

SELECTION AND PRICING CATALOG

60 HERTZ AND SPECIALTY GENERATORS

PRICING EFFECTIVE JANUARY 1, 2018

REGAL[®]

WHAT'S NEW

DATAMAX™ Generators

364 frame 12 lead and 4 lead models

570 frame reconnectable with bus bars models

744 frame, new low voltage models

764 frame, new low and medium voltage models

860 frame high voltage

Expanded form coil offering, low voltage models

ATEX expanded offering

Dedicated 400 Volt ratings

Mariner[®] Agency Certified generator stocking program

201 frame, 50 hertz, light tower

THE MARATHON[®] GENERATOR ADVANTAGE

Worldwide Availability

Thousands of generators available modified or customized to your order.



Marathon Reliability

Proven and reliable designs even in the harshest environments.



Custom Designs

Highly engineered products designed specifically to your needs.



Technical Support/Customer Care

Experienced and knowledgeable technical and customer care representatives with a combined 100 years experience.

Best of the Best Sales Organization

The most knowledgeable sales team in the business.
Go to www.marathongenerators.com/generators/SalesLocation.jsp to get in touch with your local Marathon generator representative.

Your Independent Power Source
www.marathongenerators.com

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60 Hertz

4-Pole Three Phase Generators

240Y or 480Y Volts
(12 Leads)

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR

MAGNAPLUS® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ^④	Voltage	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	12	240Y/480Y	Yes	10.5	12	13	13	14	\$2,954
282PSL1703 ^③	240	12	240Y/480Y	Ⓜ	11.5	13.5	14.5	15	15.5	\$3,108
282CSL1504	250	12	240Y/480Y	Yes	15	17.5	18	18	19	\$3,269
282CSL1505	275	12	240Y/480Y	Yes	20	22	24	24	25	\$3,516
283CSL1506	310	12	240Y/480Y	Yes	22	26	28	28	30	\$3,912
283CSL1507	350	12	240Y/480Y	Yes	27	31	33	33	35	\$4,227
284CSL1508	405	12	240Y/480Y	Yes	30	36	40	40	42	\$4,623
284CSL1542	420	12	240Y/480Y	Yes	34	40	43	43	46	\$4,794
361CSL1600 [Ⓛ]	518	12	240Y/480Y	Yes	40	45	48	48	50	\$4,859
361CSL1601 [Ⓛ]	569	12	240Y/480Y	Yes	49	55	60	60	65	\$5,265
361CSL1602 [Ⓛ]	620	12	240Y/480Y	Yes	58	65	70	70	76	\$5,982
362CSL1604 [Ⓛ]	706	12	240Y/480Y	Yes	75	84	90	90	95	\$6,464
362CSL1606 [Ⓛ]	796	12	240Y/480Y	Yes	80	96	105	105	113	\$7,416
363CSL1607 [Ⓛ]	943	12	240Y/480Y	Yes	110	125	135	135	150	\$7,978
364CSL1608	1086	12	240Y/480Y	Yes	125	145	155	155	160	\$8,740
364CSL1609	1096	12	240Y/480Y	Yes	135	160	180	180	185	\$9,597
431CSL6206 [Ⓛ]	1415	12	240Y/480Y	Yes	165	200	211	215	225	\$10,942
431CSL6208 [Ⓛ]	1455	12	240Y/480Y	Yes	180	211	226	230	240	\$11,563
432CSL6210 [Ⓛ]	1685	12	240Y/480Y	Yes	220	260	275	280	291	\$12,210
432CSL6212 [Ⓛ]	1760	12	240Y/480Y	Yes	230	275	300	300	310	\$13,810
433CSL6216 [Ⓛ]	2235	12	240Y/480Y	Yes	280	342	375	380	400	\$15,480
433CSL6220 [Ⓛ]	2245	12	240Y/480Y	Yes	310	375	403	415	430	\$16,426

