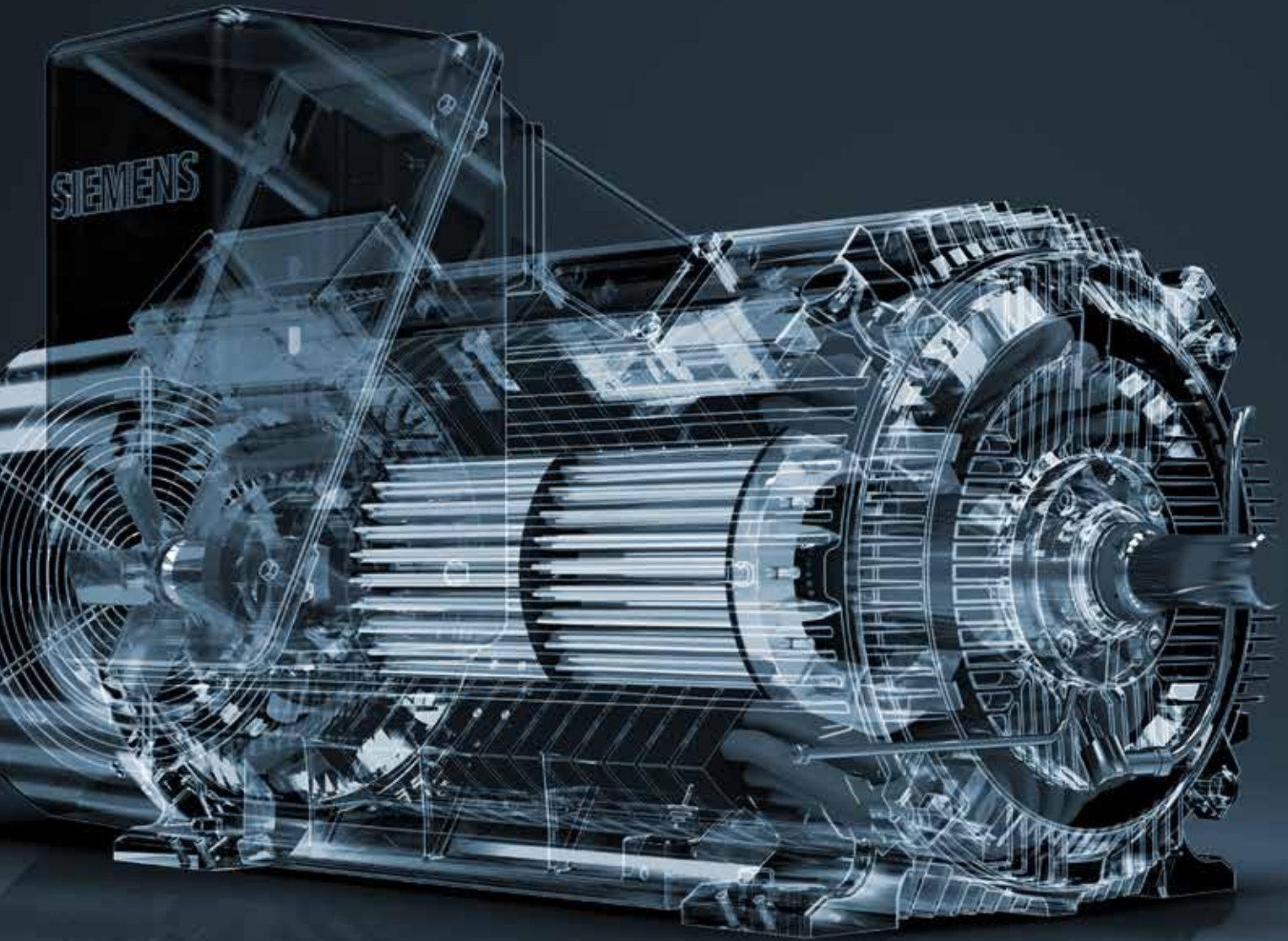


SIEMENS

Ingenuity for life



SIMOTICS Advantage™ Series

General Purpose MV Motors
Technical Factsheet

www.usa.siemens.com/abovenema

Advantage Series meets or exceeds industry preferred standards.

Motor operators rely on standards to assure performance and Siemens has always been at the forefront of compliance with important industry standards.

