70,000HP and 13,200V
Wound Rotor Systems (including starters) up to 70,000HP and 13,200V
Synchronous Motors up to 70,000HP and 13,200V
Explosion proof motors (Ex-d) up to 1,500kW and 11kV
Ex-n, Ex-e, Ex-p motors

Variable Frequency Drives

Low Voltage 1/4 to 2500HP, 230V – 480V
Medium Voltage 500-8000HP
Multi-pump systems
NEMA 4X
Dynamic braking resistors
Line and load reactors
Plug and play technology
Network communications: Profibus-DP, DeviceNet, Modbus-RTU
PLC functions integrated
Complete line of options and accessories

Soft Starters

3-1500HP
Oriented start-up
Built-in bypass contactor
Universal source voltage (230-575V, 50/60Hz)
Network communications: Profibus-DP, DeviceNet, Modbus-RTU
Complete Line of options and accessories
MV Soft-starter 3.3kV, 4.16kV: up to 3500HP, Withdrawable Power Stacks, & 8x PT100 Temperature monitoring

Controls

Mini – Contactors
IEC Contactors
Thermal Overload Relays
Manual Motor Protectors
Molded Case Circuit Breakers
Smart Relays
Enclosed Starters: combination & non-combination,
Pushbuttons & Pilot Lights
Timing & Motor Protection Relays
Terminal Blocks

Custom Panels

Custom configured to your specification.
NEMA 1, 12, 3R, 4 and 4X cabinets
Quick delivery of preconfigured drives and soft starters
UL 508 certified
Low Voltage (230-460)
Made in the U.S.A.

Generators

Brushless Synchronous Generators for diesel gen-sets up to 4,200kVA
Hydro-generators up to 25,000kVA
Turbo-generators up to 62,500kVA

Power Transformers

Built and engineered in North America
Voltages < 500kV
Ratings 5-300MVA
Station class, oil filled, round core, copper windings
Special configurations and designs available!
Ask your WEG Sales Representative for details.
Designed, built, and engineered to ANSI standards.

Custom Solution Package Sales

WEG can package any of its products for ease of sale! Enjoy a single point of contact for the entire package of products and assistance from quote through after-sales support. Ask your WEG Sales Representative for details.

US.Explosion.Proof.2018

Please contact your authorized distributor:

WEG Electric Corp.
6655 Sugarloaf Parkway
Duluth, GA 30097
Phone: 1-800-ASK-4WEG
www.weg.net

marathon®
Motors

BCP Motors with AEGIS®

BEARING PROTECTION RINGS

A Regal Brand

REGAL

Table of Contents

General Purpose, Three Phase, Dripproof NEMA Premium® XRI® Efficiency 3

NEMA Premium® XRI® Efficiency, Three Phase, Totally Enclosed 4

Hazardous Duty™ Division 1 Explosion Proof, NEMA Premium® XRI®, Class I and II, Groups C, D, F & G, Blue Chip® Severe Duty: Three Phase 5

Inverter (Vector) Duty: Blue Max® 2000, 2000:1 Constant Torque, Totally Enclosed, Three Phase 6

Blue Chip® Severe Duty / Automotive Duty, NEMA Premium® XRI®Totally Enclosed, Rigid Base, Three Phase 8

Blue Chip® Severe Duty / Automotive Duty NEMA Premium® XRI® IEEE-841, Totally Enclosed, Rigid Base, Three Phase 9

Blue Chip® Severe Duty / Cooling Tower: Single-Speed TEAO, Rigid Base, Three Phase 10

Applications:

General purpose use on compressors, pumps, conveyors, blowers, and other machinery in environments that are relatively clean and dry. Substantial energy savings can be realized when using these high efficiency motors. Guaranteed efficiencies offer an e**X**tra **R**eturn on your **I**nvestment when using these premium efficiency motors on high cycle or long run time applications.

Features:

- Meets or exceeds NEMA Premium® efficiencies
- **AEGIS® SGR installed internally (-P Models)**
- Motors are suitable for 10:1 VT on all frame sizes and 10:1 CT up to 365T frame (Except where noted)
- 1.15 Service Factor
- Normally closed thermostats, as noted
- Class F Insulation
- Nameplated 60/50 hertz
- UL Recognized, CSA Certified and CE Marked
- Three year warranty

BCP BEARING CURRENT PROTECTION

Inverter Duty

XRI ENERGY EFFICIENT MOTORS NEMA Premium

Rigid Base

HP	RPM	VOLTS	FRAME	CAT NO.	MODEL NO.	STOCK	MULT. SYMBOL	NOM. EFF.	F.L. AMPS	WEIGHT	"C" DIM.	Foot Notes	C-Face Kit
1	1800	208-230/460	143T	**U758-P**	143TTDR16052	√	E2	85.5	3.5-3.2/1.6	30	12.50	P	A436
1 ½	1800	208-230/460	145T	**U759-P**	145TTDR16348	√	E2	86.5	4.8-5.6/2.4	35	13.00	P	A436
2	1800	208-230/460	145T	**U760-P**	145TTDR16349	√	E2	86.5	6.4-5.8/2.9	37	14.00	P	A436
3	1800	208-230/460	182T	**E1930-P**	182TTDW16063	√	E2	89.5	8.4-8.0/4.0	76	14.56	13,P	A666
5	1800	208-230/460	184T	**E1931-P**	184TTDW16061	√	E2	89.5	13.6-12.8/6.4	89	15.56	13,P	A666
7 ½	1800	208-230/460	213T	**U430A-P**	213TTDW16075	√	E2	91.0	21.0-19.2/9.6	135	19.67	13,P	A606
10	1800	208-230/460	215T	**U431A-P**	215TTDW16073	√	E2	91.7	29.0-26.2/13.1	175	22.15	13,P	A606
15	1800	230/460	254T	**E722A-P**	254TTDX16043	√	E2	93.0	38.0/18.9	230	22.50	P	N/A
20	1800	230/460	256T	**E723B-P**	256TTDX16033	√	E2	93.6	49.0/24.5	259	22.50	P	N/A
25	1800	230/460	284T	**E1006-P**	284TTDR16048	√	E2	93.6	70.2/35.1	292	24.68	P	N/A
30	1800	230/460	284T	**E1009-P**	286TTDR16038	√	E2	94.1	73.2/36.6	202	26.18	P	N/A
40	1800	230/460	324T	**U775-P**	324TTDR16050	√	E2	94.1	96.0/48.0	540	28.00	P	N/A
50	1800	230/460	326T	**E791A-P**	326TTDR16063	√	E2	94.5	121/60.5	453	27.38	P	N/A

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet EISA requirements

Blue shaded areas are Cast Iron Frames
Specifications are subject to change without notice.

NEMA Premium® XRI® Efficiency
Three Phase, Totally Enclosed

Applications:

General purpose use on compressors, pumps, conveyors, blowers, and other machinery in dirty and dusty environments. Substantial energy savings can be realized when using these high efficiency motors. 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 NEMA Premium models are in compliance with EISA2007
- **AEGIS® SGR installed internally (-P Models)**
- Suitable for use on a VFD. Variable Torque and Constant Torque (as noted)
- 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
- F1 conduit box on Rigid Base, F3 on C-Face Footed (Rigid Base) motors
- Shaft slinger
- Class F Insulation
- Ball bearings (except as noted)
- C-Face Footed models are rated 60/50 Hz, same HP
- Motors accept C-face kits, as noted
- UL Recognized, CSA Certified and CE Marked
- Three year warranty

Models through 40 HP are capable of modification as follows *(contact factory to confirm)*:

- 1.25 Service Factor *(sinewave only)*
- 50Hz at same HP, 1.0 Service Factor *(sinewave only)*
- Certain combinations of existing and new nameplate markings are not possible *(contact factory to confirm)*
- Any nameplate changes are subject to modification charges *(see MOD Central section in SB300 catalog)*
- Contact Marathon Motors for optional nameplate markings on 50 HP and larger

HP	RPM	VOLTS	FRAME	CAT NO.	MODEL NO.	STOCK	CT SPEED RANGE*	MULT. SYMBOL	NOM. EFF.	F.L. AMPS	WEIGHT	"C" DIM.	Foot Notes	C-Face Kit
Rigid Base														
1	1800	230/460	143T	**E2201-P**	143TTFN16040	√	10:1	E9	85.5	3.0/1.5	48	13.99	P	A603
1½	1800	230/460	145T	**E2204-P**	145TTFN16046	√	10:1	E9	86.5	4.6/2.3	54	13.99	P	A603
2	1800	230/460	145T	**E2207-P**	145TTFN16045	√	10:1	E9	86.5	6.0/3.0	64	13.99	P	A603
3	1800	230/460	182T	**E2210-P**	182TTFN16047	√	10:1	E9	89.5	8.0/4.0	104	15.87	P	A644
5	1800	230/460	184T	**E202-P**	184TTFN16056	√	10:1	E9	89.5	12.4/6.2	109	17.85	P	A644
7½	1800	230/460	213T	**E203-P**	213TTFN16326	√	10:1	E9	91.7	20.0/10.0	185	19.63	P	A206
10	1800	230/460	215T	**E204-P**	215TTFN16057	√	10:1	E9	91.7	25.0/12.5	177	22.63	P	A206
15	1800	230/460	254T	**E2122-P**	254TTFL16036	√	10:1	E9	92.4	38.1/19.1	174	22.99	P	A1209
15	1800	230/460	254T	**E205-P**	254TTFNA16074	√	20:1	E9	92.4	37.5/18.8	350	23.52	P	A284
20	1800	230/460	256T	**E2124-P**	256TTFL16038	√	10:1	E9	93.0	48.6/24.3	191	26.24	P	A1209
20	1800	230/460	256T	**E206-P**	256TTFNA16070	√	20:1	E9	93.0	48.2/24.1	425	25.27	P	A284
25	1800	230/460	284T	**E207-P**	284TTFNA16070	√	20:1	E9	93.6	62.0/31.0	500	26.34	P	A618
30	1800	230/460	286T	**E208-P**	286TTFNA16328	√	20:1	E9	94.1	73.0/36.5	525	27.84	P	A618
40	1800	230/460	324T	**E209-P**	324TTFS16066	√	20:1	E9	94.1	95.0/47.5	528	30.37	P	A214
50	1800	230/460	326T	**E210-P**	326TTFS16073	√	20:1@	E9	94.5	120/60.0	775	31.87	P	A214
C-Face Footed (Rigid Base)														
1	1800	230/460	143TC	**E2001A**	143TTFR16053	√	10:1	E9	85.5	3.2/1.6	32	13.75	P	—
1½	1800	230/460	145TC	**E2004A**	145TTFR16331	√	10:1	E9	86.5	4.8/2.4	34	13.75	P	—
2	1800	230/460	145TC	**E2007A**	145TTFR16329	√	10:1	E9	86.5	5.8/2.9	50	14.25	P	—
3	1800	208-230/460	182TC	**E2010**	182TTFW6026	√	10:1	E9	89.5	8.4-7.8/3.9	87	13.97	13,P	—
5	1800	230/460	184TC	**E2013**	184TTFW6026	√	10:1	E9	90.2	13.7-12.6/6.3	87	14.97	13,P	—
7½	1800	230/460	213TC	**E2016A**	213TTFW16039	√	10:1	E9	91.7	19.4/9.7	143	20.97	P	—
10	1800	230/460	215TC	**E2019A**	215TTFW16047	√	10:1	E9	91.7	25.6/12.8	164	22.22	P	—

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet EISA requirements

@ Requires larger fan

*Requires nameplate modification

Blue shaded areas are Cast Iron Frames

Specifications are subject to change without notice.

Hazardous Duty™ Division 1 Explosion Proof, NEMA Premium® XRI®, Class I and II, Groups C, D, F & G, Blue Chip® Severe Duty: Three Phase

Applications:

For extreme hazardous applications in the process industries such as chemical plants, refineries, above-ground mines, and other caustic environments where long life and ultra-high efficiency are required. Guaranteed efficiencies offer an e**X**tra **R**eturn on your **I**nvestment when using these premium efficiency motors on high cycle or long run time applications.

Features:

- Meets NEMA Premium® efficiencies
- **AEGIS® SGR installed internally (-P Models)**
- 10:1 Variable torque, see Inverter Duty column for constant torque
- MAX GUARD® Class F insulation system
- Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
- Internal and external epoxy paint
- 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
- Precision balanced to .08"/sec
- Extended grease tubes
- Normally closed thermostats (must be connected to control circuit)
- Meets temperature code T3B
- Shaft slinger
- Nameplated 60/50 Hz, 190/380 Volts, at next lower HP, as noted
- See MOD CENTRAL for:
  C-Face Kit Modifications
  F2 mounting
- Ball bearings (except as noted)
- UL Listed File No. E12044
- CSA Certified File No. LR47504
- Three year warranty

Rigid Base

HP	RPM	VOLTS	FRAME	GROUP C	CAT NO.	MODEL NO.	STOCK	CT SPEED RANGE	MULT. SYMBOL	NOM. EFF.	F.L. AMPS	WEIGHT	"C" DIM.	C-Face Kit
3	1800	230/460	182T	Y	**U989-P**	182TTGN6541	√	10:1	E7	89.5	8.0/4.0	161	15.87	25,68,91,P
5	1800	230/460	184T	Y	**U990-P**	184TTGN6544	√	10:1	E7	89.5	12.4/6.2	150	17.87	25,68,91,P
7½	1800	230/460	213T	Y	**U991A-P**	213TTGN16548	√	10:1	E7	91.7	20.0/10.0	251	22.63	25,68,91,P
10	1800	230/460	215T	Y	**U992A-P**	215TTGN16539	√	10:1	E7	91.7	25.0/12.5	253	22.63	25,68,P
15	1800	230/460	254T	Y	**E503-P**	254TTGN16549	√	10:1	E7	92.4	37.5/18.8	385	23.52	68,P
20	1800	230/460	256T	Y	**E506-P**	256TTGN16552	√	10:1	E7	93.0	48.0/24.1	409	25.27	68,P
25	1800	230/460	284T	Y	**E547-P**	284TTGN16550	√	10:1	E7	93.6	62.0/31.0	536	26.34	68,P
30	1800	230/460	286T	Y	**E564-P**	286TTGN16546	√	10:1	E7	94.1	73.0/36.5	588	27.84	68,P
40	1800	230/460	324T	Y	**E567-P**	324TTGS16541	√	10:1	E7	94.1	95.0/47.5	749	30.37	68,P
50	1800	230/460	326T	Y	**E570-P**	326TTGS16546	√	10:1@	E7	94.5	123/61.5	791	30.37	68,P

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet EISA requirements
@ Requires larger fan

Blue shaded areas are Cast Iron Frames
Specifications are subject to change without notice.

Inverter (Vector) Duty: Blue Max® 2000
2000:1 Constant Torque, Totally Enclosed, Three Phase

Applications

Designed for inverter or vector applications where up to a 2000:1 constant torque speed range is required. Typical uses include: material handling, machine tools, conveyors, crane and hoist, metal processing, test stands, pumps, compressors, textile processing, and other industrial machinery installed in dusty or dirty environments where cast iron construction is required.

Features:

- MAX GUARD® Class H insulation system
- **AEGIS® SGR installed internally**
- Constant Torque operation from 0 to base speed on vector drive, including TEFC (On Volts/Hertz drives, TEFC motors are limited to 20:1 constant torque)
- Constant HP operation to twice base speed (143-256 frame); 1.5 times base (all others)
- Optimized for operation with IGBT inverter
- C-Face foot mount through 100 HP, as noted
- Normally closed thermostats (one per phase, Class F)
- Continuous duty at 40 C° ambient
- 1.0 Service Factor ("B" rise on TEBC motors)
- Blue Chip quality, cast iron frame and brackets
- Patented "fracket" design (TEBC enclosure)
- Ball Bearings (roller bearing available 360 Frame & larger)
- Field reversible to F2
- Encoder provisions included on opposite drive end (see Modification and/or Accessory Kits sections)
- UL Recognized, CSA Certified, and CE Mark
- Three year warranty

Rigid Base and C-Face Footed (Rigid Base)

HP	RPM	VOLTS	ENCL	FRAME	CAT NO.	MODEL NO.	STOCK	MULT. SYMBOL	F.L. AMPS	WEIGHT	"C" DIM.	FOOT NOTES
1	1800	230/460	TENV	143TC	Y525	143THTN8028	√	E3	3.0/1.5	61	13.68	B
1 ½	1800	230/460	TENV	145TC	Y590	145THTN8037	√	E3	4.6/2.3	65	14.68	
2	1800	230/460	TENV	145TC	Y526	145THTN8029	√	E3	6.0/3.0	71	14.68	
3	1800	230/460	TENV	182TC	Y527	182THTS8028	√	E3	8.0/4.0	113	16.68	
5	1800	230/460	TENV	184TC	Y564	184THTS8028	√	E3	13.4/6.7	147	17.68	
7 ½	1800	230/460	TEFC	213TC	Y595	213THFS8028	√	E3	19.4/9.7	192	21.03	
7 ½	1800	230/460	TENV	213TC	Y565	213THTS8038	√	E3	21.0/10.5	212	20.56	
10	1800	230/460	TEFC	215TC	Y596	215THFS8029	√	E3	25.4/12.7	212	22.53	
10	1800	230/460	TENV	215TC	Y566	215THTS8038	√	E3	26.0/13.0	272	22.74	
15	1800	230/460	TEFC	254TC	Y597	254THFNA8038	√	E3	37.0/18.5	350	26.34	
15	1800	230/460	TENV	254TC	Y509	254THTNA8058	√	E3	40.4/20.2	334	23.38	
15	1200	230/460	TEBC	284TC	Y395	284THFPA8086		E3	40.0/20.0	500	37.48	BP

Blue shaded areas are Cast Iron Frames

Specifications are subject to change without notice.

Inverter (Vector) Duty: Blue Max® 2000
2000:1 Constant Torque, Totally Enclosed, Three Phase

HP	RPM	VOLTS	ENCL	FRAME	CAT NO.	MODEL NO.	STOCK	MULT. SYMBOL	F.L. AMPS	WEIGHT	"C" DIM.	FOOT NOTES
20	1800	230/460	TEFC	256TC	Y598	256THFNA8038	√	E3	52.0/26.0	377	28.09	
20	1800	230/460	TENV	256TC	Y510	256THTNA8038	√	E3	52.0/26.0	425	27.13	
20	1200	230/460	TEBC	286TC	Y582	286THFPA8086		E3	52.4/26.2	660	38.98	BP
25	1800	230/460	TEFC	284T	Y569	284THFPA8028	√	E3	63.0/31.5	393	28.58	
25	1800	230/460	TEBC	284TC	Y511	284THFPA8038	√	E3	63.0/31.5	470	37.48	BP
25	1200	230/460	TEBC	324TC	Y583	324THFPA8086		E3	67.0/33.5	633	40.41	B,BP
30	1800	230/460	TEFC	286T	Y570	286THFNA8028	√	E3	77.0/38.5	371	29.91	
30	1800	230/460	TEBC	286TC	Y512	286THFPA8038	√	E3	74.0/37.0	507	38.98	BP
30	1200	230/460	TEBC	326TC	Y584	326THFPA8086		E3	80.4/40.2	550	41.91	B,BP
40	1800	230/460	TEFC	324T	Y571	324THFPA8028	√	E3	100/50.0	545	30.71	
40	1800	230/460	TEBC	324TC	Y513	324THFPA8038	√	E3	100/50.0	531	40.41	BP
40	1200	230/460	TEBC	364TC	Y585	364THFS8391		E3	107/53.5	1011	42.67	BP
50	1800	230/460	TEFC	326T	Y572	326THFS8028	√	E3	121/60.5	765	32.44	
50	1800	230/460	TEBC	326TC	Y514	326THFPA8038	√	E3	120/60.0	686	41.91	BP
50	1200	230/460	TEBC	365TC	Y586	365THFS8380		E3	130/65.0	1081	43.78	BP
60	1800	230/460	TEFC	364T	Y573	364THFS8036	√	E3	147/73.5	987	33.7	
60	1800	230/460	TEBC	364TC	Y515	364THFS8046	√	E3	147/73.5	1062	42.67	BP
60	1200	230/460	TEBC	404TC	Y587	404THFS8092		E3	142/71.0	1339	48.22	BP
75	1800	230/460	TEFC	365T	Y574	365THFS8036	√	E3	184/92.0	1061	34.69	
75	1800	230/460	TEBC	365TC	Y516	365THFS8046	√	E3	180/90.0	1129	43.67	BP
75	1200	230/460	TEBC	405TC	Y588	405THFS8378	√	E3	180/90.0	1387	49.72	B,BP
100	1800	230/460	TEFC	405T	Y575	405THFS8036	√	E3	230/115	1308	39.32	
100	1800	230/460	TEBC	405TC	Y517	405THFS8046	√	E3	230/115	1529	49.72	BP
100	1200	230/460	TEBC	444TC	Y589	444THFN8384	√	E3	250/125	2117	52.72	BP
125	1800	460	TEFC	444T	Y576	444THFN8036	√	E3	143	2053	43.27	
125	1800	460	TEBC	444T	Y518	444THFN8046	√	E3	138	2010	52.72	B,BP
150	1800	460	TEFC	445T	Y577	445THFN8036	√	E3	170	2247	45.27	
150	1800	460	TEBC	445T	Y519	445THFN8046	√	E3	170	2310	54.72	BP
200	1800	460	TEFC	445T	Y578	445THFN8040	√	E3	230	2388	45.27	
200	1800	460	TEBC	445T	Y520	445THFN8050	√	E3	230	2430	54.72	BP
250	1800	460	TEFC	449T	Y579	449THFS8036	√	E3	280	2900	53.89	CT
250	1800	460	TEBC	449T	Y531	449THFS8046	√	E3	295	2991	63.21	BP
300	1800	460	TEFC	449T	Y580	449THFS8037	√	E3	330	3077	53.89	CT
300	1800	460	TEBC	449T	Y532	449THFS8047	√	E3	327	2950	63.21	BP
350	1800	460	TEBC	449T	Y533	449THFS8048	√	E3	385	3099	63.21	BP

Blue shaded areas are Cast Iron Frames

Specifications are subject to change without notice.