MAGNAPLUS® Alternate Models ^③

281PSL1722	225	12	240Y/480Y	Ⓜ	8.8	10	11	11	12	\$2,954
282PSL1704	270	12	240Y/480Y	Ⓜ	12.5	15	16.5	16.5	17.5	\$3,269
282PSL1705	295	12	240Y/480Y	Ⓜ	17	20	21	21	22	\$3,516
283PSL1706	336	12	240Y/480Y	Yes	22	25	27	27	29	\$3,912
283PSL1707	366	12	240Y/480Y	Yes	25	30	33	33	35	\$4,227
284PSL1708	405	12	240Y/480Y	Yes	30	32	35	35	40	\$4,623
284PSL1742	436	12	240Y/480Y	Yes	32	36	40	40	45	\$4,794
285PSL1700	480	12	240Y/480Y	Yes	38	43	45	45	50	\$4,859
286PSL1701	600	12	240Y/480Y	Yes	44	52	58	58	62	\$5,265
287PSL1702	670	12	240Y/480Y	Yes	50	58	62	62	67	\$5,982
431CSL6202 [Ⓛ]	1220	12	240Y/480Y	Yes	125	142	151	155	160	\$9,280
431CSL6204 [Ⓛ]	1310	12	240Y/480Y	Yes	143	170	180	181	190	\$10,191

Ⓛ 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

Ⓜ PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation

240Y or 480Y Volts
(12 Leads)
480Y Volts
(4-6 Leads)

4-Pole
Three Phase
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Voltage	Regulator	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425①②	2730	12	240Y/480Y	PM500	380	450	475	475	505	\$19,295
572RSL6427①②	2840	12	240Y/480Y	PM500	440	500	515	515	560	\$19,626
572RSL6429①②	3050	12	240Y/480Y	PM500	445	535	560	560	610	\$21,852
572RSL6431①②	3110	12	240Y/480Y	PM500	485	575	600	600	645	\$22,660
573RSL6433①②	3400	12	240Y/480Y	PM500	570	680	700	700	765	\$26,480
573RSL6435①②	3620	12	240Y/480Y	PM500	585	710	750	750	810	\$28,872
574RSL6437①②	4080	12	240Y/480Y	PM500	670	800	825	825	900	\$30,798
574RSL6438②	4240	4 Bars	480Y Only	PM500	720	860	915	920	970	\$31,906
575RSL4044	5000	4 Bars	480Y Only	DVR®2000E+	800	975	1050	1060	1130	\$35,753
741RSL4044	5490	4 Bars	480Y Only	DVR®2000E+	865	1030	1080	1100	1100	\$37,176
741RSL4045	5490	12	240Y/480Y	DVR®2000E+	865	1030	1080	1100	1100	\$39,573
740RSL4046	5200	4 Bars	480Y Only	DVR®2000E+	950	1120	1200	1220	1250	\$41,971
742RSL4048	6300	4 Bars	480Y Only	DVR®2000E+	1000	1200	1260	1300	1300	\$46,278
742RSL4049	6300	12	240Y/480Y	DVR®2000E+	1000	1200	1260	1300	1300	\$49,472
742RSL4050	7230	4 Bars	480Y Only	DVR®2000E+	1220	1430	1500	1500	1520	\$50,585
743RSL4052	7800	4 Bars	480Y Only	DVR®2000E+	1310	1600	1700	1750	1750	\$59,040
744RSL4054	8600	4 Bars	480Y Only	DVR®2000E+	1500	1850	1960	2000	2000	\$63,823
744RSL4056	9740	4 Bars	480Y Only	DVR®2000E+	1700	2010	2160	2210	2260	\$71,801
744RSL4057	9740	4 Bars	480Y Only	DVR®2000E+	1760	2100	2270	2320	2370	\$74,995
764RSL4063	9937	4 Bars	480Y Only	DVR®2000E+	2000	2250	2400	2500	2650	\$109,470
Form Wound Coil Designs										
573FSL4402	3400	4 Bars	480Y Only	DVR®2000E+	450	525	575	575	600	\$35,234
574FSL4404	3650	4 Bars	480Y Only	DVR®2000E+	570	680	750	750	775	\$39,054
742FSL4408	5900	4 Bars	480Y Only	DVR®2000E+	800	1000	1100	1125	1175	\$47,883
743FSL4410	6500	4 Bars	480Y Only	DVR®2000E+	900	1100	1200	1225	1275	\$52,662
743FSL4412	6900	4 Bars	480Y Only	DVR®2000E+	1025	1250	1325	1350	1375	\$55,855
744FSL4060	7300	4 Bars	480Y Only	DVR®2000E+	1200	1430	1500	1500	1500	\$62,233
744FSL4062	8300	4 Bars	480Y Only	DVR®2000E+	1500	1800	1900	1900	1900	\$68,617
744FSL4414	8300	4 Bars	480Y Only	DVR®2000E+	1630	2000	2110	2110	2110	\$76,851