- IEEE841 Features
- ANSI
- NEMA
- CSA
- CSA- US
- NEMA Premium® Efficiency



Features

Construction Features	
Enclosure	TEFC (IC411)
Degree of Protection	IP55
HP Range	150 - 1100 HP (2, 4 pole), 150 - 900 HP (6 pole)
Frame Size / Shaft Height	449, S449, 5011, 5810, SH400
Voltage	2300V/4000V
Service Factor	1.15 @ 40°C
Warranty	36 months from date of manufacture
Construction Materials	
Frame	Cast Iron
Bearing Housings	Cast Iron
Main Terminal Box	Fabricated Steel (449 frame), Cast Iron (5011+ frames)
Auxiliary Boxes	Cast Iron - NEMA 4X
Shaft	AISI 1045 (449 frame) 4140 (S449-449T frames), S355J2+N (5011+ frames)
Rotor	Aluminum Die Cast
Lamination Material	C5 Core Plate
External Cooling Fan	Polyamide & Polypropylene (449) Bronze (S449) Anti-Static Reinforced Polyamide (5011+ frames)
Fan Cover	Cast Iron
Top Cover / Heat Exchanger / Tube Material	N/A
Insulation	MiCLAD™ Class F non-hydroscopic, NEMA Class B temp rise (449 frame), MICLASTIC™ VPI (5011+ frames)
Hardware	Zinc Plated Carbon Steel
General Information	
Noise Level	85 dB(A)
Vertical Mounting	N/A
Inverter Operation	Meets NEMA MG1-20 (449 frame), Meets NEMA MG1-31 rated at 6kV (5011+ frames) Variable Torque: 10:1; Constant Torque: 2:1
Paint	Two-part Epoxy
Paint Color	RAL 7030 Gray
Bearing Type	Anti-friction ball
Vibration	0.12 IPS
Hazardous Area	CSA Class 1, Division 2, Groups B, C, D, Temp Class T3 (5011 frame on VFD Temp Class T2D)

Options

Roller Bearings, Both Bearings Insulated, Thermistors, Thermostats, and Nameplate Additions

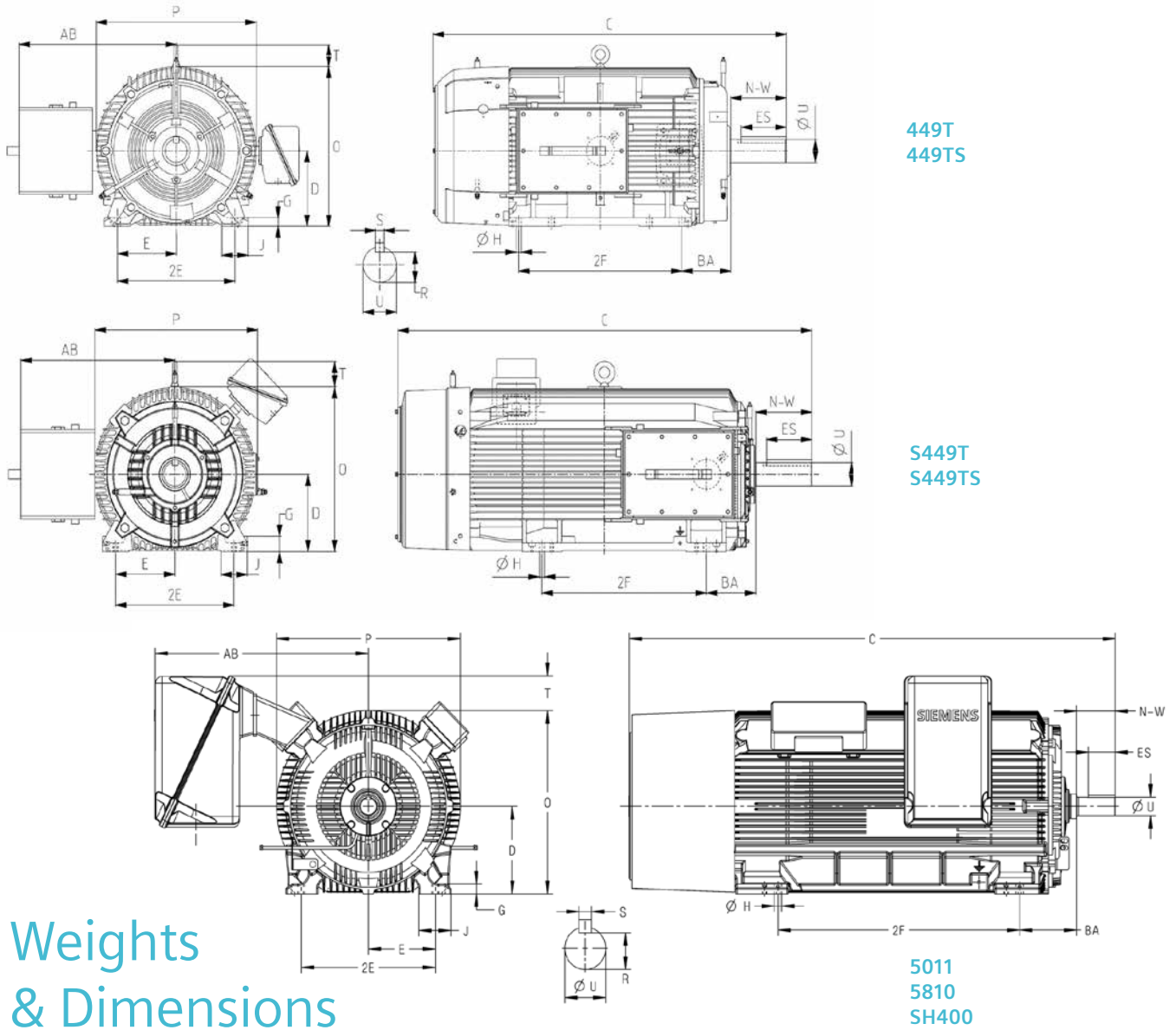
Resistive Temperature Detectors
Stick-type are available for 449 frame and standard on all other frames.