Blue Chip® Severe Duty / Automotive Duty NEMA Premium® XRI® Totally Enclosed, Rigid Base, Three Phase

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 e**X**tra **R**eturn on your **I**nvestment when using these premium efficiency motors on high cycle or long run applications.

Features:

- Meets or exceeds NEMA Premium® efficiencies, except where noted NEMA Premium models are in compliance with EISA2007
- **AEGIS® SGR installed internally (-P Models)**
- 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
- Constant Torque speed range is listed in CT SPPED RANGE column
- 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
- Bearing caps (254T and larger)
- Precision balanced to .08"/sec
- Extended grease tubes, regreasable in service
- Brass drain and breather
- Meets IEEE45 USCG Marine Duty, IP54 Construction
- Meets Ford EM1 Automotive Duty Specification
- **AEGIS® SGR installed (BCP) -P models are not certified for Hazardous Duty™ Division 2 locations**
- Hazardous Duty™ Division 2 CSA certification nameplate
- Division 2 / Zone 2 Class I (gases), Groups A, B, C, D
- Meets temperature code T2B
- Actual test and vibration data supplied with each motor
- Ball bearings (except as noted)
- UL Recognized (through 449T) and CSA Certified and CE Marked
- Three year warranty

Models through 40 HP are capable of modification as follows *(contact factory to confirm)*:

- 1.25 Service Factor *(sinewave only)*
- 50 Hz at same HP, 1.0 Service Factor *(sinewave only)*
- Any nameplate changes are subject to modification charges *(see MOD Central section)*
- Contact Marathon Motors for optional nameplate markings on 50 HP and larger

HP	RPM	VOLTS	FRAME	CAT NO.	MODEL NO.	STOCK	CT SPEED RANGE*	MULT. SYMBOL	NOM. EFF.	F.L. AMPS	WEIGHT	"C" DIM.	Foot Notes	C-Face Kit
15	1800	460	254T	**E620-P**	254TTFNA16838	√	20:1	E9	92.4	18.8	350	23.52	75,P	A284
20	1800	460	256T	**E621-P**	256TTFNA16855	√	20:1	E9	93.0	24.1	425	25.27	75,P	A284
25	1800	460	284T	**E622-P**	284TTFNA16851	√	20:1	E9	93.6	31.0	478	26.34	P	A618
30	1800	460	286T	**E623-P**	286TTFNA16847	√	20:1	E9	94.1	36.5	525	27.84	P	A618
40	1800	460	324T	**E624-P**	324TTFS16860	√	20:1@	E9	94.1	47.5	700	30.37	P	A214
50	1800	460	326T	**E625-P**	326TTFS16844	√	20:1@	E9	94.5	60.0	775	31.87	P	A214

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet EISA requirements

@ Requires larger fan

*Requires nameplate modification

Blue shaded areas are Cast Iron Frames

Specifications are subject to change without notice.

Blue Chip® Severe Duty / Automotive Duty NEMA Premium® XRI® IEEE-841, Totally Enclosed, Rigid Base, Three Phase

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 NEMA Premium models are in compliance with EISA2007
- Meets IEEE-841 standard for severe duty applications
- **AEGIS® SGR installed internally (-P Models)**
- 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
- Constant Torque speed range is listed in CT SPEED RANGE column
- 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
- Bearing caps (254T and larger)
- Precision balanced to .08"/sec
- Extended grease tubes, regreasable in service
- Brass drain and breather
- Meets IEEE45 USCG Marine Duty, API RPI4F for offshore platforms, IP56
- Meets General Motors GM 7E-TA Automotive Duty Specification
- Meets NEMA MG1 - 1.26.6 Waterproof Specification
- **AEGIS® SGR installed (BCP) -P models are not certified for Hazardous Duty™** Division 2 locations
- Hazardous Duty™ Division 2 CSA certification nameplate
- Division 2 / Zone 2 Class I (gases), Groups A, B, C, D
- Hazardous Duty™ Division 2 CSA certification nameplate
- Division 2 / Zone 2 Class I (gases), Groups A, B, C, D
- Meets temperature code T2B
- Actual test and vibration data supplied with each motor
- Ball bearings (except as noted)
- UL Recognized (through 449T) and CSA Certified and CE Marked
- Five year warranty

Models through 40 HP are capable of modification as follows *(contact factory to confirm)*:

- 1.25 Service Factor *(sinewave only)*
- 50 Hz at same HP, 1.0 Service Factor *(sinewave only)*
- Any nameplate changes are subject to modification charges *(see MOD Central section)*
- Contact Marathon Motors for optional nameplate markings on 50 HP and larger

HP	RPM	VOLTS	FRAME	CAT NO.	MODEL NO.	STOCK	CT SPEED RANGE*	MULT. SYMBOL	NOM. EFF.	F.L. AMPS	WEIGHT	"C" DIM.	Foot Notes	C-Face Kit
15	1800	460	254T	**W546-P**	254THFNA19065	√	20:1	E9	92.4	18.8	350	23.52	P	A184
20	1800	460	256T	**W553-P**	256THFNA19056	√	20:1	E9	93.0	24.1	425	25.27	75,P	A184
25	1800	460	284T	**W560-P**	284THFNA19048	√	20:1	E9	93.6	31	478	26.44	P	A186
30	1800	460	286T	**W567-P**	286THFNA19066	√	20:1	E9	94.1	36.5	525	27.84	P	A186
40	1800	460	324T	**W573-P**	324THFS19058	√	20:1@	E9	94.1	47.5	700	28.87	P	A187
50	1800	460	326T	**W580-P**	326THFS19071	√	20:1@	E9	94.5	60	775	30.37	P	A187
60	1800	460	364T	**W587-P**	364THFS19061	√	20:1@	E9	95.0	69	1000	31.5	P	A188
75	1800	460	365T	**W594-P**	365THFS19065	√	20:1@	E9	95.4	86	1100	32.5	P	A188
100	1800	460	405T	**W600-P**	405THFS19327	√	20:1@	E9	95.4	113	1330	37.12	P	A190
125	1800	460	444T	**W606-P**	444THFN19044	√	20:1@	E9	95.4	141	1725	41.25	P	A194
150	1800	460	445T	**W612-P**	445THFN19071	√	20:1@	E9	95.8	172	2070	43.19	P	A194
200	1800	460	445T	**W618-P**	445THFN19070	√	20:1@	E9	96.2	226	2437	43.19	P,RB	A194
250	1800	460	447/9T	**W626-P**	449THFS19342	√	20:1@	E9	96.5	285	2830	51.69	P	N/A

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet EISA requirements

@ Requires larger fan

*Requires nameplate modification

Blue shaded areas are Cast Iron Frames

Specifications are subject to change without notice.

Blue Chip® Severe Duty / Cooling Tower: Single-Speed TEAO, Rigid Base, Three Phase

Applications:

For cooling tower applications. Designed for outdoor use in harsh environments and conditions. Guaranteed efficiencies offer an e**X**tra **R**eturn on your **I**nvestment when using these premium efficiency motors on high cycle or long run time applications.

Features:

- Meets or exceeds NEMA Premium® efficiencies
- **AEGIS® SGR installed internally**
- Blue Chip® quality, 100% cast iron construction for rigidity and reduced vibration
- Internal and external epoxy paint
- MAX GUARD® Class F insulation system
- 1.15 Service Factor on sinewave, 1.0 Service Factor on IGBT power
- Rated 60/50 hertz, 190/380 or 380 volt at next lower horsepower
- Extended grease tubes, regreasable in service
- T-drains provided for effective drainage (Installed in both endshields)
- Suitable for all angle mounting
- Inpro/Seals® quality VBX® bearing isolators
- Ball Bearings
- Actual test and vibration data supplied with each motor
- UL Recognized and CSA Certified
- Suitable for 10:1 VT, 20:1 CT on VFD
- Three year warranty

BCP BEARING CURRENT PROTECTION

2015 Plant Engineering PRODUCT of the YEAR Gold Award

Inverter Duty

IP56

MAX GUARD INSULATION SYSTEM

XRI ENERGY EFFICIENT MOTORS

NEMA Premium

HP	RPM	VOLTS	FRAME	CAT NO.	MODEL NO.	STOCK	CT SPEED RANGE*	MULT. SYMBOL	NOM. EFF.	F.L. AMPS	WEIGHT	"C" DIM.
3	1800	230/460	182T	**U1867**	182TTTN16571	√	20:1	S3	90.2	8.0/4.0	145	15.87
5	1800	230/460	184T	**U1868**	184TTTN16545	√	20:1	S3	90.2	12.4/6.2	128	17.87
7½	1800	230/460	213T	**U1869**	213TTTN16539	√	20:1	S3	91.7	19.2/9.6	273	18.22
10	1800	230/460	215T	**U1870**	215TTTN16541	√	20:1	S3	91.7	25/12.5	267	19.72
15	1800	230/460	254T	**U1871**	254TTTNA16545	√	20:1	S3	92.4	37.5/18.8	349	23.52
20	1800	230/460	256T	**U1872**	256TTTNA16544	√	20:1	S3	93.0	48.0/24.1	375	25.27
25	1800	230/460	284T	**U1873**	284TTTNA16540	√	20:1	S3	93.6	62.0/31.0	440	26.34
30	1800	230/460	286T	**U1874**	286TTTNA16541	√	20:1	S3	94.1	73.0/36.5	503	27.84
40	1800	230/460	324T	**U1875**	324TTTS16535	√	20:1	S3	94.1	95.0/47.5	567	30.37
50	1800	230/460	326T	**U1876**	326TTTS16533	√	20:1	S3	94.5	120/60.0	644	30.37
60	1800	230/460	364T	**U1877**	364TTTS16534	√	20:1	S3	95.0	138/69.0	1078	31.50
75	1800	230/460	365T	**U1878**	365TTTS16536	√	20:1	S3	95.4	172/86.0	1169	32.50
100	1800	230/460	405T	**U1879**	405TTTS16537	√	20:1	S3	95.4	226/113	1458	37.12
125	1800	460	444T	**U1880**	444TTTN16535	√	20:1	S3	95.4	145	1990	43.35
150	1800	460	445T	**U1881**	445TTTN16536	√	20:1	S3	95.8	172	2343	43.35
200	1800	460	445T	**U1882**	445TTTN16537	√	20:1	S3	96.2	226	2556	43.35
250	1800	460	445T	**U1884**	449TTTS16539	√	20:1	S3	96.2	285	2409	43.26

Catalog numbers (Cat No.) highlighted in bold blue have efficiency levels that meet EISA requirements

*Requires nameplate modification
Blue shaded areas are Cast Iron Frames
Specifications are subject to change without notice.

marathon™ Motors

100 YEARS RUNNING STRONG

MAX GUARD™ INSULATION SYSTEM

SyMAX®

Permanent Magnet AC Motors

SB385

A Regal Brand

REGAL

SyMAX® Commercial PMAC Motor Design

SyMAX® FHP Permanent Magnet AC motors are designed with powerful rare earth magnets embedded in the rotor. We kept the induction motor's "form factor" (mounting dimensions) precisely the same to ensure direct drop-in replacement capability.

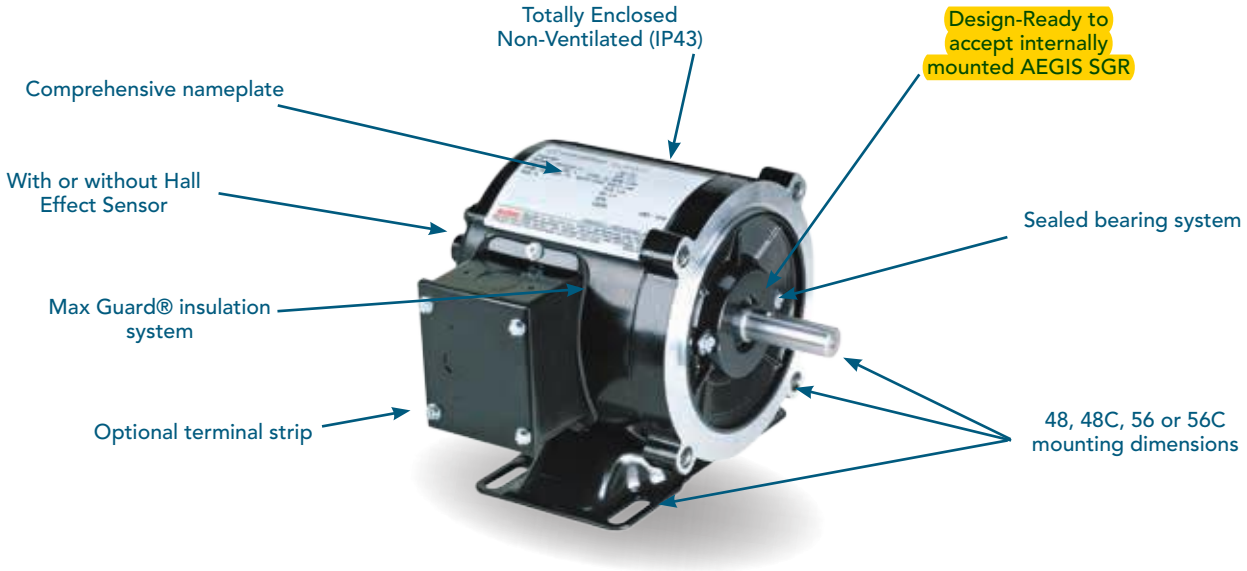
Due to the elimination of rotor conductor losses, SyMAX® motors are inherently more efficient. With more of its electrical power converted to useful work, and less waste energy in the form of heat, SyMAX® operates much cooler than traditional NEMA Premium® induction motors, resulting in longer life.

In addition to their high efficiency and lower operating temperature, SyMAX® motors deliver more torque per unit of current, often resulting in the selection of a smaller drive size.

These characteristics, plus an impressive vibration and sound profile, low cogging torque and unmatched ingress protection (IP43), make SyMAX® the only real choice in NEMA permanent magnet AC motors available today.

SyMAX® PMAC performance

- "Ultra-Efficient™ - Significant energy savings over AC Induction
- High Power Factor
- Low vibration
- Sound levels exceed requirements in IEEE841 specification
- Low operating temperature
- Low cogging torque
- Optimized Back EMF
- Full torque at zero speed (Infinity:1)



Feature

- Ultra High™ efficiency
- Performance matched
- Reduced operating temperature
- IP43 ingress protection
- Anti-Cogging technology
- Normal form factor (NEMA mounting and dimensions)
- Optional hall effect sensor (constant torque loads)
- Wide speed range (up to 2000:1 constant torque)
- Max Guard® insulation system
- WorryFree™ bearing system
- Design-Ready to accept internally mounted AEGIS™ SGR
- Interior Permanent Magnet topology
- Omnimount™
- Meets or exceeds industry sound level requirements
- Low inertia rotor
- High torque per amp
- Trickle heating
- High power density (option)
- Direct Drive™ (option)
- Comprehensive nameplate
- UL Recognized, CSA Certified
- CE Mark
- 3 year "bearing-to-bearing" warranty

Benefit

- Utility savings from day 1, minimize impact of increasing energy costs
- Maximum flexibility, easier drive selection
- Longer service life, more uptime, higher reliability, reduced maintenance
- Suitable for indoor or outdoor environments, longer service life
- Reduced noise, more efficient use of torque
- Direct mechanical retrofit into existing application
- Optimal performance for constant torque loads
- Optimal performance with open- and closed-loop drives
- Reduced insulation stresses due to dV/dT
- Reduced lubrication frequency, resulting in lower maintenance cost
- Higher reliability, longer service life, lower maintenance
- Accommodates higher speed operation, improved performance
- Accommodates horizontal, vertical shaft down & vertical shaft up mounting
- High user acceptance
- Highly responsive to accel/decel requirements
- Possible use of next lower drive size
- Reduces build up of condensation during off cycles or in cold ambient
- Accommodates smaller frame size, lower weight
- Allows reduction or elimination of mechanical power transmission equipment
- Provides all required parametric data for fast and easy drive set-up
- The only PMAC motor on the market today with agency recognition
- Certified for use in Europe, full compliance with IEC60034 and IEC60072
- Longest warranty for any PMAC motor on the market today

SyMAX® Industrial PMAC Motor Design

SyMAX® IHP Permanent Magnet AC motors are designed with powerful rare earth magnets embedded in the rotor. We kept the induction motor's ""form factor"" (physical envelope) precisely the same to ensure direct drop-in replacement capability.

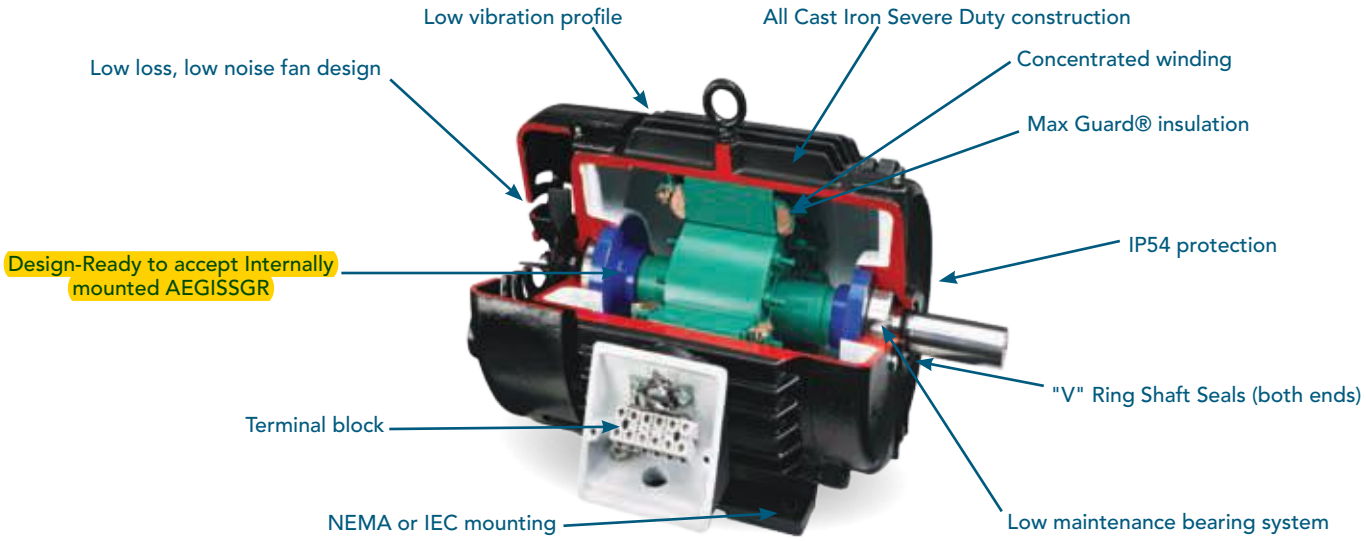
Due to the elimination of rotor conductor losses, SyMAX® motors are inherently more efficient. With more of its electrical power converted to useful work, and less waste energy in the form of heat, SyMAX® operates much cooler than traditional NEMA Premium® induction motors, resulting in longer life.