MAGNAPOWER® Standard Models ③

862RSL86006	13780	6	480Y Only	DVR®2000E+	2300	2685	2880	2880	3110	\$181,153
Form Wound Coil Designs										
1020FDL1100	15000	6	480Y Only	DVR®2000E+	1880	2190	2290	2340	2340	\$165,149
1020FDL1102	15900	6	480Y Only	DVR®2000E+	2000	2250	2500	2500	2500	\$181,912
1020FDL1104	16300	6	480Y Only	DVR®2000E+	2160	2510	2620	2680	2730	\$185,556
1020FDL1106	17000	6	480Y Only	DVR®2000E+	2250	2710	2800	2800	2800	\$190,687
863FSL86056	14500	6	480Y Only	DVR®2000E+	2400	2730	3000	3000	3100	\$218,290
1020FDL1108	17400	6	480Y Only	DVR®2000E+	2340	2800	2900	3000	3000	\$229,779
1030FDL1110	20000	6	480Y Only	DVR®2000E+	2530	3080	3260	3350	3350	\$264,195

① 12 lead reconnectable via bus bars.

② Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

③ All 860 & 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Three Phase Generators

208Y or 416Y Volts
240 or 120 Volts Delta
(12 Leads)

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR

MAGNAPLUS® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads④	Voltage	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	12	208Y/416Y	Yes	9.5	10	11	11	12	\$2,954
282PSL1703③	240	12	208Y/416Y	Ⓞ	11	12.5	13	13.5	14	\$3,108
282CSL1504	250	12	208Y/416Y	Yes	13.5	16	17	17	17.5	\$3,269
282CSL1505	275	12	208Y/416Y	Yes	19	21	22	22	23	\$3,516
283CSL1506	310	12	208Y/416Y	Yes	20	24	26	26	27	\$3,912
283CSL1507	350	12	208Y/416Y	Yes	24	27	30	30	32	\$4,227
284CSL1508	405	12	208Y/416Y	Yes	30	35	38	38	40	\$4,623
284CSL1542	420	12	208Y/416Y	Yes	32	36	40	40	41	\$4,794
361CSL1600①	518	12	208Y/416Y	Yes	35	40	42	42	45	\$4,859
361CSL1601①	569	12	208Y/416Y	Yes	45	50	55	55	58	\$5,265
361CSL1602①	620	12	208Y/416Y	Yes	53	60	65	65	68	\$5,982
362CSL1604①	706	12	208Y/416Y	Yes	65	72	80	80	85	\$6,464
362CSL1606①	796	12	208Y/416Y	Yes	80	90	100	100	105	\$7,416
363CSL1607①	943	12	208Y/416Y	Yes	100	110	125	125	135	\$7,978
364CSL1608	1086	12	208Y/416Y	Yes	125	140	155	155	160	\$8,740
364CSL1609	1096	12	208Y/416Y	Yes	135	155	175	175	180	\$9,597
431CSL6206①	1415	12	208Y/416Y	Yes	170	191	202	210	217	\$10,942
431CSL6208①	1455	12	208Y/416Y	Yes	176	203	216	225	227	\$11,563
432CSL6210①	1685	12	208Y/416Y	Yes	220	260	275	280	287	\$12,210
432CSL6212①	1760	12	208Y/416Y	Yes	225	260	276	280	300	\$13,810
433CSL6216①	2235	12	208Y/416Y	Yes	290	343	366	375	387	\$15,480
433CSL6220①	2245	12	208Y/416Y	Yes	315	362	385	400	417	\$16,426