Direction of Rotation
Ratings indicated as uni-directional (2P S449) will be listed CW as standard. All other ratings are bi-directional.

IEEE 841 Standard - 2009
For 2 pole motors, exceptions are taken to twice speed or twice frequency vibration and to sound power levels. data is offered in sound pressure.

Shaft Seals
For IP56 and/or specific Inpro/Seal on the drive-end.

Anti-Fungal Treatment
An Anti-Fungal Treatment is offered for the stator in humid areas. For 449 frames only.

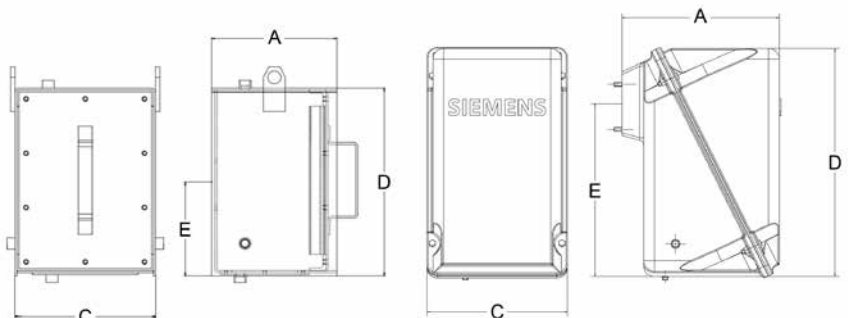


Weights & Dimensions

Frame	Poles	C	2F	N-W	P	BA	AB	2E	D	O	R	S	ES	Wgt.
449T	All	53.80	25*	8.50	25.30	7.50	24.10	18.00	11.00	23.20	2.88	0.88	6.88	2325
449TS	All	50.10	25*	4.75	25.30	7.50	24.10	18.00	11.00	23.20	2.02	0.63	3.00	2425
S449T	4, 6	62.90	25	8.50	24.90	7.50	23.40	18.00	11.00	23.40	2.88	0.88	6.88	2975
S449TS	2	62.60	25	4.75	24.90	7.50	23.40	18.00	11.00	23.40	2.02	0.63	3.00	2975
S449TS	4, 6	59.20	25	4.75	24.90	7.50	23.40	18.00	11.00	23.40	2.02	0.63	3.00	2975
5011	2	72.40	36	5.75	27.40	8.50	31.70	20.00	12.50	26.20	2.28	0.63	4.00	4400
5011	4, 6	78.00	36	11.62	27.40	8.50	31.70	20.00	12.50	26.20	3.31	1.00	10.00	4650
5810	2	78.30	36	6.75	31.00	10.00	33.00	23.00	14.50	30.00	2.45	0.75	5.00	5400
5810	4, 6	83.20	36	11.88	31.00	10.00	33.00	23.00	14.50	30.00	4.17	1.25	10.00	6150
SH400	2	83.90	44.10	6.75	31.00	10.00	34.10	29.53	15.75	32.90	2.88	0.88	5.00	7700
SH400	4, 6	84.90	44.10	8.00	27.40	10.00	34.10	29.53	15.75	32.90	3.94	1.00	6.50	8850