In addition to their high efficiency and lower operating temperature, SyMAX® motors deliver more torque per unit of current, often resulting in the selection of a smaller drive size.

These characteristics, plus an impressive vibration and sound profile, low cogging torque and unmatched ingress protection (IP54), make SyMAX® the only real choice in NEMA and IEC permanent magnet AC motors available today."

SyMAX® PMAC performance

- Ultra-Efficient™ - Exceeds NEMA Premium®, meets or exceeds IE4
- High Power Factor (on VFD power)
- Ultra-Precision balance to < 0.08 in/sec vibration
- Sound levels exceed requirements in IEEE841 specification
- Low operating temperature
- Concentrated winding stator reduces dV/dT stresses
- Low cogging torque
- Optimized Back EMF
- Full torque at zero speed (Infinity:1)



Feature

- Ultra High™ efficiency (20-25% fewer losses vs NEMA Premium)
- Performance matched
- Reduced operating temperature
- IP54 ingress protection
- Cast Iron construction
- Normal form factor (NEMA or IEC mounting and dimensions)
- Terminal block connections
- LowCog™ design
- Wide speed range (up to 2000:1 constant torque)
- Max Guard® insulation system
- WorryFree™ bearing system
- Design-Ready to accept internally mounted AEGIS™ SGR
- Interior Permanent Magnet topology
- Wide air gap
- Precision balanced to < 0.08 in/second vibrational velocity
- Omnimount™
- Meets or exceeds industry sound level requirements
- Low inertia rotor
- High torque per amp
- Trickle heating
- High power density (option)
- Direct Drive™ (option)
- Comprehensive nameplate
- UL Recognized, CSA Certified
- CE Mark
- 3 year "bearing-to-bearing" warranty

Benefit

- Utility savings from day 1, minimize impact of increasing energy costs
- Maximum flexibility, easier drive selection
- Longer service life, more uptime, higher reliability, reduced maintenance
- Suitable for the harshest environments, longer service life
- Reduced vibration, suitable for severe environments, quiet operation
- Direct mechanical retrofit into existing application
- Faster, easier, safer installation; reduction in required size
- Increased performance, quieter and smoother operation
- Optimal performance with open- and closed-loop drives
- Reduced insulation stresses due to dV/dT
- Reduced lubrication frequency, resulting in lower maintenance cost
- Higher reliability, longer service life, lower maintenance
- Accommodates higher speed operation, improved performance
- Enhanced protection from bearing currents
- Reduced vibration meets the most stringent industry standards
- Accommodates horizontal, vertical shaft down & vertical shaft up mounting
- High user acceptance
- Highly responsive to accel/decel requirements
- Possible use of next lower drive size
- Reduces build up of condensation during off cycles or in cold ambient
- Accommodates smaller frame size, lower weight
- Allows reduction or elimination of mechanical power transmission equipment
- Provides all required parametric data for fast and easy drive set-up
- The only PMAC motor on the market today with agency recognition
- Certified for use in Europe, full compliance with IEC60034 and IEC60072
- Longest warranty for any PMAC motor on the market today

Inverter Duty Motors

Inverter Duty Motors / Vector Duty Motors
2000:1 Speed Range
With Encoder mounting provisions

Features:

- Class H inverter insulation system on LEESON models, Class F on Lincoln models
- No blower needed on 256T frame and smaller motors
- Constant torque operation from 0 to base RPM rating with vector drives
- C Face with rigid base through 100 HP on LEESON models, Lincoln models through 5 HP
- TEBC designs utilize 3-phase blower motors
- Normally closed thermostats
- Cast iron, Steel and Aluminum frame construction - see Notes
- Provisions for Encoder feedback devices - all LEESON models and Lincoln Q10 models
- LEESON models, 180 frame and higher, include internal shaft grounding rings (SGRs)
- Precision balanced rotors
- UL recognized and CSA certified
- 3-year warranty

Three Phase - Totally Enclosed - Rigid Base & Rigid C Face

For use with inverters only

HP	SYN RPM 60 Hz	NEMA Frame	▼ Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	F. L. Amps @ 230 V	Max. RPM	Service Factor	"C" Dim. (Inches)	Inverter Speed Range	♥Notes
1/3	1800	56C	LM10336	√	581	SRF4S0.33TC61Q20	26	230/460	1.6	4000	1.0	11.31	10:1	S, US, 13
1/2	1800	56C	LM24264	C/A	670	SRF4S0.5TC61Q20	24	230/460	2.4	4000	1.0	11.81	10:1	S, US, 13
1/2	1200	56HC	LM10338	√	795	SRF6S0.5TC61Q20	41	230/460	2.6	4000	1.0	12.32	10:1	S, US, 13
3/4	1800	56HC	LM10339	√	755	SRF4S0.75TC61Q20	25	230/460	3.0	4000	1.0	11.82	10:1	S, US, 13
1	1800	56HC	LM10340	√	1,452	SRF4S1TC61Q20	62	230/460	3.6	4000	1.0	12.32	10:1	S, US, 13
1	1800	143TC	810548.00	√	1,535	143THTN8037	61	230/460	3.0	5400	1.0	13.68	2000:1	C, US, 12
1	1800	145TC	LM26359	√	1,471	SSN4S1TC61Q10	62	230/460	4.0	5000	1.0	15.39	2000:1	S, US, 12
1	1200	182TC	LM06103	√	1,665	AAN6S1TC61Q10	78	230/460	3.6	4800	1.0	12.94	2000:1	A, US, 12
1	900	184TC	LM06105	C/A	2,077	AAN8S1TC61Q10	100	230/460	5.0	4800	1.2	16.57	2000:1	A, US, 12
1 1/2	1800	145TC	810547.00	√	1,691	145THTN8044	68	230/460	4.6	5400	1.0	14.68	2000:1	C, US, 12
1 1/2	1800	145TC	LM26233	C/A	1,633	SSN4S1.5TC61Q10	65	230/460	4.8	5000	1.0	15.39	2000:1	S, US, 12
1 1/2	1200	56HC	119796.00	√	845	C6T11FK18	45	230/460	5.7		1.0	13.31	2:1	S, US, 13
1 1/2	1200	145TC	122337.00	√	852	C145T11FK11	46	230/460	5.7		1.0	13.76	2:1	S, US, 13
2	1800	145TC	810546.00	√	1,766	145THTN8045	70	230/460	6.0	5400	1.0	14.68	2000:1	C, US, 12
2	1800	182TC	LM06113	D	1,773	AAN4S2TC61Q10	74	230/460	6.0	4800	1.0	15.57	2000:1	A, US, 12
2	1800	182TC	LM33591	√	1,773	AAN4S2TC61Q10AP26	74	230/460	8.2	4800	1.0	15.88	2000:1	A, MX, 12
3	1800	182TC	811320.00	√	2,110	182THTS8051	110	230/460	8.0	5400	1.0	16.68	2000:1	C, US, 12
3	1800	56HC	119797.00	√	912	C6T17FK116	45	230/460	7.6		1.0	12.81	2:1	S, US, 13
3	1800	145TC	122338.00	√	925	C145T17FK84	46	230/460	7.6		1.0	13.76	2:1	S, US, 13
3	1800	184TC	LM06119	D	2,061	AAN4S3TC61Q10	94	230/460	8.4	4800	1.0	16.57	2000:1	A, US, 12
3	1800	184TC	LM33492	√	2,061	AAN4S3TC61Q10AP26	94	230/460	8.4	4800	1.0	16.57	2000:1	A, MX, 12
3	1200	215TC	LM06121	C/A	3,288	AN5S3TC61Q10	135	230/460	12.0	4600	1.0	18.56	2000:1	A, US, 12

Continued on next page

Shaded model numbers are cast iron frame

▼ LM Numbers are Lincoln Models
D - Item to be discontinued once inventory is depleted
C/A - Check Availability
Note 12 - TENV

♥ Note listing on inside back flap
Specifications are subject to change without notice

Inverter Duty Motors

Inverter Duty Motors / Vector Duty Motors - 2000:1 Speed Range

With encoder mounting provisions

Three Phase - Totally Enclosed - Rigid Base & Rigid C Face

For use with inverters only

HP	SYN RPM 60 Hz	NEMA Frame	▼ Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	F. L. Amps @ 230 V	Max. RPM	Service Factor	"C" Dim. (Inches)	Inverter Speed Range	♥Notes
5	1800	184TC	811322.00	√	2,338	184THTS8058	118	230/460	13.4	5400	1.0	17.69	2000:1	C, US, 12
5	1800	213TC	LM06125	√	2,365	AN4S5TC61Q10	115	230/460	15.6	4600	1.0	17.94	2000:1	A, US, 12
7 1/2	1800	213TC	810157.00	√	3,145	213THTS8070	180	230/460	21.0	4200	1.0	20.56	2000:1	C, US, 12
10	1800	215TC	810140.00	√	3,716	215THTS8070	290	230/460	26.0	4200	1.0	22.74	2000:1	C, US, 12
15	1800	254TC	810066.00	√	4,455	254THTNA8060	320	230/460	39.0	4200	1.0	25.12	2000 : 1	C, US, 12
15	1200	284TC	810068.00	√	9,409	284THTPA7090	440	230/460	40.0	3600	1.0	37.48	2000 : 1	C, US, 11
20	1800	256TC	810007.00	√	6,071	256THTNA8070	435	230/460	52.0	4200	1.0	27.13	2000 : 1	C, US, 12
20	1200	286TC	810001.00	√	11,272	286THFPA8090	450	230/460	52.4	3600	1.0	37.48	2000 : 1	C, US, 11
25	1800	284TC	810011.00	C/A	7,566	284THFPA8060	438	230/460	65.0	3600	1.0	37.48	2000 : 1	C, US, 11
25	1200	324TC	810003.00	√	13,261	324THFPA8090	620	230/460	67.0	3600	1.0	40.41	2000 : 1	C, US, 11
30	1800	286TC	810015.00	√	8,331	286THFPA8040	520	230/460	74.0	4200	1.0	38.98	2000 : 1	C, US, 11
30	1200	326TC	810005.00	√	14,594	326THFPA8090	700	230/460	82.0	3600	1.0	41.91	2000 : 1	C, US, 11
40	1800	324TC	810019.00	√	10,537	324THFPA8050	620	230/460	100.0	3600	1.0	40.41	2000 : 1	C, US, 11
40	1200	364TC	810096.00	√	17,599	364THFS18079	975	230/460	104.0	2700	1.0	42.78	2000 : 1	C, US, 11
50	1800	326TC	810023.00	√	12,429	326THFPA8040	640	230/460	120.0	3600	1.0	41.91	2000 : 1	C, US, 11
50	1200	365TC	810097.00	C/A	21,097	365THFS8397	1029	230/460	180.0	2700	1.0	43.78	2000 : 1	C, US, 11
60	1800	364TC	810027.00	√	15,997	364THFS8059	975	230/460	147.0	2700	1.0	42.78	2000 : 1	C, US, 11
60	1200	404TC	810098.00	√	23,405	404THFS8378	1322	230/460	142.0	2700	1.0	46.72	2000 : 1	C, US, 11
75	1800	365TC	810031.00	√	19,182	365THFS8074	1050	230/460	180.0	2700	1.0	43.78	2000 : 1	C, US, 11
75	1200	405TC	810099.00	C/A	28,517	405THFS8386	1350	230/460	180.0	2700	1.0	49.28	2000 : 1	C, US, 11
100	1800	405TC	810087.00	C/A	23,369	405THFS8329	1400	230/460	230.0	2700	1.0	49.28	2000 : 1	C, US, 11
100	1200	444TC	811367.00	C/A	32,422	444THFN8389	2050	230/460	250.0	2700	1.0	52.72	2000 : 1	C, US, 11
125	1800	444T	811369.00	C/A	29,471	444THFN8050	2000	460	138*	2700	1.0	52.72	2000 : 1	C, US, 11
150	1800	445T	811371.00	C/A	33,437	445THFN8334	2321	460	170*	2700	1.0	54.72	2000 : 1	C, US, 11
200	1800	445T	810503.00	C/A	39,580	445THFN8335	2450	460	230*	2700	1.0	54.72	2000 : 1	C, US, 11
250	1800	449T	811516.00	C/A	52,438	449THFS8328	3210	460	295*	2700	1.0	63.21	2000 : 1	C, US, 11
300	1800	449T	811529.00	C/A	66,471	449THFS8329	3410	460	330*	2700	1.0	63.21	2000 : 1	C, US, 11
350	1800	449T	811530.00	C/A	81,079	449THFS8330	3520	460	385*	2700	1.0	63.21	2000 : 1	C, US, 11

Shaded model numbers are cast iron frame

♥ Note listing on inside back flap
Specifications are subject to change without notice

*F.L. Amps at 460 Volts
▼ LM Numbers are Lincoln Models
D - Item to be discontinued once inventory is depleted
C/A - Check Availability
Note 11 - TEBC
Note 12 - TENV

LEESON®

Inverter Duty Motors

Platinum*e* Permanent Magnet AC Motors

NEW!

Commercial, Rolled Steel Frame (NEMA S56C frame models)

Features:

- Meets or exceeds NEMA Premium® (IE3)
- Class F IRIS™ insulation system
- 20:1 Constant Torque open-loop (1000:1 closed-loop)
- IP43 enclosure (IP54 and IP55 available)
- Totally enclosed non-ventilated
- Sealed ball bearing
- High power density, low weight design
- Provisions for optional Shaft Grounding Ring
- 3-year warranty
- Requires an AC inverter for operation

Industrial, Cast Iron Frame (NEMA 182-286 frame models)

Features:

- Ultra Efficient™ Premium-Plus exceeds NEMA Premium® (IE4)
- Class H IRIS™ insulation system
- Cast iron construction for rigidity and reduced vibration
- Severe Duty, TEFC
- Normally closed thermostats (One per phase, Class F)
- High power density, low weight design
- UL,CSA and CE
- Optional terminal block
- Provisions for shaft grounding ring
- 3-year warranty
- Requires an AC inverter for operation

TENV and TEFC Three Phase C Face With Base

HP	SYN RPM 60 Hz	NEMA Frame	▼ Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	Hertz	F. L. Amps	Nominal EFF	Torque (LB-FT)	"C" Dim. (Inches	♥Notes
1/4	1800	S56C	103756.00	√	484	48PNRA20202	13	230/460	–	–	–	–	–	S, MX
1/3	1800	S56C	103757.00	√	571	48PNRA20203	13	230/460	–	–	–	–	–	S, MX
1/2	1800	S56C	103758.00	√	687	48PNRA20204	13	230/460	91	1.9/0.8	83.5	1.5	7.68	S, MX
3/4	1800	S56C	103759.00	√	735	48PNRA20205	16	230/460	–	–	–	–	–	S, MX
1	1800	S56C	103760.00	√	797	48PNRA20206	18	230/460	91	3.44/1.71	85.3	2.9	8.68	S, MX
1.5	1800	S56C	104008.00	√	969	48PNRA20207	23	230/460	91	5.4/2.7	86.1	4.4	9.68	S, MX
2	1800	S56C	103761.00	√	1,283	48PNRA20208	28	230/460	91	6.32/3.16	86.5	5.8	10.68	S, MX
3	1800	182TC	132293.00	√	3,028	182TPFSA20017	99	460	150	3.9	91.7	8.8	16.63	C, US
5	1800	184TC	132294.00	√	3,866	184TPFSA20018	108	460	150	6.4	91.7	14.6	16.63	C, US
7.5	1800	213TC	140840.00	√	4,689	213TPFSA20027	152	460	150	9.4	93.0	21.9	20.16	C, US
10	1800	215TC	140841.00	√	4,900	215TPFSA20028	166	460	150	11.7	93.6	29.2	20.16	C, US
15	1800	254TC	825201.00	√	5,613	254TPFSA20057	204	460	120	18.0	94.5	43.8	25.77	C, US
20	1800	256TC	825202.00	√	5,972	256TPFSA20058	253	460	120	24.0	95.0	58.3	25.77	C, US
25	1800	284TC	825203.00	√	7,167	284TPFSA20059	396	460	120	30.0	95.0	72.9	26.21	C, US
30	1800	286TC	825204.00	√	7,331	286TPFSA20060	416	460	120	35.5	95.4	87.5	27.71	C, US
40	1800	286TC	825387.00	√	8,912	286TPFSA20125	490	460	120	47.5	95.8	116.7	27.71	C, US

Shaded model numbers are cast iron frame

♥ Note listing on inside back flap
Specifications are subject to change without notice

LEESON®

Washguard® Motors
Premium All Stainless Motors with Shaft Grounding Rings (SGRs)

General Specifications:

Same design features as our standard Premium Stainless and Extreme Duck motors only having a built-in Shaft Grounding Ring that are designed to protect motors that are used in applications that are using AC inverters to control the speed of the motors. They eliminate the stray voltages that may damage the motor's bearings.

Premium Washguard® All-Stainless Motors
With Shaft Grounding Rings (SGRs)

Three Phase - Standard, EPAct & NEMA Premium Ratings
Three-Phase - TENV/TEFC - C Face With Base

HP	SYN RPM 60 Hz	NEMA Frame	Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	F. L. Amps @ 230 V	% F.L. EFF.	Service Factor	"C" Dim. (Inches)	♥Notes
1/2	1800	56HC	117901.00	√	1,557	CZ6T17VK53	35	230/460	1.6	78.5	1.15	12.54	S, US, 12
3/4	1800	56HC	117902.00	√	1,609	CZ6T17VK54	41	230/460	2.3	80.0	1.15	13.04	S, US, 12
1	1800	56HC	117903.00	D	1,685	CZ6T17WK38	39	230/460	3.1	82.5	1.15	13.13	S, US, 12
1	1800	56C	119500.00	√	1,820	CZ6T17WK48	41	230/460	3.2	85.5	1.15	11.94	S, US, 13
1	1800	143TC	122029.00	D	1,643	CZ143T17VK10	44	230/460	3.0	81.5	1.15	13.61	S, US, 12
1	1800	143TC	122215.00	√	1,875	CZ143T17WK21		230/460	3.2	85.5	1.15	12.00	S, US, 13
1 1/2	1800	56HC	117904.00	D	1,720	CZ6T17WK40	49	230/460	4.4	84.0	1.15	13.63	S, US, 13
1 1/2	1800	56HC	119501.00	√	1,893	CZ6T17WK49		230/460	4.8	86.5	1.15	12.94	S, US, 13
1 1/2	1800	145TC	122030.00	√	1,957	CZ145T17WK52	49	230/460	4.4	86.5	1.15	13.69	S, US, 13
2	1800	56HC	117905.00	D	2,009	CZ6T17WK39	50	230/460	5.6	84.0	1.15	13.63	S, US, 13
2	1800	56HC	119502.00	√	2,210	CZ6T17WK50		230/460	5.8	86.5	1.15	13.44	S, US, 13
2	1800	145TC	122031.00	√	2,288	CZ145T17WK53	50	230/460	5.6	86.5	1.25	13.69	S, US, 13

230/460 volt motors are suitable for use at 208 volts

♥ Note listing on inside back flap
Specifications are subject to change without notice

Green items are Premium Efficient

D - Item to be discontinued once inventory is depleted
Note 12 - TENV

Three Phase - Totally Enclosed - Rigid C Face

HP	SYN RPM 60 Hz	NEMA Frame	Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	F. L. Amps @ 230 V	% F.L. EFF.	Service Factor	"C" Dim. (Inches)	♥Notes
1/2	1800	56C	117906.00	√	1,697	CZ6T17VK55	40	230/460	1.6	78.5	1.15	10.72	S, US, 12
3/4	1800	56C	117907.00	√	1,756	CZ6T17VK56	47	230/460	2.3	80.0	1.15	11.22	S, US, 12
1	1800	56C	117908.00	D	1,794	CZ6T17VK57	50	230/460	3.0	81.5	1.15	11.97	S, US, 12
1	1800	56C	119527.00	√	1.920	CZ6T17FK112	55	230/460	3.2	85.5	1.15	11.97	S, US, 13
1 1/2	1800	56C	117909.00	D	1,878	CZ6T17WK41	56	230/460	4.4	84.0	1.15	11.69	S, US, 13
1 1/2	1800	56C	119528.00	√	1,962	CZ6T17WK389	58	230/460	4.8	85.5	1.15	12.69	S, US, 13
1 1/2	1800	145TC	122032.00	D	1,878	CZ143T17WK20	56	230/460	4.4	84.0	1.15	11.25	S, US, 13
1 1/2	1800	145TC	122221.00	√	1,975	CZ143T17WK23	59	230/460	4.8	86.5	1.15	12.75	S, US, 13
2	1800	56C	117910.00	D	2,177	CZ6T17WK42	57	230/460	5.6	84.0	1.15	12.69	S, US, 13
2	1800	56C	119529.00	√	2,293	CZ6T17WK55	61	230/460	5.8	86.5	1.15	13.19	S, US, 13
2	1800	145TC	122033.00	D	2,177	CZ145T17WK54	57	230/460	5.6	84.0	1.15	12.50	S, US, 13
2	1800	145TC	122222.00	√	2,293	CZ145T17WK60	62	230/460	5.8	86.5	1.15	13.25	S, US, 13
3	3600	56C	119205.00	D	2,325	CZ6T34WK27	62	230/460	7.6	85.5	1.15	12.69	S, US, 13
3	3600	56C	119530.00	√	2,390	CZ6T34WK36	64	230/460	8.0	86.5	1.15	13.19	S, US, 13

230/460 volt motors are suitable for use at 208 volts

♥ Note listing on inside back flap
Specifications are subject to change without notice

Green items are Premium Efficient

D - Item to be discontinued once inventory is depleted
Note 12 - TENV

Three Phase - Totally Enclosed - C Face Less Base

HP	SYN RPM 60 Hz	NEMA Frame	Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	F. L. Amps @ 230 V	% F.L. EFF.	Service Factor	"C" Dim. (Inches)	♥Notes
3	3600	56C	119206.00	D	2,307	CZ6T34WC23	61	230/460	7.6	85.5	1.15	12.69	S, US, 13
3	3600	56C	119531.00	√	2,372	CZ6T34WC34	62	230/460	8.0	86.5	1.15	13.19	S, US, 13
3	1800	56C	122118.00	D	2,325	CZ145T17WC42	61	230/460	8.6	82.5	1.15	13.19	S, US, 13

230/460 volt motors are suitable for use at 208 volts

♥ Note listing on inside back flap
Specifications are subject to change without notice

Green items are Premium Efficient

D - Item to be discontinued once inventory is depleted
Note 12 - TENV
Note: No Premium Eff. replacement for model 122118.00

NEW!
6-Pole Ratings

HVAC - Fan Motors
TEAO Cooling Tower Single Speed Motors

Applications:

Cooling towers, fan and blowers, and other severe duty environments where long life and high efficiency are desired.