MAGNAPLUS® Alternate Models ③

281PSL1722	225	12	208Y/416Y	Ⓞ	10	11	12	12	12.5	\$2,954
282PSL1704	270	12	208Y/416Y	Ⓞ	12.5	15	16	16	17.5	\$3,269
282PSL1705	295	12	208Y/416Y	Ⓞ	17	20	21	21	22	\$3,516
283PSL1706	336	12	208Y/416Y	Yes	21	23	25	25	28	\$3,912
283PSL1707	366	12	208Y/416Y	Yes	24	28	30	30	33	\$4,227
284PSL1708	405	12	208Y/416Y	Yes	30	32	35	35	40	\$4,623
284PSL1742	436	12	208Y/416Y	Yes	32	36	40	40	42	\$4,794
285PSL1700	480	12	208Y/416Y	Yes	36	40	45	45	47	\$4,859
286PSL1701	600	12	208Y/416Y	Yes	42	50	55	55	58	\$5,265
287PSL1702	670	12	208Y/416Y	Yes	48	55	60	60	63	\$5,982
431CSL6202①	1220	12	208Y/416Y	Yes	125	140	147	151	155	\$9,280
431CSL6204①	1310	12	208Y/416Y	Yes	142	165	175	176	182	\$10,191

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation

208Y or 416Y Volts
240 or 120 Volts Delta
(12 Leads)
416Y Volts
(4-6 Leads)

