WOLONG
Power your future

EMPORIUM ENERGY



Energy Saver SD Aluminum Motors

Severe-Duty NEMA B
3 Phase, 60 Hz
230/460V
1 - 30 HP

NEMA B Motors
Sturdy Light Weight Design

Wolong severe-duty aluminum motors are widely used in a diverse range of applications from food and beverage to water and wastewater, HVAC, and refrigeration among others. Some of the benefits of aluminum over cast iron include, high resistance to most kinds of environmental corrosion, cooler running, and light weight. Aluminum frames and endshields are approximately one third the weight of cast iron making the motor significantly lighter.





Benefits

- High efficiency for low running costs
- Low noise levels
- High torque with smooth acceleration and low current
- 3-year warranty

Key Features

NEMA Frames	143 - 286
Poles	2, 4
Horsepower Range	1 - 30
Voltage	230/460
Shaft Extension	284 - 286 2-poles TS, all others T
Agency Approvals	UL1446 - Insulation System CSA - Certification/Efficiency
Altitude	3300 ft
Maximum Ambient	40°C @ 1.25SF @ 60Hz
Bearing L10 Life	Direct Coupled - 65,000 hrs
Bearing Type	Deep Groove Ball Bearings
Conduit Box Rotation	90 degree increments
Div 2 Temp Codes	Division 2 Class I Groups A, B, C and D T3 temp code
Efficiency	NEMA Premium
Enclosure	TEFC, IP55
Field Modifiable to F2	Yes
Frequency	60Hz or Variable on PWM drive
Insulation	Class F Non-Hygroscopic and Anti-Fungus

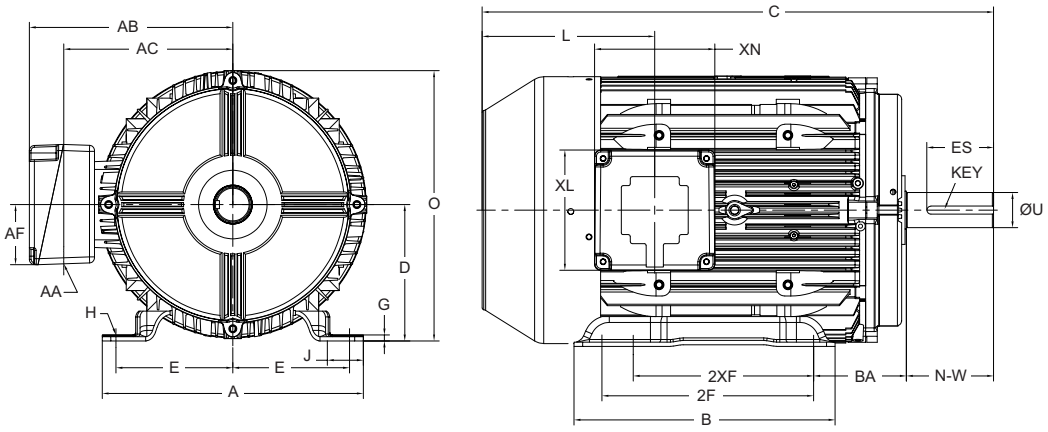
Inverter Capabilities	NEMA MG1 Part 31 VFD only 60Hz 5:1 Constant Torque @ 100% TN 15:1 Constant Torque @ 66.7%TN 20:1 Variable Torque
Lifting	Eyebolts for motors above 50 lbs. No lifting means for 140 frame
Material	Conduit Box: FS140: Steel / FS180 ~ FS280: Alum. Endshield: Aluminum Fan: Non-Sparking Fan Cover: Steel Frame: Aluminum
Mounting	Horizontal Foot Mounted / C-Face
Mounting Holes	Dual drilled for multiple frame mounting except FS215 motor
NEMA Design	B
Service Factor	1.25
Shaft	45# steel
Sound Power	NEMA MG1 Part 9
Tests	NEMA Routine
Vibration	NEMA Grade A. 2-pole motors tested on rigid base.
Winding Temp. Rise	Class B @ 1.0SF



Ratings

NEMA B (IP55)			Foot Mounted			C-Face		
HP	RPM	Volts	Frame	Cat. No.	Model No.	Frame	Cat. No.	Model No.
1	3600	230/460	143T	**WV577**	5KS143BWV120	143TC	**WV578**	5KS143KWV101
1	1800	230/460	143T	**WV000**	5KS143BWV205	143TC	**WV100**	5KS143KWV205
1.5	3600	230/460	143T	**WV001**	5KS143BWV105	143TC	**WV101**	5KS143KWV105
1.5	1800	230/460	145T	**WV002**	5KS145BWV201	145TC	**WV102**	5KS145KWV201
2	3600	230/460	145T	**WV003**	5KS145BWV105	145TC	**WV103**	5KS145KWV105
2	1800	230/460	145T	**WV004**	5KS145BWV205	145TC	**WV104**	5KS145KWV205
3	3600	230/460	182T	**WV005**	5KS182BWV105	182TC	**WV105**	5KS182KWV105
3	1800	230/460	182T	**WV006**	5KS182BWV205	182TC	**WV106**	5KS182KWV205
5	3600	230/460	184T	**WV007**	5KS184BWV105	184TC	**WV107**	5KS184KWV105
5	1800	230/460	184T	**WV008**	5KS184BWV205	184TC	**WV108**	5KS184KWV205
7.5	3600	230/460	213T	**WV009**	5KS213BWV105	213TC	**WV109**	5KS213KWV105
7.5	1800	230/460	213T	**WV010**	5KS213BWV205	213TC	**WV110**	5KS213KWV205
10	3600	230/460	215T	**WV011**	5KS215BWV105	215TC	**WV111**	5KS215KWV105
10	1800	230/460	215T	**WV012**	5KS215BWV205	215TC	**WV112**	5KS215KWV205
15	3600	230/460	254T	**WV013**	5KS254BWV105	254TC	**WV113**	5KS254KWV105
15	1800	230/460	254T	**WV014**	5KS254BWV205	254TC	**WV114**	5KS254KWV205
20	3600	230/460	256T	**WV015**	5KS256BWV105	256TC	**WV115**	5KS256KWV105
20	1800	230/460	256T	**WV016**	5KS256BWV205	256TC	**WV116**	5KS256KWV205
25	3600	230/460	284TS	**WV017**	5KS284BWV115	284TSC	**WV117**	5KS284KWV115
25	1800	230/460	284T	**WV018**	5KS284BWV205	284TC	**WV118**	5KS284KWV205
30	3600	230/460	286TS	**WV019**	5KS286BWV115	286TSC	**WV119**	5KS286KWV115
30	1800	230/460	286T	**WV020**	5KS286BWV205	286TC	**WV120**	5KS286KWV205