Features:

- Complete cast iron construction for rigidity and reduced vibration
- Epoxy painted
- Severe duty treatment of internal parts
- Class F insulation
- F-1 / F-2 capable
- Re-greaseable bearings
- Brass T-drain installed - both ends at 6:00
- Inpro Shaft seal protected
- Shaft grounding ring (SGRs) installed
- Inverter rated IRIS™ insulation system
- 10:1 constant and variable torque rated
- Extra nameplate with CE for external mounting
- Designed for shaft up mounting
- 3-year warranty
- 1.15 S.F. under sine wave power

Three Phase - TEAO - Rigid Base

HP	RPM 60 Hz	NEMA Frame	Catalog Number	Stock	List Price	Model Number	App. Wgt. (lbs)	Voltage	F.L. Amps @ 230V	% F.L. EFF.	"C" Dim. (Inches)	♥Notes
3	1800	182T	824528.00	√	1,574	182TTTN16569	123	230/460	8.0	90.2	13.82	C, US
3	1200	213T	824554.00	√	2,066	213TTTN16585	225	230/460	8.8	89.5	17.47	C, US
5	1800	184T	824529.00	√	1,678	184TTTN16542	155	230/460	12.4	90.2	15.82	C, US
5	1200	215T	824555.00	√	2,078	215TTTN16580	300	230/460	13.8	89.5	17.47	C, US
7 1/2	1800	213T	824530.00	√	2,158	213TTTN16536	225	230/460	19.2	91.7	17.47	C, US
7 1/2	1200	254T	824556.00	√	3,288	254TTTNA16580	240	230/460	19.8	91.0	22.56	C, US
10	1800	215T	824531.00	√	2,260	215TTTN16537	300	230/460	25.0	91.7	20.47	C, US
10	1200	256T	824557.00	√	3,494	256TTTNA16577	400	230/460	26.2	91.0	24.31	C, US
15	1800	254T	824532.00	√	2,938	254TTTNA14533	240	230/460	39.0	91.0	20.95	C, US
15	1200	284T	824558.00	√	3,780	284TTTNA16578	500	230/460	41.0	91.7	26.97	C, US
20	1800	256T	824533.00	√	3,105	256TTTNA14533	400	230/460	50.0	91.0	22.70	C, US
20	1200	286T	824559.00	√	4,179	286TTTNA16576	500	230/460	53.5	91.7	26.97	C, US
25	1800	284T	824534.00	√	3,692	284TTTNA14536	500	230/460	63.0	92.4	26.97	C, US
25	1200	324T	824560.00	√	5,819	324TTTS16579	550	230/460	65.0	93.0	26.14	C, US
30	1800	286T	824535.00	√	4,305	286TTTPA14531	500	230/460	74.0	92.4	26.19	C, US
30	1200	326T	824561.00	√	5,837	326TTTS16578	600	230/460	77.0	93.0	27.64	C, US
40	1800	324T	824536.00	√	5,581	324TTTPA14532	550	230/460	100.0	93.0	28.10	C, US
40	1200	364T	824562.00	√	9,892	364TTTS16576	850	230/460	100.0	94.1	29.01	C, US
50	1800	326T	824537.00	√	7,029	326TTTPA14532	600	230/460	122.0	93.0	29.60	C, US
50	1200	365T	824563.00	√	10,190	365TTTS16578	1000	230/460	123.0	94.5	30.01	C, US
60	1800	364T	824538.00	√	9,837	364TTTS14531	850	230/460	144.0	93.6	28.88	C, US
60	1200	404T	824564.00	√	13,206	404TTTS16576	1250	230/460	144.0	94.5	34.38	C, US
75	1800	365T	824539.00	√	12,246	365TTTS14533	1000	230/460	178.0	94.1	29.88	C, US
75	1200	405T	824565.00	√	13,890	405TTTS16578	1250	230/460	179.0	95.0	34.38	C, US
100	1800	405T	824540.00	√	15,164	405TTTS14531	1250	230/460	228.0	94.5	34.25	C, US
100	1200	444T	824566.00	√	20,276	444TTTN16578	1990	230/460	240.0	95.4	40.13	C, US
125	1800	444T	824541.00	√	19,522	444TTTN14531	1990	460	143*	94.5	40.03	C, US
125	1200	445T	824567.00	√	22,540	445TTTN16579	2343	460	148 *	95.4	40.05	C, US
150	1800	445T	824542.00	√	23,246	445TTTN14532	2343	460	172*	95.0	40.13	C, US
150	1200	445T	824568.00	√	25,493	445TTTN16578	2556	460	181 *	95.8	40.13	C, US
200	1800	445T	824543.00	√	27,746	445TTTN14533	2556	460	225*	95.0	40.13	C, US
200	1200	449T	824569.00	C/A	32,398	449TTTS16577	2409	460	240 *	95.8	48.62	C, US
250	1800	449T	824544.00	√	26,812	449TTTS14531	2409	460	290*	95.0	48.62	C, US
250	1200	449T	824570.00	C/A	35,890	449TTTS16576	2409	460	300 *	95.8	48.62	C, US

* - Amps at 460 Volts

♥ Note listing on inside back flap

Specifications are subject to change without notice

Motors Protected with AEGIS® Shaft Grounding Rings

The AEGIS® Shaft Grounding Ring (SGR) prevents electrical bearing fluting damage by safely diverting harmful shaft voltages and bearing currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers™ inside the AEGIS® SGR provide the most reliable current diversion technology for shaft grounding with a "path of least resistance" to dramatically extend motor life.

Motor Lines with AEGIS® SGR

ODP Rolled Steel
- 1 – 40 hp
- 3600, 1800, 1200 RPM

TENV/ TEFC Rolled Steel
- 1 – 10 hp
- 3600, 1800, 1200 RPM

ODP Cast Iron NEMA Premium
- 1 – 75 hp
- 3600, 1800, 1200 RPM

MAX-PE™ (TEFC) NEMA Premium
- 1 – 75 hp
- 3600, 1800, 1200 RPM

- Applications: fans, blowers, pumps, compressors, and HVAC equipment
- Precautions should be taken to eliminate or reduce shaft currents that may be imposed on the motor by the VFD as stated per NEMA MG1 Part 31.4.4.3.

AEGIS® SGR BEARING PROTECTION RING INSTALLED Patented Technology

TECO Westinghouse

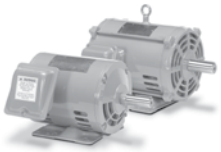
5100 N. IH-35, Round Rock, TX 78681
www.tecowestinghouse.com | 1-888-754-5006

SP-ASGR 01-16

ROLLED STEEL ODP

TYPE: ASGH (140~280 FRAME) NEMA PREMIUM
AEGIS SHAFT GROUND RING INSTALLED

Effective 06-14-15
Supercedes 05-01-13



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (230V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
DTP0012G	1	3600	143T	78.5	83	2.87	34	453
DTP0014G	1	1800	143T	85.5	79	2.77	42	450
DTP0016G	1	1200	145T	82.5	64	3.55	43	570
DTP1/52G	1.5	3600	143T	85.5	83	3.96	34	479
DTP1/54G	1.5	1800	145T	82.5	81	4.01	47	489
DTP1/56G	1.5	1200	182T	86.5	54	6.01	94	629
DTP0022G	2	3600	145T	85.5	89	4.92	42	528
DTP0024G	2	1800	145T	86.5	83	5.22	47	517
DTP0026G	2	1200	184T	87.5	57	7.51	94	700
DTP0032G	3	3600	145T	85.5	84	7.82	42	587
DTP0034G	3	1800	182T	89.5	73	8.6	94	595
DTP0036G	3	1200	213T	88.5	69	9.2	158	975
DTP0052G	5	3600	182T	87.5	88	12.2	94	684
DTP0054G	5	1800	184T	89.5	75.5	13.9	94	714
DTP0056G	5	1200	215T	89.5	73	14.3	158	1,196
DTP7/52G	7.5	3600	184T	88.5	90	17.6	94	871
DTP7/54G	7.5	1800	213T	91	81	19.1	158	1,003
DTP7/56G	7.5	1200	254T	90.2	77	20.2	292	1,574
DTP0102G	10	3600	213T	90.2	85.5	24.3	158	1,085
DTP0104G	10	1800	215T	91.7	84	24.3	158	1,165
DTP0106G	10	1200	256T	91.7	79.5	25.7	292	1,761
DTP0152G	15	3600	215T	91	87	35.5	158	1,405
DTP0154G	15	1800	254T	93	83	36.4	292	1,584
DTP0156G	15	1200	284T	91.7	80	38.3	344	2,331
DTP0202G	20	3600	254T	91.7	90	45.4	292	1,817
DTP0204G	20	1800	256T	93	83	48.5	292	1,916
DTP0206G	20	1200	286T	93	81.5	49.4	344	2,797
DTP0252G	25	3600	256T	91.7	91	56.1	292	2,115
DTP0254G	25	1800	284T	93.6	85	58.8	344	2,346
DTP0302G	30	3600	284TS	92.4	90	67.6	344	2,572
DTP0304G	30	1800	286T	94.1	86	69.4	415	2,723
DTP0402G	40	3600	286TS	92.4	90.5	89.6	415	3,248

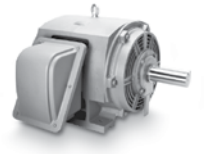
Notes:
(1) AEGIS® SGR Rings have a warranty of 1 year.

CAST IRON ODP

TYPE: ASHH - NEMA PREMIUM

AEGIS SHAFT GROUND RING INSTALLED

Effective 06-14-15
Supercedes 05-01-13



CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	APPROX. SHIPPING WT. (lbs.)	LIST PRICE ($)
DHP0014G	1	1800	143T	85.5	78.0	1.40	54	477
DHP0016G	1	1200	145T	82.5	65.5	1.70	75	601
DHP1/52G	1.5	3600	143T	85.5	80.0	2.10	50	507
DHP1/54G	1.5	1800	145T	86.5	80.5	2.00	60	524
DHP1/56G	1.5	1200	182T	87.5	63.0	2.50	123	668
DHP0022G	2	3600	145T	85.5	84.5	2.60	57	565
DHP0024G	2	1800	145T	86.5	79.5	2.70	58	552
DHP0026G	2	1200	184T	87.5	71.0	3.00	130	800
DHP0032G	3	3600	145T	87.5	87.0	3.70	66	620
DHP0034G	3	1800	182T	89.5	81.0	3.90	117	650
DHP0036G	3	1200	213T	88.5	77.0	4.10	183	1,075
DHP0052G	5	3600	182T	87.5	91.0	5.90	120	750
DHP0054G	5	1800	184T	89.5	84.5	6.20	145	780
DHP0056G	5	1200	215T	89.5	79.0	6.60	195	1,250
DHP7/52G	7.5	3600	184T	88.5	91.5	8.70	134	923
DHP7/54G	7.5	1800	213T	91.0	86.0	9.00	187	1,150
DHP7/56G	7.5	1200	254T	90.2	79.0	9.90	260	1,669
DHP0102G	10	3600	213T	90.2	88.0	11.80	190	1,157
DHP0104G	10	1800	215T	91.7	87.0	11.70	215	1,236
DHP0106G	10	1200	256T	91.7	81.0	12.60	329	1,878
DHP0152G	15	3600	215T	90.2	87.5	17.80	220	1,498
DHP0154G	15	1800	254T	93.0	84.5	17.90	247	1,678
DHP0156G	15	1200	284T	91.7	83.0	18.50	367	2,485
DHP0202G	20	3600	254T	91.0	90.5	22.80	233	1,934
DHP0204G	20	1800	256T	93.0	86.5	23.30	350	2,042
DHP0206G	20	1200	286T	92.4	83.5	24.30	392	2,977
DHP0252G	25	3600	256T	91.7	92.0	27.70	317	2,257
DHP0254G	25	1800	284T	93.6	87.0	28.70	352	2,500
DHP02G6G	25	1200	324T	93.0	83.0	30.30	568	3,671
DHP0302G	30	3600	284TS	92.4	90.5	33.60	405	2,746
DHP0304G	30	1800	286T	94.1	87.0	34.30	429	2,903
DHP0306G	30	1200	326T	93.6	83.5	35.90	640	4,098
DHP0402G	40	3600	286TS	92.4	91.5	44.30	442	3,473
DHP0404G	40	1800	324T	94.1	86.0	46.30	608	3,581
DHP0406G	40	1200	364T	94.1	87.0	45.70	835	5,081
DHP0502G	50	3600	324TS	93.0	86.0	58.50	552	4,258
DHP0504G	50	1800	326T	94.5	85.0	58.30	629	3,989
DHP0506G	50	1200	365T	94.1	86.0	57.80	766	5,967
DHP0602G	60	3600	326TS	93.6	87.0	69.00	614	4,981
DHP0604G	60	1800	364T	95.0	85.0	69.60	735	5,024
DHP0606G	60	1200	404T	94.5	85.5	69.50	1,100	7,180
DHP0752G	75	3600	364TS	94.1	90.5	82.50	704	6,544
DHP0754G	75	1800	365T	95.0	86.0	86.00	850	5,898
DHP0756G	75	1200	405T	94.5	86.5	86.00	1,210	8,509

Notes:

(1) To order 575V , please add "5" to the end of Catalog Number as shown, for example: "DHP00545" for 5 HP, 1800 RPM, 575V.
(2) "R" = Motor stocked standard with a drive-end roller bearing.
(3) Motors larger than 75 HP with SGR can be quoted and provided upon request

ROLLED STEEL TEFC

TYPE: AEGH - NEMA PREMIUM EFFICIENCY
AEGIS SHAFT GROUND RING INSTALLED

Effective 06-14-15
Supercedes 05-01-13

CATALOG NO.	HP	RPM	FL EFF (%)	FL PF (%)	FL AMPS (230V)	FRAME	APPROX SHIPPING WT. (lbs.)	LIST PRICE ($)
GP0012G	1	3600	80.0	85.5	2.74	143T	33	509
GP0014G	1	1800	85.5	75.5	2.90	143T	41	513
GP0016G	1	1200	82.5	66.0	3.44	145T	43	646
GP1/52G	1.5	3600	85.5	83.0	3.96	143T	33	584
GP1/54G	1.5	1800	86.5	80.5	4.03	145T	46	587
GP1/56G	1.5	1200	87.5	55.0	5.84	182T	75	690
GP0022G	2	3600	86.5	85.0	5.09	145T	41	598
GP0024G	2	1800	86.5	79.0	5.48	145T	46	611
GP0026G	2	1200	88.5	64.5	6.56	184T	97	768
GP0032G	3	3600	87.5	87.5	7.34	182T	84	726
GP0034G	3	1800	89.5	74.0	8.48	182T	69	709
GP0036G	3	1200	89.5	68.0	9.23	213T	145	992
GP0052G	5	3600	89.5	90.0	11.60	184T	97	885
GP0054G	5	1800	89.5	80.0	13.10	184T	94	806
GP0056G	5	1200	90.2	73.5	14.10	215T	189	1,390
GP7/52G	7.5	3600	90.2	84.5	18.40	213T	141	1,174
GP7/54G	7.5	1800	91.7	83.0	18.50	213T	135	1,178
GP0102G	10	3600	91.0	86.0	23.90	215T	186	1,338
GP0104G	10	1800	91.7	85.0	24.00	215T	183	1,390

TYPE: AEHH8P - NEMA PREMIUM
AEGIS SHAFT GROUND RING INSTALLED

Effective 06-14-15
Supercedes 05-01-13

CATALOG NO.	HP	RPM	FRAME	FL EFF (%)	FL PF (%)	FL AMPS (460V)	SHIPPING WT. (lbs.)	LIST PRICE ($)
NP0012G	1	3600	143T	82.5	85.0	1.34	83	504
NP0014G(1)	1	1800	143T	85.5	73.0	1.50	48	522
NP0016G(1)	1	1200	145T	82.5	65.5	1.73	90	642
NP1/52G	1.5	3600	143T	84.0	83.5	2.00	85	573
NP1/54G	1.5	1800	145T	86.5	78.0	2.08	78	578
NP1/56G(1)	1.5	1200	182T	87.5	63.5	2.53	120	703
NP0022G	2	3600	145T	86.5	86.0	2.52	62	607
NP0024G	2	1800	145T	86.5	78.0	2.78	90	616
NP0026G	2	1200	184T	88.5	70.5	3.00	132	772
NP0032G	3	3600	182T	88.5	90.0	3.53	130	735
NP0034G	3	1800	182T	89.5	84.0	3.74	135	716
NP0036G(1)	3	1200	213T	89.5	78.0	4.02	164	991
NP0052G	5	3600	184T	88.5	92.5	5.72	135	881
NP0054G	5	1800	184T	89.5	85.5	6.12	133	809
NP0056G	5	1200	215T	91.0	82.5	6.24	210	1,387
NP7/52G	7.5	3600	213T	91.0	89.0	8.67	180	1,178
NP7/54G	7.5	1800	213T	91.7	86.5	8.85	200	1,173
NP7/56G(1)	7.5	1200	254T	91.0	80.5	9.59	315	1,912
NP0102G	10	3600	215T	91.0	89.5	11.50	220	1,340
NP0104G	10	1800	215T	91.7	88.0	11.60	219	1,380
NP0106G(1)	10	1200	256T	91.0	80.5	12.80	340	2,279
NP0152G	15	3600	254T	92.4	91.5	16.60	325	1,853
NP0154G	15	1800	254T	92.4	88.0	17.30	316	1,808
NP0156G(1)	15	1200	284T	92.4	83.5	18.20	530	3,107
NP0202G	20	3600	256T	92.4	92.5	21.90	380	2,309
NP0204G(1)	20	1800	256T	93.0	87.5	23.00	395	2,226
NP0206G(1)	20	1200	286T	91.7	84.0	24.30	520	3,842
NP0252G	25	3600	284TS	92.4	91.0	27.80	460	2,891
NP0254G(1)	25	1800	284T	93.6	86.0	29.10	510	2,718
NP0256G(1)	25	1200	324T	93.0	83.0	30.30	745	4,783
NP0302G	30	3600	286TS	93.0	91.0	33.20	508	3,381
NP0304G(1)	30	1800	286T	93.6	87.5	34.30	545	3,262
NP0306G(1)	30	1200	326T	93.0	80.5	37.50	775	5,299
NP0402G	40	3600	324TS	94.1	90.0	44.20	650	4,445
NP0404G(1)	40	1800	324T	94.1	86.0	46.30	710	4,345
NP0406G(1)	40	1200	364T	94.1	86.5	46.00	945	6,929
NP0502G	50	3600	326TS	94.1	91.0	54.70	775	5,896
NP0504G(1)	50	1800	326T	94.5	87.0	56.90	795	5,440
NP0506G(1)	50	1200	365T	94.1	86.0	57.80	1040	8,477
NP0602G	60	3600	364TS	94.1	93.0	64.20	890	7,674
NP0604G(1)	60	1800	364T	95.0	86.5	68.40	870	6,967
NP0606G(1)	60	1200	404T	94.5	87.0	68.30	1,295	10,101
NP0752G(1)	75	3600	365TS	94.5	93.0	79.90	970	9,761
NP0754G(1)	75	1800	365T	95.4	86.5	85.10	1,075	8,913
NP0756G(1)	75	1200	405T	94.5	86.5	85.90	1,317	11,941

Notes:
(1) Meets NEMA Design C Torque. All other motors are NEMA Design B Torque.