4-Pole
Three Phase
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Voltage	Regulator	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425①②	2730	12	208Y/416Y	PM500	385	435	440	440	450	\$19,295
572RSL6427①②	2840	12	208Y/416Y	PM500	400	445	470	475	505	\$19,626
572RSL6429①②	3050	12	208Y/416Y	PM500	450	510	525	525	535	\$21,852
572RSL6431①②	3110	12	208Y/416Y	PM500	460	525	555	565	600	\$22,660
573RSL6433①②	3400	12	208Y/416Y	PM500	570	650	685	700	725	\$26,480
573RSL6435①②	3620	12	208Y/416Y	PM500	590	680	720	725	725	\$28,872
574RSL6437①②	4080	12	208Y/416Y	PM500	630	725	770	785	825	\$30,798
574RSL6438②	4240	4 Bars	416Y Only	PM500	675	770	820	835	885	\$31,906
575RSL4044	5000	4 Bars	416Y Only	DVR®2000E+	760	890	950	975	1040	\$35,753
741RSL4044	5490	4 Bars	416Y Only	DVR®2000E+	810	920	970	1000	1020	\$37,176
741RSL4045	5490	12	208Y/416Y	DVR®2000E+	810	920	970	1000	1020	\$39,573
740RSL4046	5200	4 Bars	416Y Only	DVR®2000E+	880	1020	1090	1110	1180	\$41,971
742RSL4048	6300	4 Bars	416Y Only	DVR®2000E+	950	1100	1160	1180	1250	\$46,278
742RSL4049	6300	12	208Y/416Y	DVR®2000E+	950	1100	1160	1180	1250	\$49,472
742RSL4050	7230	4 Bars	416Y Only	DVR®2000E+	1110	1270	1340	1370	1410	\$50,585
743RSL4052	7800	4 Bars	416Y Only	DVR®2000E+	1400	1610	1610	1610	1620	\$59,040
744RSL4054	8600	4 Bars	416Y Only	DVR®2000E+	1420	1680	1800	1840	1840	\$63,823
744RSL4056	9740	4 Bars	416Y Only	DVR®2000E+	1520	1780	1900	1950	2000	\$71,801
744RSL4057	9740	4 Bars	416Y Only	DVR®2000E+	1640	1920	2050	2090	2240	\$74,995
764RSL4063	9937	4 Bars	416Y Only	DVR®2000E+	1730	1950	2080	2170	2300	\$109,470
Form Wound Coil Designs										
573FSL4402	3400	4 Bars	416Y Only	DVR®2000E+	390	460	500	500	520	\$35,234
574FSL4404	3650	4 Bars	416Y Only	DVR®2000E+	490	590	650	650	670	\$39,054
742FSL4408	5900	4 Bars	416Y Only	DVR®2000E+	690	870	950	980	1020	\$47,883
743FSL4410	6500	4 Bars	416Y Only	DVR®2000E+	780	950	1040	1060	1110	\$52,662
743FSL4412	6900	4 Bars	416Y Only	DVR®2000E+	890	1080	1150	1170	1190	\$55,855
744FSL4060	7300	4 Bars	416Y Only	DVR®2000E+	1190	1380	1440	1440	1440	\$62,233
744FSL4062	8300	4 Bars	416Y Only	DVR®2000E+	1510	1750	1830	1830	1830	\$68,617
744FSL4414	8300	4 Bars	416Y Only	DVR®2000E+	1620	1880	2010	2040	2120	\$76,851

MAGNAPOWER® Standard Models ③

862RSL86006	13780	6	416Y Only	DVR®2000E+	2260	2580	2800	2800	2940	\$181,153
Form Wound Coil Designs										
1020FDL1100	15000	6	416Y Only	DVR®2000E+	1920	2190	2280	2320	2320	\$165,149
1020FDL1102	15900	6	416Y Only	DVR®2000E+	2040	2250	2500	2500	2500	\$181,912
1020FDL1104	16300	6	416Y Only	DVR®2000E+	2200	2510	2610	2660	2710	\$185,556
1020FDL1106	17000	6	416Y Only	DVR®2000E+	2450	2680	2750	2760	2780	\$190,687
863FSL86056	14500	6	416Y Only	DVR®2000E+	2160	2460	2700	2700	2830	\$218,290
1020FDL1108	17400	6	416Y Only	DVR®2000E+	2550	2850	2850	2850	2850	\$229,779
1030FDL1110	20000	6	416Y Only	DVR®2000E+	2620	3060	3210	3250	3250	\$264,195

① 12 lead reconnectable via bus bars.

② Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

③ All 860 & 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Three Phase Generators

220Y or 440Y Volts
(12 Leads)