Dimensions

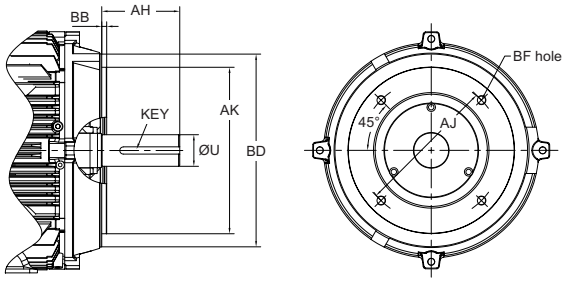


Frame	Weight (lbs)	Dimensions in Inches																	
		Shaft					Mounting												
		Key																	
		Width	Depth	Length	N-W	U	E	H	BA	2F	2XF	A	B	C	D	G	J	L	O
143T	40	0.188	0.188	1.457	2.250	0.875	2.75	0.39	2.25	5.00	4.00	6.46	6.00	13.02	3.50	0.16	1.13	4.75	7.00
145T	42	0.188	0.188	1.457	2.250	0.875	2.75	0.39	2.25	5.00	4.00	6.46	6.00	13.02*	3.50	0.16	1.13	4.75	7.00
182T	90	0.250	0.250	1.874	2.750	1.125	3.75	0.47	2.75	5.50	4.50	8.43	6.70	16.24	4.50	0.16	1.28	5.41	8.50
184T	102	0.250	0.250	1.874	2.750	1.125	3.75	0.47	2.75	5.50	4.50	8.43	6.70	16.24	4.50	0.16	1.28	5.41	8.50
213T	130	0.312	0.312	2.528	3.375	1.375	4.25	0.47	3.50	7.00	5.50	10.00	9.45	18.45	5.25	0.20	1.34	6.61	10.20
215T	150	0.312	0.312	2.528	3.375	1.375	4.25	0.47	3.50	7.00	5.50	10.00	8.19	19.95	5.25	0.20	1.34	6.61	10.20
254T	280	0.375	0.375	3.063	4.000	1.625	5.00	0.59	4.25	10.00	8.25	11.97	12.00	23.45	6.25	0.20	1.92	7.91	12.36
256T	280	0.375	0.375	3.063	4.000	1.625	5.00	0.59	4.25	10.00	8.25	11.97	12.00	23.45	6.25	0.20	1.92	7.91	12.36
284T	315	0.500	0.500	3.500	4.625	1.875	5.50	0.59	4.75	11.00	9.50	12.95	13.00	26.53	7.00	0.24	1.95	9.07	14.09
284TS	315	0.375	0.375	2.059	3.250	1.625	5.50	0.59	4.75	11.00	9.50	12.95	13.00	25.16	7.00	0.24	1.95	9.07	14.09
286T	368	0.500	0.500	3.500	4.625	1.875	5.50	0.59	4.75	11.00	9.50	12.95	13.00	26.53	7.00	0.24	1.95	9.07	14.09
286TS	368	0.375	0.375	2.059	3.250	1.625	5.50	0.59	4.75	11.00	9.50	12.95	13.00	25.16	7.00	0.24	1.95	9.07	14.09

* 4 Pole 145T frame C Dim. - 14.07 inches

Frame	Nom. HP	Approx. Vol ($inch^3$)	Conduit Box Dimensions in Inches					
			AA	AB	AC	AF	XL	XN
143 - 145	2	29	0.75	5.63	4.57	2.02	4.04	4.04
182 - 184	5	58	0.75	6.87	5.71	2.50	5.00	5.00
213 - 215	10	58	1.00	7.64	6.52	2.50	5.00	5.00
254 - 256	20	93	1.25	9.49	7.95	2.76	5.51	5.51
284 - 286	30	93	1.50	10.31	8.78	2.76	5.51	5.51

* AA - Tapped NPT hole provided for conduit



Frame	C-Face Dimensions in Inches					
	AJ	AK	BB	BD	BF	AH
143TC / 145TC	5.87	4.50	0.125	6.50	0.37	2.12
182TC / 184TC	7.25	8.50	0.250	9.00	0.50	2.76
213TC / 215TC	7.25	8.50	0.250	9.00	0.50	3.34
254TC / 256TC	7.25	8.50	0.250	9.84	0.50	4.00
284TC / 286TC	9.00	10.50	0.250	11.25	0.50	4.61
284TSC / 286TSC	9.00	10.50	0.250	11.25	0.50	4.61

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GEA33481-EN (5/2024)