GE INDUSTRIAL MOTORS
a **WOLONG** *company*

Ultra® Series

Vertical Pump Motors

NEMA Premium Efficient

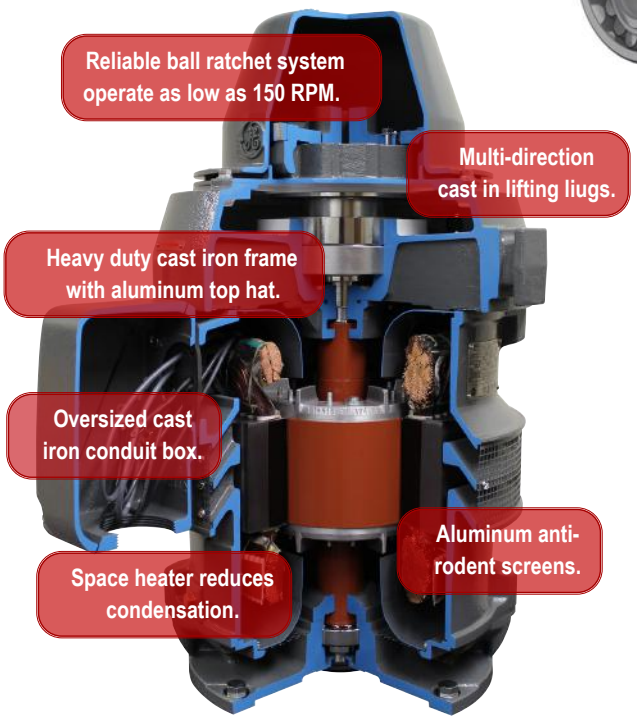
3-1000 HP

NEMA Premium | IEC | CSA C US | IEEE

+1 (888) 525-2915
www.gemotorswolong.com

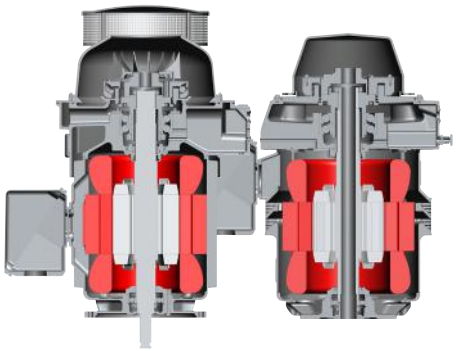
Motor technology for tomorrows challenges.

The Most Robust WPI VHS Motor In The Industry



Custom Motors Built Fast

Ultra Series TEFC and WPI electrical systems, fans, couplings, end shields, bearings, bearing caps, and flanges are shared across designs resulting in some of the fastest custom cycle times in the industry.



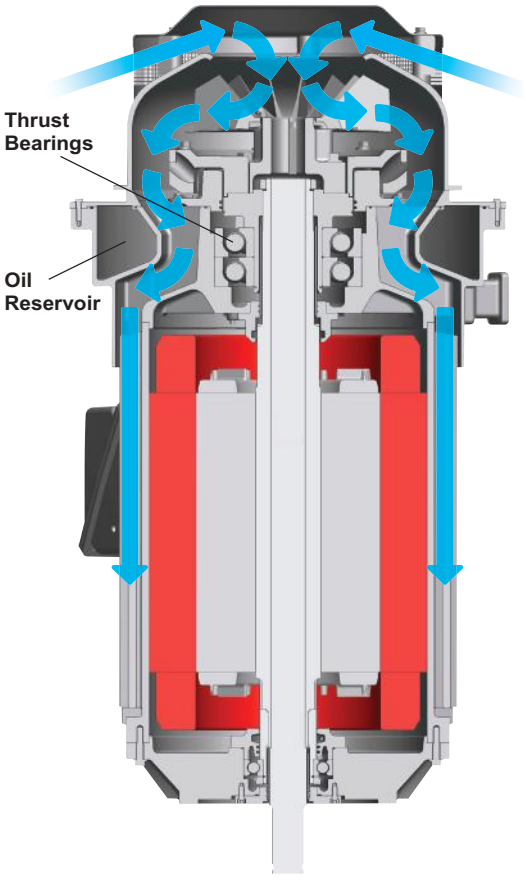
20% Average Higher Standard Thrust

GEIM high thrust vertical pump motors have, on average, 20% higher thrust and extended performance than any other similar product in the industry

As a result, motors in all deep well applications can be air-cooled with any bearing configuration.

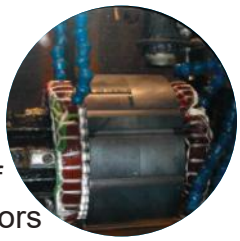
PATENTED GECHANNEL COOLING TECHNOLOGY

Cooloing design improvements on larger TEFC frames result in an amazing - 30°C Temperature reduction dramatically extending bearing and winding life.



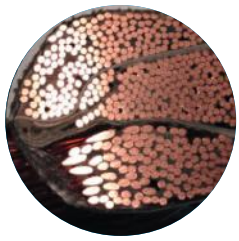
Engineered for reliability.

GEGARD™ Insulation offers added protection in severe applications. Our Class H GEGARD2400 insulation system exceeds NEMA MG1-31 (tested to with stand corona inception voltage of 2499 volts peak @ 0.1 seconds) for motors operating on inverters.



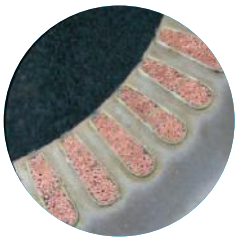
Rotational Varnish Application

Motor coils are rotationally varnished with a “Trickle Treat” process while an electric current is passed through the windings to ensure a penetrating, thorough and even coating. This proven process fills air gaps that could cause corona inception damage during operation.



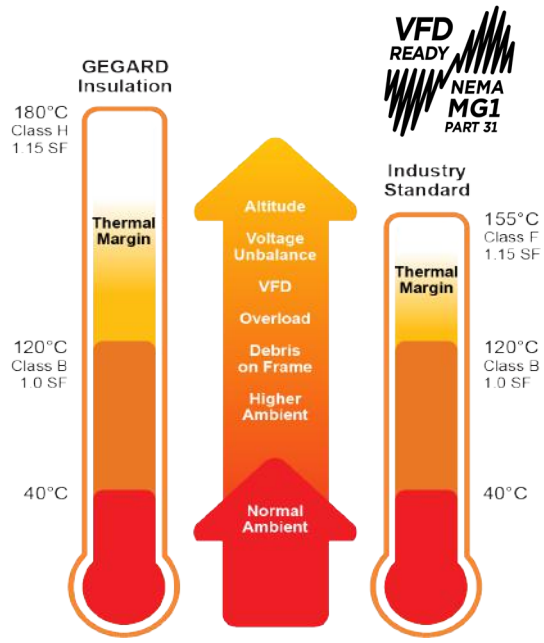
Strong Bond

Resin penetrates deep into tightly packed coil wire creating a strong bond that guards against end-turn vibration.



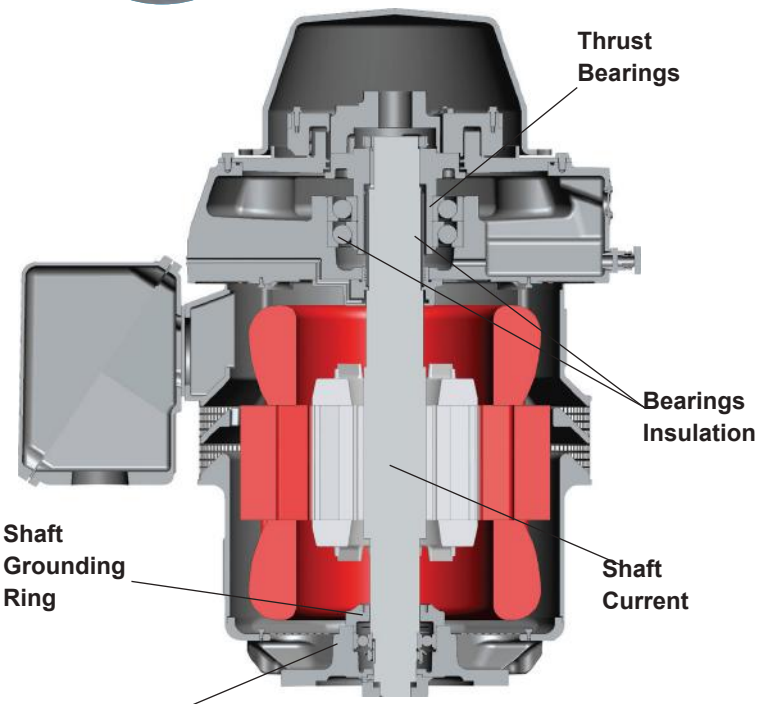
High Protection

Contaminants can’t penetrate carefully and tightly packed stator coils bonded by deep resin penetration into the slots.



Protecting Bearings From Voltage Spikes.

The harmonics from VFDs induce a voltage on the shaft. This voltage will discharge through the bearings if the voltage is not grounded. Insulating one bearing prevents a ground loop from developing. To divert shaft currents from bearings and driven equipment, we include insulation for the thrust bearings in ratings 100HP+ and AegisTM shaft grounding rings are optional on all ratings.



Complete Product Line

Product Name	WPI Ultra™ VHS	XSD Ultra™ VSS NT	XSD Ultra® VHS	XSD Ultra® 841 VSS
Enclosure/Shaft Type	WPI hollow shaft	TEFC solid shaft	TEFC hollow shaft	TEFC solid shaft
Speed	1200, 1800, 3600	1800/3600	1800, 3600	1800, 3600
Voltage (60Hz*)	230/460, 460 PWS, 575, 380-440	230/460, 460	230/460, 460 PWS	460
Base/Face	P-Base	P-Base	P-Base	P-Base and C-Face
Thrust	100, 175, 300% High	Normal	100, 175, 300% High	Inline and 100% High
HP Range (Standard)	5 - 600	3 - 150	5 - 300	3 - 300
HP Range (Custom)	5 - 1000	3 - 500	5 - 600	3 - 500
Efficiency	NEMA Premium	NEMA Premium	NEMA Premium	NEMA Premium
Warranty	3 Years	3 Years	3 Years	3 Years

Notes: *Also dual 50Hz nameplated.

Standard VHS Scope	WPI Ultra	WPI Ultra+
HP	5-400	40-600
Speed	1200, 1800, 3600	1800
Thrust	100 or 175% HT	100, 175%, 300% HT
Voltage	230/460, 460 PWS	230/460, 460 PWS, 575
Space Heater	Yes	Yes
GEGARD 2400 Inverter Duty Insulation	Yes	Yes
Class H Insulation System	Yes	Yes
Winding Thermostats		Yes
Insulated Thrust Bearings		Yes
Shaft Grounding Ring on NDE		Yes
Aegis SGR Extended Warranty		Yes

Caring For Your Needs

We understand that the goals of your organization are demanding, and evolving. That is why we offer a comprehensive range of aftermarket services including replacement units, field service spares, service agreements, unit upgrades and technical support.

GE INDUSTRIAL MOTORS
a WOLONG *company*

www.gemotorswolong.com

XSD Ultra, GEGARD 2400, and the Six Star Bearing System are trademarks of Wolong Electric America LLC.
NEMA Premium is a trademark of NEMA. GE is a trademark of General Electric Company. Manufactured under trademark license.
©2019, Wolong Electric America LLC. All rights reserved
GEA30732-EN (7/2019)

Ultra™ and Ultra+™ Vertical Hollow Shaft

Weather Protection I (WPI)
Premium Efficient

Standard Features

Type	Ultra™ WPI VHS	Ultra+™ WPI VHS with bearing fluting protection	Key Differences
HP Range	5-400	40-600	
Poles	2, 4, 6	2, 4	
Voltage	230/460, 460 PWS	230/460, 460 PWS, 575V	
Efficiency	NEMA Premium	NEMA Premium	
Frequency	60 Hz (De-rated at 50 Hz and noted on the nameplate.)	60 Hz (De-rated at 50 Hz and noted on the nameplate.)	
NEMA Design	B	B	
Agency Approvals	UL - Component and Insulation System Recognition, CSA - Motors	UL - Component and Insulation System Recognition, CSA - Motors	
Altitude	3300 ft	3300 ft	
Ambient	40ºC	40ºC	
Balance/Vibration	Special Balance = 0.075 IPS	Special Balance = 0.075 IPS	
Bearing Caps	Yes	Yes	
Bearing Protection	Shaft Slinger	Shaft Slinger	
Bearing Type	High Thrust and Extra High Thrust	High Thrust and Extra High Thrust	
Conduit Box	Cast Iron	Cast Iron	
Coupling	Non-Reverse Standard, kitted for Self Release, or Bolted	Non-Reverse Standard, kitted for Self Release, or Bolted	
End Shield	Cast Iron	Cast Iron	
Fasteners	SAE	SAE	
Finishing Varnish	Trickle Treat system	Trickle Treat system	
Frame Material	Cast Iron	Cast Iron	
Frame Size	213-449	324-511	
Grease/Oil	All Guide and 213-286 Thrust Bearings: Polyrex EM, 324-449 Oil Lubricated Thrust Bearings: ISO 32	All Guide and 213-286 Thrust Bearings: Polyrex EM, 324-509 Oil Lubricated Thrust Bearings: ISO 32	
Ground	Brass Bolt on Frame and in Conduit Box	Brass Bolt on Frame and in Conduit Box	
Insulation Class	H	H	
Insulation System	GEGARD2400, Non-Hygroscopic, Anti-Fungus, 2400Volt at .1microsecond rise time, Exceeds NEMA MG1-31 for variable frequency drives	GEGARD2400, Non-Hygroscopic, Anti-Fungus, 2400Volt at .1microsecond rise time, Exceeds NEMA MG1-31 for variable frequency drives	
Inverter Capabilities	Variable Torque 0-60 Hz w/out non-reverse ratchet & *5-60 Hz w/NRR	Variable Torque 0-60 Hz w/out non-reverse ratchet & *5-60 Hz w/NRR	
Lifting Means	Yes, Integral to Endshield	Yes, Integral to Endshield	
Mounting	Vertical P-Base	Vertical P-Base	
Nameplate	Stainless Steel	Stainless Steel	
Non-Reverse Ratchet Type	Ball Style	Ball Style [pin style 500HP+]	
Paint	Grey Epoxyester	Grey Epoxyester	
Relubrication	Yes	Yes	
Rotor	Cast Aluminum	Cast Aluminum	
Service Factor	1.15	1.15	
Shaft Grounding	N/A	40-100HP: Aegis SGR on DE, 125HP and up: Aegis SGR on DE & Insulated Bearing Carrier on ODE	*
Space Heater	115 Volt, 60 Hz	115 Volt, 60 Hz	
Temperature Rise	80ºC @ 1.0 SF	80ºC @ 1.0 SF	
Tests	NEMA Routine only	NEMA Routine only	
Thermostats	N/A	Includes NC Winding Thermostats	*
Time Rating	Continuous	Continuous	
Top Hat	Cast Aluminum	Cast Aluminum	
Warranty	36 months from date of purchase or 42 months from date of shipment, whichever occurs first	36 months from date of purchase or 42 months from date of shipment, whichever occurs first	

Ultra™ TEFC Vertical Hollow Shaft

Inverter Duty with Bearing Fluting Protection (40HP and up)
Totally Enclosed Fan Cooled (TEFC)
Premium Efficient

Standard Features

HP Range	5-300
Poles	2, 4
Voltage	230/460, 460
Efficiency	NEMA Premium
Frequency	60 Hz (De-rated at 50 Hz and noted on the nameplate.)
NEMA Design	B
Agency Approvals	UL - Component and Insulation System Recognition, CSA - Motors
Altitude	3300 ft
Ambient	40ºC
Balance/Vibration	Special Balance = 0.075 IPS
Bearing Caps	Yes
Bearing Protection	Shaft Slinger
Bearing Type	High Thrust
Conduit Box	Cast Iron
Coupling	Non-Reverse Standard, kitted for Self Release, or Bolted
End Shield	Cast Iron
Fan Cover	Cast Iron
Fasteners	SAE
Finishing Varnish	Trickle Treat system
Frame Material	Cast Iron
Frame Size	213-449
Grease/Oil	All Guide and 213-286 Thrust Bearings: Polyrex EM, 324-449 Oil Lubricated Thrust Bearings: ISO 32
Ground	Brass Bolt on Frame and in Conduit Box
Insulation Class	H
Insulation System	GEGARD2400, Non-Hygroscopic, Anti-Fungus, 2400Volt at .1microsecond rise time, Exceeds NEMA MG1-31 for variable frequency drives
Inverter Capabilities	Variable Torque 0-60 Hz w/out non-reverse ratchet & *5-60 Hz w/ NRR
Lifting Means	Yes, Integral to Endshield
Mounting	Vertical P-Base
Nameplate	Stainless Steel
Non-Reverse Ratchet Type	Axial Ball Style
Paint	Buff Epoxyester
Relubrication	Yes
Rotor	Cast Aluminum
Service Factor	1.15
Shaft Grounding	40-100HP: Aegis SGR on Bearing Cap, 125HP and up: Aegis SGR on Bearing Cap & Insulated Upper Bearing Carrier
Space Heater	115 Volt, 60 Hz
Temperature Rise	80°C @ 1.0 SF
Tests	NEMA Routine only
Thermostats	Includes NC Winding Thermostats (40HP and greater)
Time Rating	Continuous
Warranty	36 months from date of purchase or 42 months from date of shipment, whichever occurs first

Ultra™ TEFC Vertical Hollow Shaft

Inverter Duty with Bearing Fluting Protection (40HP and up)
Totally Enclosed Fan Cooled (TEFC)
Premium Efficient

Pricing

Volts: 230/460, 460 PWS
HP: 5-300

HP	RPM	Volts	Frame	Thrust Down	Cat. No.*	Model No.	Motor List Price	Coupling BX	Coupling Key	Price Symbol	Notes
5	3600	230/460	L213TP10	1,663	**V4022**	5KS213SAE5035	$2,397	1	1/4	G67VHS	51, 111
7.5	3600	230/460	L213TP10	1,658	**V4023**	5KS213SAE5036	$2,434	1	1/4	G67VHS	51, 111
10	3600	230/460	L215TP10	1,658	**V4024**	5KS215SAE5027	$2,772	1	1/4	G67VHS	51, 111
15	3600	230/460	L254TP10	2,070	**V4025**	5KS254SAE5033	$3,114	1	1/4	G67VHS	51, 111
5	1800	230/460	L213TP10	2,071	**V4026**	5KS213SAE6056	$2,267	1	1/4	G67VHS	51, 111
7.5	1800	230/460	L213TP10	2,071	**V4027**	5KS213SAE6054	$2,470	1	1/4	G67VHS	51, 111
10	1800	230/460	L215TP10	2,065	**V4028**	5KS215SAE6042	$2,675	1	1/4	G67VHS	51, 111
15	1800	230/460	L254TP10	2,570	**V4029**	5KS254SAE6057	$3,948	1	1/4	G67VHS	51, 111
20	1800	230/460	L256TP10	2,597	**V4030**	5KS256SAE6062	$4,145	1	1/4	G67VHS	51, 111
25	1800	230/460	L284TP16	2,976	**V4031**	5KS284SAE6054	$4,784	1	1/4	G67VHS	51, 111
30	1800	230/460	L286TP16	2,959	**V4032**	5KS286SAE6061	$5,218	1	1/4	G67VHS	51, 111
40	1800	230/460	L324TP16	4,700	**V4711**	5KS324SAJ6005	$6,334	1 1/4	1/4	G6-7VHSB	51, 111, 112, 113
50	1800	230/460	L326TP16	4,700	**V4712**	5KS326SAJ6005	$7,169	1 1/4	1/4	G6-7VHSB	51, 111, 112. 113
60	1800	460	L364TP16	5,700	**V4713**	5KS364SAJ6008	$9,081	1 1/4	1/4	G6-7VHSB	51, 110, 112, 113
75	1800	460	L365TP16	5,700	**V4714**	5KS365SAJ6008	$10,827	1 1/4	1/4	G6-7VHSB	51, 110, 112, 113
100	1800	460	L405TP16	6,700	**V4715**	5KS405SAJ6008	$14,184	1 1/2	3/8	G6-7VHSB	51, 110, 112, 113
125	1800	460	L444TP16	13,500	**V4716**	5KS444SAJ6008	$20,009	1 1/2	3/8	G6-7VHSB	51, 110, 112, 114
150	1800	460	L445TP16	13,500	**V4717**	5KS445SAJ6008	$24,023	1 1/2	3/8	G6-7VHSB	51, 110, 112, 114
200	1800	460	L447TP16	13,300	**V4718**	5KS447SAJ6008	$30,945	1 11/16	3/8	G6-7VHSB	51, 110, 112, 114
250	1800	460	L449TP16	13,300	**V4719**	5KS449SAJ6008	$34,900	1 11/16	3/8	G6-7VHSB	51, 110, 112, 114
300	1800	460	L449TP16	13,300	**V4720**	5KS449SAJ6020	$38,566	1 11/16	3/8	G6-7VHSB	51, 110, 112, 114

The motor list price includes NRR and SRC

* GEIM is changing its product structure to include a standard sized non-reverse/self-release coupling as indicated by the table above. Alternate sized couplings are available and listed on page VP.11 for additional fees. Please note that as this is a running change, some motors may be in inventory without couplings until inventory is depleted so please consult with your GEIM inside sales representative to verify if the catalog number being ordered includes a coupling or if one needs to be ordered at no charge.