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR

MAGNAPLUS® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ^④	Voltage	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	12	220Y/440Y	Yes	10	11	11.5	11.5	12.5	\$2,954
282PSL1703 ^③	240	12	220Y/440Y	Ⓜ	11.5	13.5	14.5	15	15	\$3,108
282CSL1504	250	12	220Y/440Y	Yes	14	16.5	17.5	17.5	18.5	\$3,269
282CSL1505	275	12	220Y/440Y	Yes	19	21	23	23	24	\$3,516
283CSL1506	310	12	220Y/440Y	Yes	21	25	27	27	28	\$3,912
283CSL1507	350	12	220Y/440Y	Yes	25	28	31	31	33	\$4,227
284CSL1508	405	12	220Y/440Y	Yes	30	35	39	39	41	\$4,623
284CSL1542	420	12	220Y/440Y	Yes	33	37	41	41	43	\$4,794
361CSL1600 ^①	518	12	220Y/440Y	Yes	37	42	45	45	47	\$4,859
361CSL1601 ^①	569	12	220Y/440Y	Yes	48	53	58	58	61	\$5,265
361CSL1602 ^①	620	12	220Y/440Y	Yes	56	63	68	68	71	\$5,982
362CSL1604 ^①	706	12	220Y/440Y	Yes	68	76	84	84	89	\$6,464
362CSL1606 ^①	796	12	220Y/440Y	Yes	82	92	102	102	107	\$7,416
363CSL1607 ^①	943	12	220Y/440Y	Yes	105	115	130	130	140	\$7,978
364CSL1608	1086	12	220Y/440Y	Yes	125	145	155	155	160	\$8,740
364CSL1609	1096	12	220Y/440Y	Yes	135	160	180	180	185	\$9,597
431CSL6206 ^①	1415	12	220Y/440Y	Yes	172	200	212	220	226	\$10,942
431CSL6208 ^①	1455	12	220Y/440Y	Yes	180	210	221	225	233	\$11,563
432CSL6210 ^①	1685	12	220Y/440Y	Yes	221	261	278	283	292	\$12,210
432CSL6212 ^①	1760	12	220Y/440Y	Yes	227	266	285	290	300	\$13,810
433CSL6216 ^①	2235	12	220Y/440Y	Yes	290	348	372	380	395	\$15,480
433CSL6220 ^①	2245	12	220Y/440Y	Yes	317	375	397	410	423	\$16,426

MAGNAPLUS® Alternate Models ^③

281PSL1722	225	12	220Y/440Y	Ⓜ	10	11	12	12	12.5	\$2,954
282PSL1704	270	12	220Y/440Y	Ⓜ	12.5	15	16.2	16.2	17.5	\$3,269
282PSL1705	295	12	220Y/440Y	Ⓜ	17	20	21	21	22	\$3,516
283PSL1706	336	12	220Y/440Y	Yes	21	24	26	26	28	\$3,912
283PSL1707	366	12	220Y/440Y	Yes	24	29	31	31	34	\$4,227
284PSL1708	405	12	220Y/440Y	Yes	30	32	35	35	40	\$4,623
284PSL1742	436	12	220Y/440Y	Yes	32	36	40	40	43	\$4,794
285PSL1700	480	12	220Y/440Y	Yes	37	41	45	45	48	\$4,859
286PSL1701	600	12	220Y/440Y	Yes	43	50	56	56	60	\$5,265
287PSL1702	670	12	220Y/440Y	Yes	49	56	61	61	65	\$5,982
431CSL6202 ^①	1220	12	220Y/440Y	Yes	125	143	151	153	160	\$9,280
431CSL6204 ^①	1310	12	220Y/440Y	Yes	143	167	177	180	185	\$10,191

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation

220Y or 440Y Volts
(12 Leads)
440Y Volts
(4 Leads)