*(447 frame is 20) application will use the rear jackscrew hole as one of the foundation bolts, thus you will not be able to use jackscrews

Frame	A	C	D	E
449T	11.3	12.6	17.4	8.2
449TS	11.3	12.6	17.4	8.2
S449T	11.3	12.6	17.4	8.2
S449TS	11.3	12.6	17.4	8.2
5011	12.6	12.0	21.5	16.0
5810	12.6	12.0	21.5	16.0
SH400	12.6	12.0	21.5	16.0



HP	Pole	Frame	RPM	kVA/HP Code	FLA 2300V	LRA 2300V	FLA 4000V	LRA 4000V	FLE (%)	FL-PF (%)	FLT (ft /lbs)	LRT (ft /lbs)
150	2	449TS	3600	G	35	218	20	126	93.6	87	220	249
150	4	449T	1800	J	37	262	21	151	94.5	80	440	506
150	6	449T	1200	G	37	230	21	133	94.2	81	663	849
200	2	449TS	3600	F	46	287	26	166	94.2	87	293	325
200	4	449T	1800	H	49	339	28	196	94.4	81	587	763
200	6	S449T	1200	H	48	317	28	183	94.5	82	884	1202
250	2	449TS	3600	F	56	336	32	194	95.0	88	367	407
250	4	449T	1800	H	61	425	35	245	95.0	81	734	1028
250	6	S449T	1200	H	61	418	35	242	95.0	81	1105	1635
300	2	S449TS	3600	E	66	381	38	220	95.2	90	440	475
300	4	S449T	1800	H	72	486	41	281	95.3	82	881	1057
300	6	5011	1200	J	226	1401	130	808	94.7	78	1328	1793
350	2	S449TS	3600	F	77	470	45	271	95.2	89	513	585
350	4	S449T	1800	H	82	564	48	326	95.3	83	1028	1316
350	6	5011	1200	H	250	1752	145	1012	94.7	78	1546	1994
400	2	5011	3600	F	90	542	52	313	95.1	86	588	541
400	4	5011	1800	G	218	1529	126	883	94.7	85	1186	1672
400	6	5011	1200	G	76	544	44	314	94.8	80	1767	2085
450	2	5011	3600	G	102	631	59	365	95.2	86	662	536
450	4	5011	1800	G	240	1657	139	957	94.9	83	1327	2017
450	6	5810	1200	H	88	597	51	345	95.2	80	1989	2148
500	2	5011	3600	F	90	542	52	313	95.5	87	734	734
500	4	5011	1800	G	93	605	54	349	94.9	86	1474	1901
500	6	5810	1200	G	97	623	56	360	95.4	81	2205	2381
600	2	5810	3600	G	102	631	59	365	95.6	87	882	979
600	4	5810	1800	H	106	733	61	423	95.3	85	1766	2296
600	6	5810	1200	G	110	658	63	380	95.4	82	2650	2809
700	2	5810	3600	F	111	691	64	399	95.8	88	1027	1232
700	4	5810	1800	F	114	684	66	395	95.3	86	2058	2470
700	6	SH400	1200	G	120	732	69	423	95.6	82	3082	3020
800	2	SH400	3600	F	134	830	77	479	95.8	85	1173	1067
800	4	5810	1800	G	138	935	79	540	95.5	86	2355	3038
800	6	SH400	1200	G	143	843	82	486	95.7	81	3523	3805
900	2	SH400	3600	G	154	984	89	568	96.1	87	1319	1266
900	4	SH400	1800	G	158	995	91	575	95.0	85	2642	3250
900	6	SH400	1200	G	166	1011	96	584	95.8	82	3959	4315
1000	2	SH400	3600	G	181	1212	104	699	96.3	88	1464	1508
1000	4	SH400	1800	G	181	1178	105	681	95.2	86	2936	3553
1100	2	SH400	3600	G	200	1360	116	785	96.3	88	1612	1693
1100	4	SH400	1800	G	205	1314	119	758	95.4	85	3230	4587

Comprehensive Service and Support

Siemens warranty, parts and service request call center is available 24/7, providing fast and efficient responses. Siemens service technicians take pride in finding the right solution, the first time, every time.

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