Notes:

51 Space Heater, 115V/60 Hz
110 Usable on 380 volts, 50 Hz at 1.0 Service Factor and derated to next lower HP
111 Usable on 190/380 volts, 50 Hz at 1.0 Service Factor and derated to next lower HP
112 Includes NC Winding Thermostats (40HP and greater)
113 Aegis Shaft Grouding ring on bearing cap (40-100HP)
114 Insulated Upper Bearing Carrier and Aegis Shaft Grounding ring on bearing cap (125HP and greater)

Ultra+™ Vertical Hollow Shaft

Inverter Duty with Bearing Fluting Protection
Weather Protection I (WPI)
Premium Efficient

Pricing

Volts: 230/460, 460 PWS, 575
HP: 40-600

HP	RPM	Volts	Frame	Thrust Down	Cat. No.*	Model No.	Motor List Price	Coupling BX	Coupling Key	Price Symbol	Notes
40	1800	230/460	L324TP16	6,324	**V4513**	5KS324DAJ6021	$4,294	1 1/4	1/4	G67VHS	111, 113
50	1800	230/460	L326TP16	6,324	**V4515**	5KS326DAJ6020	$5,126	1 1/4	1/4	G67VHS	111, 113
60	1800	460 PWS	L364TP16	6,244	**V4518**	5KS364DAJ6020	$5,939	1 1/4	1/4	G67VHS	110, 113
75	1800	460 PWS	L365TP16	6,244	**V4520**	5KS365DAJ6020	$7,234	1 1/4	1/4	G67VHS	110, 113
100	1800	460 PWS	L404TP16	14,609	**V4521**	5KS404DAJ6020	$9,398	1 1/2	3/8	G67VHS	110, 113
125	1800	460 PWS	L405TP16	14,609	**V4524**	5KS405DAJ6020	$11,588	1 1/2	3/8	G67VHS	111, 112, 114
150	1800	460 PWS	L444TP16	14,462	**V4526**	5KS444DAJ6021	$14,696	1 11/16	3/8	G67VHS	111, 112, 114
200	1800	460 PWS	L444TP20	22,551	**V4528**	5KS444DAJ6022	$19,263	1 11/16	3/8	G67VHS	111, 112, 114
250	1800	460 PWS	L445TP20	22,551	**V4529**	5KS445DAJ6020	$24,188	1 11/16	3/8	G67VHS	111, 112, 114
300	1800	460 PWS	L447TP20	22,277	**V4530**	5KS447DAJ6021	$27,864	1 11/16	3/8	G67VHS	111, 112, 114
350	1800	460 PWS	L447TP20	22,277	**V4531**	5KS447DAJ6022	$31,017	1 11/16	3/8	G67VHS	111, 112, 114
400	1800	460 PWS	L449TP20	20,800	**V4532**	5KS449DAJ6021	$34,465	1 15/16	1/2	G67VHS	111, 112, 114
400	1800	460 PWS	L449TP20	30,000	**V4533**	5KS449DAJ6023	$37,038	1 15/16	1/2	G67VHS	110, 112, 114, 156
450	1800	460 PWS	L449TP20	30,000	**V4534**	5KS449DAJ6020	$38,870	1 15/16	1/2	G67VHS	110, 112, 114, 156
500	1800	460 PWS	L509TP24	14,807	**V852**	5KS509DAE6020	$42,006	2 3/16	1/2	G67VHS	110, 112, 114, 157
500	1800	460 PWS	L509TP24	45,304	**V952**	5KS509DAE6030	$45,353	2 3/16	1/2	G67VHS	110, 112, 114, 156, 157
600	1800	460 PWS	L511TP24	44,796	**V953**	5KS511DAE6023	$50,853	2 3/16	1/2	G67VHS	110, 112, 114, 156, 157
40	1800	575	L324TP16	5,700	**V4550**	5KS324DAJ6022	$4,294	1 1/4	1/4	G67VHS	113
50	1800	575	L326TP16	5,700	**V4551**	5KS326DAJ6021	$5,126	1 1/4	1/4	G67VHS	113
60	1800	575	L364TP16	5,700	**V4552**	5KS364DAJ6021	$5,939	1 1/4	1/4	G67VHS	113
75	1800	575	L365TP16	5,700	**V4553**	5KS365DAJ6021	$7,234	1 1/4	1/4	G67VHS	113
100	1800	575	L404TP16	6,700	**V4554**	5KS404DAJ6021	$9,398	1 1/2	3/8	G67VHS	113
125	1800	575	L405TP16	6,700	**V4555**	5KS405DAJ6021	$11,588	1 1/2	3/8	G67VHS	112, 114
150	1800	575	L444TP16	13,500	**V4556**	5KS444DAJ6023	$14,696	1 11/16	3/8	G67VHS	112, 114
200	1800	575	L444TP20	13,500	**V4557**	5KS444DAJ6024	$19,263	1 11/16	3/8	G67VHS	112, 114
250	1800	575	L445TP20	21,100	**V4558**	5KS445DAJ6021	$24,188	1 11/16	3/8	G67VHS	112, 114
300	1800	575	L447TP20	20,800	**V4559**	5KS447DAJ6023	$27,864	1 11/16	3/8	G67VHS	112, 114

The motor list price includes NRR and SRC

* GEIM is changing its product structure to include a standard sized non-reverse/self-release coupling as indicated by the table above. Alternate sized couplings are available and listed on page VP.6 for additional fees. Please note that as this is a running change, some motors may be in inventory without couplings until inventory is depleted so please consult with your GEIM inside sales representative to verify if the catalog number being ordered includes a coupling or if one needs to be ordered at no charge.

Notes:

110 Usable on 380 volts, 50 Hz at 1.0 Service Factor and derated to next lower HP
111 Usable on 190/380 volts, 50 Hz at 1.0 Service Factor and derated to next lower HP
112 Includes NC Winding Thermostats (125HP and greater)
113 Aegis Shaft Grouding ring on bearing cap (40-100HP)
114 Insulated Upper Bearing Carrier and Aegis Shaft Grounding ring on bearing cap (125HP and greater)
156 With Spherical Roller Bearing water cooling required
157 Includes Self Release Coupling (SRC) with 2 3/16" BX

World Motor Cooling Tower Duty Motors

Inverter Duty TEAO and TEFC Motors

Product Specifications

Phase: Three

Insulation: Class F Inverter Grade Insulation exceeding NEMA Part 31

Speed Range: 20:1 (3-60Hz) Variable Torque Speed Range and may be used across the line

Voltage: 230/460, 200, 575

Enclosure:
Totally Enclosed Air Over (TEAO)
Totally Enclosed Fan Cooled (TEFC)

Efficiency Level: NEMA Premium Efficient / IE3

Product Overview and Options

For use in Cooling Tower, Evaporative Condenser and other commercial and industrial applications requiring protection from harsh operating conditions with high humidity.

- Nidec Motor Corporation's patented Inverter Grade® insulation
- Class F Insulation, 40°C Ambient
- Double Dip & Bake, 100% Solids, Polyester Insulation on Windings with Dolph protective treatment
- Cast Iron Frame
- Cast Iron Outlet Box
- Steel Fan Cover
- Double Sealed Bearings
- Double Drilled Feet to Accommodate Mounting Flexibility
- Sealed Bracket-to-Frame Registers with RTV sealant
- Stainless Steel Nameplate & Zinc Plated Hardware
- 1.15 Service Factor
- Rotor Balanced to 0.08 in/sec
- NEMA®† Design B Performance on 60 Hertz Sine Wave Power
- Meets IEC 34-5 Classification IP55
- CORRO-DUTY® Motor Paint and Rotor Paint
- Space Heater (115V) to reduce condensation and improve motor life
- Internal Aegis Shaft Grounding Ring (available on some stock ratings)

Option List Prices

Add motor & required options list prices, then use applicable multiplier to calculate net price.

Options	Frame Size								
	140	180	210	250	280	320	360	400	440
Thermistor	$725	$725	$725	$725	$725	$725	$725	$725	$725
TEFC W5 or W8 Mounting	$89	$125	$137	$174	$221	$281	$310	$419	$478

Totally Enclosed Air Over (TEAO)

HP	RPM	Volts	FramB	NBw Stock Cat#	List PricB	AssBmbly Position	Discount Symbol	SF	"C" Dim. (inchBs)"	Ship Wt. (lbs)	NBMA Nom. Bff.	Full Load Amps	NotBs
2	1200	230/460	184T	CVW2V3B6	$1,454	W6	DS-3CTSW	1.15	13.6	130	88.5	6.2/3.1	
3	1800	230/460	182T	CVW3V2B6	$1,206	W6	DS-3CTSW	1.15	13.6	130	89.5	7.7/3.9	
	1200	230/460	213T	CVW3V3B6	$2,138	W6	DS-3CTSW	1.15	17.1	200	90.2	8.6/4.3	
5	1800	200	184T	CVW5V2H6	$1,254	W6	DS-3CTSW	1.15	13.6	130	89.5	14.5	
	1800	230/460	184T	CVW5V2B6	$1,254	W6	DS-3CTSW	1.15	13.6	130	89.5	12.7/6.3	
	1200	230/460	215T	CVW5V3B6	$2,224	W6	DS-3CTSW	1.15	17.1	200	90.2	14.2/7.1	
7 1/2	1800	200	213T	CVW7V2H6	$1,691	W6	DS-3CTSW	1.15	17.1	200	91.7	21.9	
	1800	230/460	213T	CVW7V2B6	$1,691	W6	DS-3CTSW	1.15	17.1	200	91.7	19.2/9.6	
	1200	230/460	254T	CVW7V3B6	$3,049	W6	DS-3CTSW	1.15	22.3	325	91.0	18.8/9.4	
10	1800	200	215T	CVW10V2H6	$1,976	W6	DS-3CTSW	1.15	17.1	200	91.7	29.3	
	1800	230/460	215T	CVW10V2B6	$1,976	W6	DS-3CTSW	1.15	17.1	200	91.7	25.7/12.8	
	1200	230/460	256T	CVW10V3B6	$3,577	W6	DS-3CTSW	1.15	22.3	325	91.7	25.1/12.5	
15	1800	200	254T	CVW15V2H6	$2,814	W6	DS-3CTSW	1.15	22.3	325	92.4	41	
	1800	230/460	254T	CVW15V2B6	$2,814	W6	DS-3CTSW	1.15	22.3	325	92.4	36/18	
	1200	230/460	284T	CVW15V3B6	$5,105	W6	DS-3CTSW	1.15	24.8	380	91.7	36/18.2	
20	1800	200	256T	CVW20V2H6	$3,195	W6	DS-3CTSW	1.15	22.3	325	93.0	54	
	1800	230/460	256T	CVW20V2B6	$3,195	W6	DS-3CTSW	1.15	22.3	325	93.0	47/23.7	
	1200	230/460	286T	CVW20V3B6	$5,809	W6	DS-3CTSW	1.15	24.8	410	91.7	48/24	
25	1800	230/460	284T	CVW25V2B6	$4,322	W6	DS-3CTSW	1.15	24.8	380	93.6	58/29.2	
	1200	230/460	324T	CVW25V3B6	$7,867	W6	DS-3CTSW	1.15	27.5	605	93.0	59/29.3	
30	1800	230/460	286T	CVW30V2B6	$4,551	W6	DS-3CTSW	1.15	24.8	410	93.6	69/34	
	1200	230/460	326T	CVW30V3B6	$8,290	W6	DS-3CTSW	1.15	27.5	605	93.0	70/35	
40	1800	230/460	324T	CVW40V2B6	$5,747	W6	DS-3CTSW	1.15	27.5	605	94.1	92/46	
	1200	230/460	364T	CVW40V3B6	$10,422	W6	DS-3CTSW	1.15	29.6	740	94.1	94/47	
50	1800	230/460	326T	CVW50V2B6	$6,661	W6	DS-3CTSW	1.15	27.5	605	94.5	112/56	
	1200	230/460	365T	CVW50V3B6	$12,111	W6	DS-3CTSW	1.15	29.6	910	94.1	117/59	
60	1800	230/460	364T	CVW60V2B6	$8,855	W6	DS-3CTSW	1.15	29.6	740	95.0	137/68	
	1200	230/460	404T	CVW60V3B6	$16,229	W6	DS-3CTSW	1.15	33.8	960	94.5	140/70	
75	1800	230/460	365T	CVW75V2B6	$10,227	W6	DS-3CTSW	1.15	29.6	910	95.4	170/85	
	1200	230/460	405T	CVW75V3B6	$18,766	W6	DS-3CTSW	1.15	33.8	990	94.5	178/89	
100	1800	230/460	405T	CVW100V2B6	$15,250	W6	DS-3CTSW	1.15	33.8	1000	95.4	229/115	

Minimum Air Velocity Required for TEAO Models

Horsepower	Velocity (FPM) 4 Pole	Velocity (FPM) 6 Pole
2	1000	580
3	1000	600
5	1054	700
7 .5	1023	650
10	975	600
15	1500	650
20	1700	850

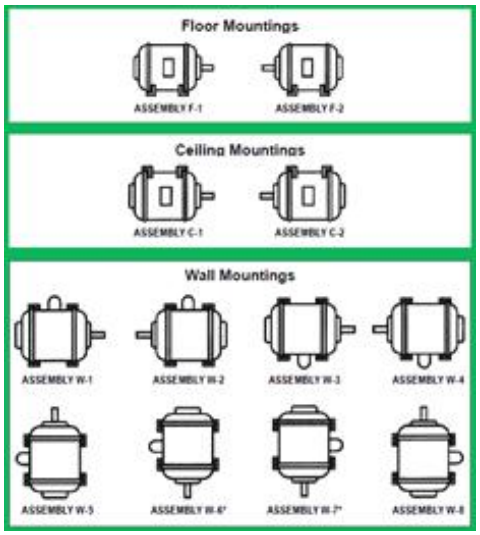
Horsepower	Velocity (FPM) 4 Pole	Velocity (FPM) 6 Pole
25	1500	950
30	1600	1000
40	1700	1100
50	1800	1150
60	1800	1150
75	2000	1300
100	2000	1300

Option List Prices

Totally Enclosed Fan Cooled (TEFC)

* W6 & W7 mounting not available on Totally Enclosed Fan Cooled (TEFC) Motors.

HP	RPM	Volts	Frame	New Stock Cat#	List Price	Assembly Position	Discount Symbol	SF	"C" Dim. (inches)"	Ship Wt. (lbs)	NEMA Nom. Eff.	Full Load Amps	Notes
2	1800	230/460	145T	CW2V2E2	$698	F2	DS-3CTSW	1.15	13.5	80	86.5	5.3/2.7	
	1200	230/460	184T	CW2V3E2	$1,290	F2	DS-3CTSW	1.15	16.3	110	88.5	6.2/3.1	
3	1800	200	182T	CW3V2H2	$1,050	F2	DS-3CTSW	1.15	16.3	100	89.5	8.8	
	1800	230/460	182T	CW3V2E2	$1,050	F2	DS-3CTSW	1.15	16.3	100	89.5	7.8/3.9	
	1800	575	182T	CW3V2G2	$1,050	F2	DS-3CTSW	1.15	16.3	100	89.5	3.1	
	1200	230/460	213T	CW3V3E2	$1,942	F2	DS-3CTSW	1.15	19.6	170	90.2	8.6/4.3	
5	1800	200	184T	CW5V2H2	$1,095	F2	DS-3CTSW	1.15	16.3	110	89.5	14.5	
	1800	230/460	184T	CW5V2E2	$1,095	F2	DS-3CTSW	1.15	16.3	110	89.5	12.7/6.3	
	1800	575	184T	CW5V2G2	$1,095	F2	DS-3CTSW	1.15	16.3	110	89.5	5.1	
	1200	230/460	215T	CW5V3E2	$2,026	F2	DS-3CTSW	1.15	19.6	180	90.2	14.2/7.1	
7 1/2	1800	200	213T	CW7V2H2	$1,509	F2	DS-3CTSW	1.15	19.6	170	91.7	22	
	1800	230/460	213T	CW7V2E2	$1,509	F2	DS-3CTSW	1.15	19.6	170	91.0	19.1/9.6	
	1800	575	213T	CW7V2G2	$1,509	F2	DS-3CTSW	1.15	19.6	170	91.7	7.8	
	1200	230/460	254T	CW7V3E2	$2,791	F2	DS-3CTSW	1.15	24.9	250	91.0	18.8/9.4	
10	1800	200	215T	CW10V2H2	$1,786	F2	DS-3CTSW	1.15	19.6	180	91.7	29.3	
	1800	230/460	215T	CW10V2E2	$1,786	F2	DS-3CTSW	1.15	19.6	180	91.7	25.7/12.8	
	1800	575	215T	CW10V2G2	$1,786	F2	DS-3CTSW	1.15	19.6	180	91.7	10.3	
	1200	230/460	256T	CW10V3E2	$3,304	F2	DS-3CTSW	1.15	24.9	280	91.7	24.9/12.4	
15	1800	200	254T	CW15V2H2	$2,563	F2	DS-3CTSW	1.15	24.9	270	92.4	41	
	1800	230/460	254T	CW15V2E2	$2,563	F2	DS-3CTSW	1.15	24.9	270	92.4	36/18	
	1800	575	254T	CW15V2G2	$2,563	F2	DS-3CTSW	1.15	24.9	270	92.4	14.5	
20	1800	200	256T	CW20V2H2	$2,932	F2	DS-3CTSW	1.15	24.9	300	93.0	55	
	1800	230/460	256T	CW20V2E2	$2,932	F2	DS-3CTSW	1.15	24.9	300	93.0	47/23.7	
	1800	575	256T	CW20V2G2	$2,932	F2	DS-3CTSW	1.15	24.9	300	93.0	18.9	
25	1800	200	284T	CW25V2H2	$3,981	F2	DS-3CTSW	1.15	27.5	385	93.6	67	
	1800	230/460	284T	CW25V2E2	$3,981	F2	DS-3CTSW	1.15	27.5	380	93.6	58/29.2	
	1800	575	284T	CW25V2G2	$3,981	F2	DS-3CTSW	1.15	27.5	380	93.6	23.3	
30	1800	230/460	286T	CW30V2E2	$4,203	F2	DS-3CTSW	1.15	27.5	410	93.6	70/35	
	1800	575	286T	CW30V2G2	$4,203	F2	DS-3CTSW	1.15	27.5	410	93.6	28.1	
40	1800	230/460	324T	CW40V2E2	$5,307	F2	DS-3CTSW	1.15	30.1	600	94.1	92/46	
	1800	575	324T	CW40V2G2	$5,307	F2	DS-3CTSW	1.15	30.1	600	94.1	37	
50	1800	230/460	326T	CW50V2E2	$6,193	F2	DS-3CTSW	1.15	30.1	625	94.5	112/56	
	1800	575	326T	CW50V2G2	$6,193	F2	DS-3CTSW	1.15	30.1	625	94.5	45	
60	1800	230/460	364T	CW60V2E2	$8,297	F2	DS-3CTSW	1.15	32.3	740	95.0	137/68	
	1800	575	364T	CW60V2G2	$8,297	F2	DS-3CTSW	1.15	32.3	910	95.0	55	
75	1800	230/460	365T	CW75V2E2	$9,628	F2	DS-3CTSW	1.15	32.3	910	95.4	170/85	



World Motor Cooling Tower Duty Three Phase, TEAO & TEFC, Internal Grounding Ring, Premium Efficient, Inverter Duty 10:1 (6-60 Hz) Speed Range Variable Torque

APPLICATIONS:

For use in Cooling Tower, Evaporative Condenser and other commercial and industrial applications requiring protection from harsh operating conditions with high humidity.

FEATURES:

- INVERTER GRADE® Motors with Insulation that Exceeds the NEMA®† MG-1 Part 31 Standard
- Double Dip & Bake, 100% Solids, Polyester Insulation on Windings
- Class F Insulation, 40°C Ambient
- Cast Iron Frame & Outlet Box
- Cast Iron Bearing Caps
- Double Sealed bearings
- Double Drilled Feet to Accommodate Mounting Flexibility
- Sealed Bracket-to-Frame Registers & Leads
- Stainless Steel Nameplate & Zinc Plated Hardware
- 1.15 Service Factor
- Rotor Balance better than 0.08 in/sec Inverter Compatible: Exceeds NEMA®† MG-1 Part 31 (10:1 Variable Torque)
- NEMA®† Design B Performance on 60 Hertz Sine Wave Power
- Meets IEC 34-5 Classification IP55
- Space Heater (115v)
- Includes CORRO-DUTY® Motor Paint and Rotor Treatment
- Internal Shaft Grounding Ring

ORDERING INFORMATION:

Options below available from Southaven and Rancho Cucamonga Distribution Centers ONLY

Option List Prices: Add motor & required options list prices, then use applicable multiplier to calculate net price.

Options	Frame Size								
	140	180	210	250	280	320	360	400	440
Thermistor	$725	$725	$725	$725	$725	$725	$725	$725	$725
TEFC W5 or W8 Mounting	$89	$125	$137	$174	$221	$281	$310	$419	$478

Totally Enclosed Fan Cooled (TEFC)

HP	RPM	Volts	Frame	New Stock Cat#	List Price	Assembly Position	Discount Symbol	SF	"C" Dim. (inches)	Ship Wt. (lbs)	NEMA Nom. Eff.	Full Load Amps	Notes
3	1800	230/460	182T	CWG3V2B2	$1,375	F2	DS-3CTSW	1.15	16.3	110	89.5	7.8/3.9	SGR
5	1800	230/460	184T	CWG5V2B2	$1,420	F2	DS-3CTSW	1.15	16.3	120	89.5	12.7/6.3	SGR
7 1/2	1800	230/460	213T	CWG7V2B2	$1,834	F2	DS-3CTSW	1.15	19.6	170	91.7	19.1/9.6	SGR
10	1800	230/460	215T	CWG10V2B2	$2,111	F2	DS-3CTSW	1.15	19.6	180	91.7	25.7/12.8	SGR
15	1800	230/460	254T	CWG15V2B2	$2,913	F2	DS-3CTSW	1.15	24.9	285	92.4	36/18	SGR
20	1800	230/460	256T	CWG20V2B2	$3,282	F2	DS-3CTSW	1.15	24.9	315	93	47/23.7	SGR
25	1800	230/460	284T	CWG25V2B2	$4,346	F2	DS-3CTSW	1.15	27.5	375	93.6	58/29.2	SGR
30	1800	230/460	286T	CWG30V2B2	$4,568	F2	DS-3CTSW	1.15	27.5	385	93.6	70/35	SGR
40	1800	230/460	324T	CWG40V2B2	$5,685	F2	DS-3CTSW	1.15	30.1	515	94.1	92/46	SGR
50	1800	230/460	326T	CWG50V2B2	$6,571	F2	DS-3CTSW	1.15	30.1	615	94.5	112/56	SGR
60	1800	230/460	364T	CWG60V2B2	$8,717	F2	DS-3CTSW	1.15	32.3	715	95	137/68	SGR

Totally Enclosed Air Over (TEAO)

HP	RPM	Volts	Frame	New Stock Cat#	List Price	Assembly Position	Discount Symbol	SF	"C" Dim. (inches)	Ship Wt. (lbs)	NEMA Nom. Eff.	Full Load Amps	Notes
5	1800	230/460	184T	CVWG5V2B6	$1,579	W6	DS-3CTSW	1.15	13.6	110	89.5	12.7/6.3	SGR
7 1/2	1800	230/460	213T	CVWG7V2B6	$2,016	W6	DS-3CTSW	1.15	17.1	170	91.7	19.2/9.6	SGR
10	1800	230/460	215T	CVWG10V2B6	$2,301	W6	DS-3CTSW	1.15	17.1	180	91.7	25.7/12.8	SGR
15	1800	230/460	254T	CVWG15V2B6	$3,164	W6	DS-3CTSW	1.15	22.3	275	92.4	36/18	SGR
20	1800	230/460	256T	CVWG20V2B6	$3,545	W6	DS-3CTSW	1.15	22.3	305	93	47/23.7	SGR
25	1800	230/460	284T	CVWG25V2B6	$4,687	W6	DS-3CTSW	1.15	24.8	365	93.6	58/29.2	SGR
30	1800	230/460	286T	CVWG30V2B6	$4,916	W6	DS-3CTSW	1.15	24.8	395	93.6	69/34	SGR
40	1800	230/460	324T	CVWG40V2B6	$6,125	W6	DS-3CTSW	1.15	27.5	505	94.1	92/46	SGR
50	1800	230/460	326T	CVWG50V2B6	$7,039	W6	DS-3CTSW	1.15	27.5	615	94.5	112/56	SGR
60	1800	230/460	364T	CVWG60V2B6	$9,275	W6	DS-3CTSW	1.15	29.6	705	95	137/68	SGR
75	1800	230/460	365T	CVWG75V2B6	$10,647	W6	DS-3CTSW	1.15	29.6	765	95	170/85	SGR

† All marks shown within this document are properties of their respective owners.

Nidec Motor Corporation, © 2020; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation. Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

NIDEC MOTOR CORPORATION

www.nidec-motor.com/
PDS Stock Cooling Motors

8050 W. Florissant Avenue | St. Louis, MO 63136
Phone: 888-637-7333 | Fax: 866-422-7758

CORRO-DUTY® Vertical HOLLOSHAFT® Inverter Duty Motors

In Stock Totally Enclosed Fan Cooled, Premium Efficient Vertical Motors

Horsepower: 5–300 HP

Poles: 2 & 4 (3600 & 1800 RPM)

Rated Voltage: 230/460V or 460V 60Hz

Frame Size: 184-449

Enclosure: Totally Enclosed Fan Cooled (TEFC)

Efficiency Level: NEMA Premium®† Efficient, Inverter Duty

Product Overview

All cast iron, U.S. MOTORS® brand CORRO-DUTY® Vertical HOLLOSHAFT® Inverter Duty Motors are now in stock.

CORRO-DUTY® Vertical HOLLOSHAFT® Inverter Duty motors are designed with a 1.0 service factor (1.15 S.F. on sinewave power) with full Class H insulating materials designed to withstand the steep-wave-front voltage impressed by the VFD waveform and are designed to run smoother and cooler on inverter power supplies, which can lead to improved system efficiency and reliability.

Product Features

- CORRO-DUTY – all cast iron construction
- Class H INVERTER GRADE® insulation
- Class B rise at full load (sine wave power)
- 1.15 Service Factor (sine wave power)
- Inverter duty per NEMA®† MG-1 Part 31 at 1.0 S.F.
- Maximum 40°C ambient, 3,300 feet altitude
- Premium Efficient design
- Thrust capacities among highest in industry
- Special balance
- 115-volt space heater
- Internal AEGIS®† Shaft Grounding Ring
- Upper insulated bearing 400 Frame & Up
- Non-Reverse Ratchet, BALLOMATIC®
  - First technology of its kind in the market
  - Prevents reverse rotation
- LUBRIPORT® oil sight level window on 400 Frame & up

BALLOMATIC®
Ratchet

Conversion Options

- Coupling (change to alternate)
- P-Base (change to alternate diameter)
- Fire pump label
- Special paint
- Steady bushing
- Tests – short commercial or complete initial

NIDEC MOTOR CORPORATION

Vertical HOLLOSHAFT® High Thrust Motors - "P" Base, Three Phase
TEFC CORRO-DUTY® Premium Efficient, Inverter Duty

HP	RPM	Volts	Frame	Catalog Number	Type	List w/ NRR	List w/ SRC	NEMA Nom. Eff.	Down Thrust (lbs)	Base Dia. (in.)	Cplg Height (in.)	Cplg BX (in.)	Cplg Key Size	Ship Wt. (lbs.)	Notes
5	3600	230/460	184TP	CHT5V1BLE	TUCI	$3,893	$3,560	88.5	2200	10	17-1/2	1	1/4	180	51,97,D
	3600	575	184TP	CHT5V1GLE	TUCI	$3,893	$3,560	88.5	2200	10	17-1/2	1	1/4	180	51,97,D
	1800	230/460	184TP	CHT5V2BLE	TUCI	$3,654	$3,321	89.5	2500	10	17-1/2	1	1/4	180	51,97,D
	1800	575	184TP	CHT5V2GLE	TUCI	$3,654	$3,321	89.5	2500	10	17-1/2	1	1/4	180	51,97,D
7 1/2	3600	230/460	213TP	CHT7V1BLE	TUCI	$4,044	$3,701	89.5	2200	10	17-1/2	1	1/4	220	51,97,D
	3600	575	213TP	CHT7V1GLE	TUCI	$4,044	$3,701	89.5	2200	10	17-1/2	1	1/4	220	51,97,D
	1800	230/460	213TP	CHT7V2BLE	TUCI	$3,962	$3,619	91.7	2500	10	17-1/2	1	1/4	220	51,97,D
	1800	575	213TP	CHT7V2GLE	TUCI	$3,962	$3,619	91.7	2500	10	17-1/2	1	1/4	220	51,97,D
10	3600	230/460	215TP	CHT10V1BLE	TUCI	$4,398	$4,046	90.2	2200	10	17-1/2	1	1/4	230	51,97,D
	3600	575	215TP	CHT10V1GLE	TUCI	$4,398	$4,046	90.2	2200	10	17-1/2	1	1/4	230	51,97,D
	1800	230/460	215TP	CHT10V2BLE	TUCI	$4,307	$3,955	91.7	2500	10	17-1/2	1	1/4	230	51,97,D
	1800	575	215TP	CHT10V2GLE	TUCI	$4,307	$3,955	91.7	2500	10	17-1/2	1	1/4	230	51,97,D
15	3600	230/460	254TP	CHT15V1BLE	TUCI	$4,945	$4,532	91.0	3300	10	22-15/16	1	1/4	395	51,97,D
	3600	575	254TP	CHT15V1GLE	TUCI	$4,945	$4,532	91.0	3300	10	22-15/16	1	1/4	395	51,97,D
	1800	230/460	254TP	CHT15V2BLE	TUCI	$6,019	$5,596	92.4	3300	10	22-15/16	1	1/4	395	51,97,D
	1800	575	254TP	CHT15V2GLE	TUCI	$6,019	$5,596	92.4	3300	10	22-15/16	1	1/4	395	51,97,D
20	1800	230/460	256TP	CHT20V2BLE	TUCI	$6,703	$6,215	93.0	3300	10	22-15/16	1	1/4	405	51,97,D
	1800	575	256TP	CHT20V2GLE	TUCI	$6,703	$6,215	93.0	3300	10	22-15/16	1	1/4	405	51,97,D
25	1800	230/460	284TPA	CHT25V2BLF	TUCI	$7,565	$7,020	93.6	3300	12	26-9/16	1	1/4	500	51,97,D
	1800	575	284TPA	CHT25V2GLF	TUCI	$7,565	$7,020	93.6	3300	12	26-9/16	1	1/4	500	51,97,D
30	1800	230/460	286TPA	CHT30V2BLF	TUCI	$8,337	$7,727	93.6	3300	12	26-9/16	1	1/4	520	51,97,D
	1800	575	286TPA	CHT30V2GLF	TUCI	$8,337	$7,727	93.6	3300	12	26-9/16	1	1/4	520	51,97,D
40	1800	230/460	324TP	CHT40V2BLG	TUCI	$10,564	$9,883	94.5	4500	16-1/2	28-1/2	1-1/2	3/8	740	51,97,D
	1800	575	324TP	CHT40V2GLG	TUCI	$10,564	$9,883	94.1	4500	16-1/2	28-1/2	1-1/2	3/8	740	51,97,D
50	1800	230/460	326TP	CHT50V2BLG	TUCI	$12,194	$11,386	94.5	4500	16-1/2	28-1/2	1-1/2	3/8	750	51,97,D
	1800	575	326TP	CHT50V2GLG	TUCI	$12,194	$11,386	94.5	4500	16-1/2	28-1/2	1-1/2	3/8	750	51,97,D
60	1800	460	364TP	CHT60V2CLG	TUCI	$15,131	$14,131	95.0	5600	16-1/2	30	1-1/4	1/4	925	51,97,D
	1800	575	364TP	CHT60V2GLG	TUCI	$15,131	$14,131	95.0	5600	16-1/2	30	1-1/4	1/4	925	51,97,D
75	1800	460	365TP	CHT75V2CLG	TUCI	$17,917	$16,706	95.4	5600	16-1/2	30	1-1/4	1/4	940	51,97,D
	1800	575	365TP	CHT75V2GLG	TUCI	$17,917	$16,706	95.4	5600	16-1/2	30	1-1/4	1/4	940	51,97,D
100	1800	460	405TP	CHT100V2CLG	TUCI	$24,122	$22,488	95.4	7000	16-1/2	39-15/16	1-1/2	3/8	1600	51,97,E
	1800	575	405TP	CHT100V2GLG	TUCI	$24,122	$22,488	95.4	7000	16-1/2	39-15/16	1-1/2	3/8	1600	51,97,E
125	1800	460	444TP	CHT125V2CLG	TUCI	$33,598	$31,729	95.4	9300	16-1/2	42-1/2	1-1/2	3/8	1900	51,97,E
	1800	575	444TP	CHT125V2GLG	TUCI	$33,598	$31,729	95.4	9300	16-1/2	42-1/2	1-1/2	3/8	1900	51,97,E
150	1800	460	447TP	CHT150V2CLG	TUCI	$39,655	$37,373	95.8	9300	16-1/2	46	1-1/2	3/8	2300	51,97,E
	1800	575	447TP	CHT150V2GLG	TUCI	$39,655	$37,373	95.8	9300	16-1/2	46	1-1/2	3/8	2300	51,97,E
200	1800	460	447TP	CHT200V2CLG	TUCI	$52,944	$49,756	96.2	9300	16-1/2	46	1-11/16	3/8	2300	51,97,E
	1800	575	447TP	CHT200V2GLG	TUCI	$52,944	$49,756	96.2	9300	16-1/2	46	1-11/16	3/8	2300	51,97,E
250	1800	460	449TP	CHT250V2CLJX	JUCEI	$61,776	$60,424	96.2	15400	24-1/2	56-7/8	1-11/16	3/8	3800	51,97,E
	1800	575	449TP	CHT250V2GLJX	JUCEI	$61,776	$60,424	96.2	15400	24-1/2	56-7/8	1-11/16	3/8	3800	51,97,E
300	1800	460	449TP	CHT300V2CLJX	JUCEI	$67,994	$66,482	96.2	15400	24-1/2	56-7/8	1-15/16	1/2	3900	51,97,E
	1800	575	449TP	CHT300V2GLJX	JUCEI	$67,994	$66,482	96.2	15400	24-1/2	56-7/8	1-15/16	1/2	3900	51,97,E

Note 51 equipped with winding thermostat
Note 97 inverter duty with inverter grade insulation
Note D includes internal shaft grounding ring
Note E includes internal shaft grounding ring and upper insulated bearing

For additional information, please refer to our Full Line Standard Motor Catalog (FL600) or contact your Nidec Motor Corporation representative

† All marks shown within this document are properties of their respective owners.

Nidec Motor Corporation, © 2019; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation.
Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

NIDEC MOTOR CORPORATION
8050 W. Florissant Avenue | St. Louis, MO 63136
Phone: 888-637-7333 | Fax: 866-422-7758

Definite Purpose Three Phase, Totally Enclosed Fan Cooled (TEFC) World Motor Hostile Duty, Inverter Duty 20:1 (3-60 Hertz) Speed Range Variable Torque 5:1 (12-60 Hertz) Speed Range Constant Torque

APPLICATIONS:

For use on pumps, fans, blowers or other inverter powered applications having variable torque requirements.
Constant torque applications requiring 5:1 or less speed range and applications requiring a drive bypass.

FEATURES:

- Inverter Grade® Insulation System (Meets NEMA®† MG-1 Part 31)
- Class F Thermostats (One Per Phase)
- Shaft Grounding Ring
- Corrosion Resistant Mill & Chemical Duty Paint
- Cast Iron Frame, Cast Iron End Brackets
- Stainless Steel Nameplate & Zinc Plated Hardware
- Shaft Slinger On Pulley End For IP54 Protection
- Dual Voltage 230/460 Volts (1-100 HP)
- 40°C Ambient, NEMA®† Design B Performance On 60 Hz Sine Wave Power
- Regreasable Ball Bearings 250 Frame & Up, Lifting Provisions
- Double Shielded Bearings 140-360, Open On 400-440
- Double Dip & Bake With Extra Bracing
- Class F Insulation, 1.15 S.F. On Sine Wave / 1.0 S.F. On PWM
- Constant Horsepower To 90 Hz
- Steel Fan Cover & Conduit Box
- Field Convertible To F2 Mounting
- Condensation Drains With Plastic Plugs
- Conversion Kits: All Cast Iron Upgrade, C&D Flanges, Canopy Kits
- C-Face Footed 1-5 HP
- Bearing Caps On 400-440
- Non-Drive End Insulated Bearing On 400-440

HP	RPM	Voltage	Frame	Catalog Number	List	Discount Symbol	"C" Dim. (inches)	Ship Wt. (lbs)	Full Load Eff.	Full Load Amps	Notes
1	1800(3600)	230/460	143TC	HD1V2BC	$639	DS-VSTW	14.0	60	85.5	3/1.5	SGR
	1200(2400)	230/460	145TC	HD1V3BC	$785	DS-VSTW	14.0	70	82.5	3.7/1.8	SGR
1 1/2	3600(7200)	230/460	143TC	HD32V1BC	$699	DS-VSTW	14.0	50	84.0	3.9/1.9	SGR
	1800(3600)	230/460	145TC	HD32V2BC	$675	DS-VSTW	14.0	70	86.5	4.1/2.1	SGR
	1200(2400)	230/460	182TC	HD32V3BC	$848	DS-VSTW	17.1	90	87.5	4.5/2.2	SGR
2	3600(7200)	230/460	145TC	HD2V1BC	$722	DS-VSTW	14.0	50	85.5	5/2.5	SGR
	1800(3600)	230/460	145TC	HD2V2BC	$731	DS-VSTW	14.0	70	86.5	5.3/2.7	SGR
	1200(2400)	230/460	184TC	HD2V3BC	$935	DS-VSTW	17.1	110	88.5	6.2/3.1	SGR
3	3600(7200)	230/460	182TC	HD3V1BC	$861	DS-VSTW	17.1	80	86.5	8.2/4.1	SGR
	1800(3600)	230/460	182TC	HD3V2BC	$828	DS-VSTW	17.1	100	89.5	7.8/3.9	SGR
	1200(2400)	230/460	213TC	HD3V3BC	$1,120	DS-VSTW	19.6	170	89.5	8.6/4.3	SGR
5	3600(7200)	230/460	184TC	HD5V1BC	$994	DS-VSTW	17.1	90	88.5	12.3/6.1	SGR
	1800(3600)	230/460	184TC	HD5V2BC	$923	DS-VSTW	17.1	110	89.5	12.7/6.3	SGR
	1200(2400)	230/460	215TC	HD5V3BC	$1,540	DS-VSTW	20.4	180	89.5	14.2/7.1	SGR
7 1/2	3600(7200)	230/460	213T	HD7V1B	$1,099	DS-VSTW	19.6	130	89.5	18.1/9	SGR
	1800(3600)	230/460	213T	HD7V2B	$1,055	DS-VSTW	19.6	150	91.7	19.1/9.6	SGR
	1200(2400)	230/460	254T	HD7V3B	$1,873	DS-VSTW	24.9	230	91.0	18.8/9.4	SGR
10	3600(7200)	230/460	215T	HD10V1B	$1,281	DS-VSTW	19.6	140	90.2	23.5/11.8	SGR
	1800(3600)	230/460	215T	HD10V2B	$1,313	DS-VSTW	19.6	170	91.7	25.7/12.8	SGR
	1200(2400)	230/460	256T	HD10V3B	$2,226	DS-VSTW	24.9	250	91.0	24.9/12.4	SGR
15	3600(7200)	230/460	254T	HD15V1B	$1,803	DS-VSTW	24.9	250	91.0	35/17.4	SGR
	1800(3600)	230/460	254T	HD15V2B	$1,757	DS-VSTW	24.9	250	92.4	36/18	SGR
	1200(2400)	230/460	284T	HD15V3B	$2,941	DS-VSTW	27.5	310	91.7	37/18.5	SGR
20	3600(7200)	230/460	256T	HD20V1B	$2,235	DS-VSTW	24.9	260	91.0	46/23	SGR
	1800(3600)	230/460	256T	HD20V2B	$2,186	DS-VSTW	24.9	280	93.0	47/23.7	SGR
	1200(2400)	230/460	286T	HD20V3B	$3,616	DS-VSTW	27.5	350	91.7	49/24.4	SGR
25	3600(7200)	230/460	284TS	HD25V1BS	$2,658	DS-VSTW	26.1	310	91.7	58/28.8	SGR
	1800(2700)	230/460	284T	HD25V2B	$2,571	DS-VSTW	27.5	330	93.6	58/29.2	SGR
	1200(2400)	230/460	324T	HD25V3B	$4,619	DS-VSTW	30.1	490	93.0	59/29.3	SGR
30	3600(5400)	230/460	286TS	HD30V1BS	$3,188	DS-VSTW	26.1	310	91.7	69/35	SGR
	1800(2700)	230/460	286T	HD30V2B	$3,053	DS-VSTW	27.5	340	93.6	70/35	SGR
	1200(2400)	230/460	326T	HD30V3B	$5,254	DS-VSTW	30.1	520	93.0	70/35	SGR

Note SGR Shaft Grounding Ring

† All marks shown within this document are properties of their respective owners.

Definite Purpose Three Phase, Totally Enclosed Fan Cooled (TEFC) World Motor Hostile Duty, Inverter Duty 20:1 (3-60 Hertz) Speed Range Variable Torque 5:1 (12-60 Hertz) Speed Range Constant Torque

(continued)

HP	RPM	Voltage	Frame	Catalog Number	List	Discount Symbol	"C" Dim. (inches)	Ship Wt. (lbs)	Full Load Eff.	Full Load Amps	Notes
40	3600(5400)	230/460	324TS	HD40V1BS	$3,758	DS-VSTW	28.6	410	92.4	92/46	SGR
	1800(2700)	230/460	324T	HD40V2B	$3,644	DS-VSTW	30.1	450	94.1	92/46	SGR
	1200(2400)	230/460	364T	HD40V3B	$5,821	DS-VSTW	32.3	630	94.1	94/47	SGR
50	3600(5400)	230/460	326TS	HD50V1BS	$5,036	DS-VSTW	28.6	480	93.0	112/56	SGR
	1800(2700)	230/460	326T	HD50V2B	$4,524	DS-VSTW	30.1	550	94.5	112/56	SGR
	1200(2400)	230/460	365T	HD50V3B	$7,239	DS-VSTW	32.3	680	94.1	117/59	SGR
60	3600(5400)	230/460	364TS	HD60V1BS	$6,476	DS-VSTW	30.2	560	93.6	136/68	SGR
	1800(3600)	230/460	364T	HD60V2B	$6,330	DS-VSTW	32.3	640	95.0	137/68	SGR
	1200(2400)	230/460	404T	HD60V3B	$8,517	DS-VSTW	37.6	940	94.5	141/71	SGR
75	3600(4500)	230/460	365TS	HD75V1BS	$8,339	DS-VSTW	30.2	650	94.1	165/83	SGR
	1800(3600)	230/460	365T	HD75V2B	$7,728	DS-VSTW	32.3	700	95.4	170/85	SGR
	1200(2400)	230/460	405T	HD75V3B	$10,133	DS-VSTW	37.6	970	94.5	178/89	SGR
100	3600(4500)	230/460	405TS	HD100V1BS	$11,178	DS-VSTW	34.6	900	94.1	228/114	SGR
	1800(3600)	230/460	405T	HD100V2B	$10,133	DS-VSTW	34.6	980	95.4	229/115	SGR
	1200(2400)	460	444T	HD100V3C	$13,603	DS-VSTW	44.4	1450	95.0	120	SGR
125	3600(4500)	460	444TS	HD125V1CS	$13,997	DS-VSTW	40.6	1300	95.0	142	SGR
	1800(3600)	460	444T	HD125V2C	$13,146	DS-VSTW	44.4	1260	95.4	141	SGR
	1200(2400)	460	445T	HD125V3C	$16,895	DS-VSTW	44.4	1500	95.0	153	SGR
150	3600(4500)	460	445TS	HD150V1CS	$17,743	DS-VSTW	40.6	1410	95.0	167	SGR
	1800(3600)	460	445T	HD150V2C	$15,831	DS-VSTW	44.4	1480	95.8	171	SGR
	1200(2400)	460	445T	HD150V3C	$19,320	DS-VSTW	44.4	1650	95.8	179	SGR
200	3600(4500)	460	447TS	HD200V1CS	$24,249	DS-VSTW	44.1	1540	95.4	222	SGR
	1800(3600)	460	447T	HD200V2C	$20,503	DS-VSTW	47.9	1630	96.2	226	SGR

Note SGR Shaft Grounding Ring

† All marks shown within this document are properties of their respective owners.

Definite Purpose Three Phase, Totally Enclosed Fan Cooled (TEFC) UNIMOUNT®, Inverter Duty 20:1 (3-60 Hertz) Speed Range Variable Torque, 5:1 (12-60 Hertz) Speed Range Constant Torque

UTI

APPLICATIONS:

For use on pumps, fans, blowers or other variable torque applications. Constant torque applications requiring 5:1 or less speed range and applications requiring a drive bypass.

FEATURES:

- INVERTER GRADE® Insulation System (Meets NEMA®† MG-1 Part 31)
- Class F Thermostats (One Per Phase)
- Extruded Aluminum Frame (140: Rolled Steel)
- Aluminum End Shields With Steel Bearing Inserts
- 40°C Ambient, NEMA®† Design B Performance On 60 Hertz Sine Wave Power
- Removable Base 180 Frame & Larger
- Lifting Provisions 180 Frame & Larger
- Regreasable Shaft-End Bearing 180 Frame & Larger
- Sealed Bearings 56-140, Double Shielded Bearings 180-280
- Double Dip & Bake With Extra Bracing
- Premium Efficient Design, Special Balance, F1 Assembly Position
- Class F Insulation, 1.15 S.F. On Sine Wave / 1.0 S.F. On PWM
- Constant Horsepower To 90 Hertz
- Precision Balance (< 0.08 In/Sec Vibration)
- C-Face Footed 1-5 HP
- Brake Kits Available 56-210 Frame
- Shaft Grounding Ring 140-250 Frame (Updating models to include Grounding Ring, confirm availability at time of order)

HP	RPM (Max Speed)	Voltage	Frame	Catalog Number	List	Discount Symbol	"C" Dim. (inches)	Ship Wt. (lbs)	NEMA Nom. Eff.	Full Load Amps	Notes
1/3	1800(3600)	230/460	56C	U13T2BCR	$420	DS-VST	10.8	22	75.5	1.6/0.8	FTLS
1/2	1800(3600)	208-230/460	56C	UN12V2AC	$444	DS-VST	8.8	26	84.0	2.0-2.1/1.1	28
	1800(3600)	230/460	56C	U12T2BCR	$463	DS-VST	10.8	28	78.5	2.3/1.1	FTLS
	1200(2400)	208-230/460	56C	UN12V3BC	$578	DS-VST	10.3	33	-	2.3-2.4/1.2	28
3/4	1800(3600)	208-230/460	56C	UN34V2AC	$498	DS-VST	10.3	26	-	2.8-2.7/1.3	
	1800(3600)	230/460	56C	U34T2BCR	$497	DS-VST	12.1	32	82.5	2.7/1.3	FTLS
	1200(2400)	208-230/460	56C	UN34V3BC	$622	DS-VST	13.6	32	-	3.1-3.0/1.5	28
1	1800(3600)	208-230/460	56C	UN1V2AFC	$553	DS-VST	11.8	37	85.5	3.5-3.4/1.7	28
	1800(3600)	230/460	143TC	U1V2BC	$569	DS-VST	13.1	45	85.5	3.0/1.5	SGR
	1200(2400)	230/460	145TC	U1V3BC	$740	DS-VST	13.1	42	82.5	3.7/1.8	SGR
1 1/2	3600(7200)	230/460	143TC	U32V1BC	$646	DS-VST	13.1	37	84.0	3.9/1.9	SGR
	1800(3600)	208-230/460	56C	T32V2BFC	$607	DS-VST	13.4	34	76.0	5.1-5.0/2.5	
	1800(3600)	230/460	145TC	U32V2BC	$623	DS-VST	13.1	42	86.5	4.1/2.1	SGR
	1200(2400)	230/460	182TC	U32V3BC	$864	DS-VST	16.2	60	87.5	4.5/2.2	SGR
2	3600(7200)	230/460	145TC	U2V1BC	$675	DS-VST	13.1	40	85.5	5/2.5	SGR
	1800(3600)	230/460	145TC	U2V2BC	$656	DS-VST	13.1	55	86.5	5.3/2.7	SGR
	1200(2400)	230/460	184TC	U2V3BC	$961	DS-VST	16.9	70	88.5	6.2/3.1	SGR
3	3600(7200)	230/460	182TC	U3V1BC	$882	DS-VST	16.2	60	86.5	8.2/4.1	SGR
	1800(3600)	230/460	182TC	U3V2BC	$780	DS-VST	16.2	75	89.5	7.8/3.9	SGR
	1200(2400)	230/460	213TC	U3V3BC	$1,191	DS-VST	18.8	115	89.5	8.6/4.3	SGR
5	3600(7200)	230/460	184TC	U5V1BC	$1,106	DS-VST	16.2	75	88.5	12.3/6.1	SGR
	1800(3600)	230/460	184TC	U5V2BC	$906	DS-VST	16.9	80	89.5	12.7/6.3	SGR
	1200(2400)	230/460	215TC	U5V3BC	$1,705	DS-VST	20.3	145	89.5	14.2/7.1	SGR
7 1/2	3600(7200)	230/460	213T	U7V1B	$1,371	DS-VST	18.6	105	89.5	17.9/9	SGR
	1800(3600)	230/460	213T	U7V2B	$1,240	DS-VST	18.6	115	91.7	19.3/9.6	SGR
	1200(2400)	230/460	254T	U7V3B	$2,276	DS-VST	23.9	212	91.0	18.6/9.3	SGR
10	3600(7200)	230/460	215T	U10V1B	$1,607	DS-VST	20.1	125	90.2	23.5/11.8	SGR
	1800(3600)	230/460	215T	U10V2B	$1,497	DS-VST	20.1	140	91.7	25.7/12.8	SGR
15	3600(7200)	230/460	254T	U15V1B	$2,299	DS-VST	23.9	202	90.2	35/17.7	SGR
	1800(3600)	230/460	254T	U15V2B	$2,068	DS-VST	23.9	180	92.4	37/18.4	SGR
20	3600(7200)	230/460	256T	U20V1B	$2,846	DS-VST	25.6	222	90.2	47/23.4	SGR
	1800(3600)	230/460	256T	U20V2B	$2,548	DS-VST	25.6	262	93.0	47/23.7	SGR

Note 28 TENV Enclosure
Note FTLS Footless
Note SGR Shaft Grounding Ring

VariTough® Motors

Commercial Condenser Motors

No matter the climate.

True Inverter Duty Construction™ Motors

*The Difference is **U.S. MOTORS***™

Why VariTough® Inverter Duty Motors?

A commercial condenser unit usually has multiple motors and is usually operating with only one variable frequency drive (VFD). This is a harsh environment in itself, but in addition, these motors need to be designed to work efficiently in the heat of the summer and also efficiently in the cooler parts of the year. Our U.S. MOTORS® VariTough® Inverter Duty Motors are not only designed to operate in a multi motor environment with one VFD, but our 4:1 ratio allows the motor to obtain the RPM's needed in the heat of the summer, and a lower RPM in the cooler parts of the year offering system efficiency, all the while protecting the condensing unit from "freezing up."

When installing, you the expert, must select the right motor for the application. If you are replacing a Commercial Condensing motor operating through a VFD, the VariTough® Inverter Duty Construction Motor should be your first choice.

Product Overview and Features

VariTough® motors are designed with U.S. MOTORS® brand Inverter Grade® Insulation System that has had years of proven success in our commercial belt drive products leading to longer life, less downtime and lower maintenance costs. VariTough® motors are designed to meet the NEMA MG1-Part 31 design guidelines, which most drive manufacturers recommend.

What is "shaft voltage" and how do VariTough® motors handle it?

High Switching frequencies of variable frequency drives can induce damaging voltage levels to the rotor.

- Induced voltages seek a path to ground, typically through the bearings.
- The electrical currents arc between the balls and races of the bearing causing craters, pitting and fluting that contribute to premature bearing failure.
- Some have tried to solve this by using conductive grease to facilitate the voltage reaching the motor housing and ground.
- However, conductive grease has two issues:
  - The particles that are added to the grease to make it conductive contribute to bearing wear.
  - There is only limited conductivity created that does little to get the induced voltage out of the bearing and avoid damage.
- VariTough® motors offer a more effective solution to protect the bearing where "shaft voltage" may be an issue.
  - Each motor has an AEGIS® SGR Bearing Protection Ring included/mounted on the motor, providing an alternative path for electrically grounding the shaft.
  - The ring is included/assembled with the VariTough® motors and is sold separately as an accessory kit number 21.

Shaft Grounding Comparison:

	Grounding Ring*	Conductive Grease
Long-term Effectiveness	Yes	No
Easy to Install	Yes	No
Contamination Proof	Yes	N/A
Effective at any RPM	Yes	No
Maintenance Free	Yes	No

*AEGIS® SGR Grounding Ring

Motor Specifications:

Horsepower: 1 – 2 HP

Phase: Three

Speeds: 850, 1140 RPM

Enclosure: Open Drip-Proof (ODP), Shaft-up Design

VariTough® Motor

Belly Band Mount										
Catalog Number	**HP**	**RPM**	**Volts**	**Amps**	**Frame**	**Bearings**	**Mount**	**Shaft (in.)*** **	**Total Length**	**Wt. (lbs.)**
1830VG	1	825	208–230/460	5.2–5.2/2.6	56YZ	Ball	Belly Band	5/8 x 3.2	13.6	43
1828VG	1	850	208–230/460	5.0–5.0/2.5	56YZ	Ball	Belly Band	5/8 x 6.0	16.8	32
1818VG	1	1140	208–230/460	4.3–4.3/2.1	56YZ	Ball	Belly Band	5/8 x 6.0	15.8	32
1832VG	1 1/2	850	208–230/460	7.2–7.2/3.6	56YZ	Ball	Belly Band	5/8 x 3.5	15.8	32
1819VG	1 1/2	1140	208–230/460	5.3–5.3/2.6	56YZ	Ball	Belly Band	5/8 x 6.0	16.3	43
8987VG	2	1140	208–230/460	7.8–7.8/3.9	56YZ	Ball	Belly Band	5/8 x 6.0	16.8	48
Rigid Base Mount										
1139VG	1/2	575	230/460	3.1/1.6	56YZ	Ball	Rigid	5/8 x 3.6	14.4	44
1833VG	1	850	208–230/460	5.0–5.0/2.5	56YZ	Ball	Rigid	5/8 x 6.0	16.8	42
1820VG	1	1140	208–230/460	4.3–4.3/2.1	56YZ	Ball	Rigid	5/8 x 6.0	15.8	38
1831VG	1 1/2	850	208–230/460	7.2–7.2/3.6	56YZ	Ball	Rigid	5/8 x 3.5	15.8	40
1821VG	1 1/2	1140	208–230/460	5.3–5.3/2.6	56YZ	Ball	Rigid	5/8 x 6.0	16.3	44
1822VG	2	1140	208–230/460	7.8–7.8/3.9	56YZ	Ball	Rigid	5/8 x 6.0	16.8	48

***Shaft has keyway and flat

VariTough® Inverter Duty Motor Features:

- Inverter duty
- Designed to NEMA MG1-Part 31
- 70°C (158°F) max ambient
- Thermostat overload detection
- AEGIS® SGR Protection Ring included and mounted
- Class F insulation system
- Double-sealed ball bearings
- Shaft-up, open drip-proof enclosure
- Continuous duty, air over
- Voltage change device
- Reversible rotation

Why VariTough® Inverter Duty Motors?

Issue:	Resolution:
Use of Variable Frequency drives (VFDs) to control the motor's speed, often cause electrical occurrences that require special motor designs to insure reliable performance. - Internal Voltage Spikes - Corona discharge between the windings	*True Inverter Duty Construction – Inverter Grade® Insulation System* prevents damaging corona effect allowing higher switching frequencies and longer cable lengths.
Most drive manufacturers recommend meeting NEMA MG1-Part 31 Design Guidelines.	*U.S. MOTORS® brands feature Inverter Grade® Insulation System* that has proven success in our commercial belt drive products leading to longer life, less downtime and lower maintenance costs. - Designed to NEMA MG1-Part 31 and have a 4:1 speed ratio
Demanding inverter duty applications, especially where multiple motors are driven by one VFD.	*U.S. MOTORS® brands feature Thermostat Overload Detection* –* Provides consistent, reliable protection even in the most demanding inverter duty applications, providing better motor protection for the motors than typical "auto protected" motors.
Bearing damage due to electrical discharges by VFD-induced shaft voltage.	Includes shaft grounding which provides maintenance-free bearing protection from damaging electrical discharges caused by VFD-induced shaft voltage.

*Must be wired in series with run circuit on variable frequency drive. **AEGIS® SGR Bearing Protection Ring included and mounted on motor.

†All marks shown within this document are properties of their respective owners.

Nidec Motor Corporation, © 2013; All Rights Reserved. U.S. MOTORS® is a registered trademark of Nidec Motor Corporation.
Nidec Motor Corporation trademarks followed by the ® symbol are registered with the U.S. Patent and Trademark Office.

PDS VariTough 08/13

NIDEC MOTOR CORPORATION

8050 W. Florissant Avenue | St. Louis, MO 63136

HVACR Aftermarket Customer Service
Phone: 855-487-6686 | Fax: 800-899-2887
www.usmotors.com