4-Pole
Three Phase
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Voltage	Regulator	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425①②	2730	12	220Y/440Y	PM500	400	455	465	465	465	\$19,295
572RSL6427①②	2840	12	220Y/440Y	PM500	410	460	485	500	520	\$19,626
572RSL6429①②	3050	12	220Y/440Y	PM500	470	535	560	560	560	\$21,852
572RSL6431①②	3110	12	220Y/440Y	PM500	480	545	580	590	625	\$22,660
573RSL6433①②	3400	12	220Y/440Y	PM500	595	680	725	730	765	\$26,480
573RSL6435①②	3620	12	220Y/440Y	PM500	620	715	760	765	765	\$28,872
574RSL6437①②	4080	12	220Y/440Y	PM500	660	760	805	820	875	\$30,798
574RSL6438②	4240	4 Bars	440Y Only	PM500	705	810	860	875	930	\$31,906
575RSL4044	5000	4 Bars	440Y Only	DVR®2000E+	785	925	995	1010	1090	\$35,753
741RSL4044	5490	4 Bars	440Y Only	DVR®2000E+	840	960	1020	1030	1070	\$37,176
741RSL4045	5490	12	220Y/440Y	DVR®2000E+	840	960	1020	1030	1070	\$39,573
740RSL4046	5200	4 Bars	440Y Only	DVR®2000E+	915	1070	1140	1160	1240	\$41,971
742RSL4048	6300	4 Bars	440Y Only	DVR®2000E+	1000	1140	1220	1240	1280	\$46,278
742RSL4049	6300	12	220Y/440Y	DVR®2000E+	1000	1140	1220	1240	1280	\$49,472
742RSL4050	7230	4 Bars	440Y Only	DVR®2000E+	1160	1340	1420	1450	1500	\$50,585
743RSL4052	7800	4 Bars	440Y Only	DVR®2000E+	1420	1680	1710	1710	1710	\$59,040
744RSL4054	8600	4 Bars	440Y Only	DVR®2000E+	1460	1750	1880	1920	1920	\$63,823
744RSL4056	9740	4 Bars	440Y Only	DVR®2000E+	1590	1860	1990	2030	2100	\$71,801
744RSL4057	9740	4 Bars	440Y Only	DVR®2000E+	1690	1990	2140	2180	2340	\$74,995
764RSL4063	9937	4 Bars	440Y Only	DVR®2000E+	1830	2070	2210	2300	2440	\$109,470
Form Wound Coil Designs										
573FSL4402	3400	4 Bars	440Y Only	DVR®2000E+	410	480	530	530	550	\$35,234
574FSL4404	3650	4 Bars	440Y Only	DVR®2000E+	520	620	690	690	710	\$39,054
742FSL4408	5900	4 Bars	440Y Only	DVR®2000E+	730	920	1010	1030	1080	\$47,883
743FSL4410	6500	4 Bars	440Y Only	DVR®2000E+	830	1010	1100	1120	1170	\$52,662
743FSL4412	6900	4 Bars	440Y Only	DVR®2000E+	940	1150	1210	1240	1260	\$55,855
744FSL4060	7300	4 Bars	440Y Only	DVR®2000E+	1210	1400	1460	1460	1460	\$62,233
744FSL4062	8300	4 Bars	440Y Only	DVR®2000E+	1530	1780	1860	1860	1860	\$68,617
744FSL4414	8300	4 Bars	440Y Only	DVR®2000E+	1680	1960	2100	2140	2180	\$76,851

① 12 lead reconnectable via bus bars.

② Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Three Phase Broad Range Generators

**208Y-240Y or
416Y-480Y Volts
240 or 120 Volts Delta
(12 Leads)**

**1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR**

MAGNAPLUS® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ^④	Voltage	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	12	208Y-240Y/416Y-480Y	Yes	9.5	10	11	11	12	\$2,954
282PSL1703 ^③	240	12	208Y-240Y/416Y-480Y	Ⓜ	11	12.5	13	13.5	14	\$3,108
282CSL1504	250	12	208Y-240Y/416Y-480Y	Yes	13.5	16	17	17	17.5	\$3,269
282CSL1505	275	12	208Y-240Y/416Y-480Y	Yes	19	21	22	22	23	\$3,516
283CSL1506	310	12	208Y-240Y/416Y-480Y	Yes	20	24	26	26	27	\$3,912
283CSL1507	350	12	208Y-240Y/416Y-480Y	Yes	24	27	30	30	32	\$4,227
284CSL1508	405	12	208Y-240Y/416Y-480Y	Yes	30	35	38	38	40	\$4,623
284CSL1542	420	12	208Y-240Y/416Y-480Y	Yes	32	36	40	40	41	\$4,794
361CSL1600 ^①	518	12	208Y-240Y/416Y-480Y	Yes	35	40	42	42	45	\$4,859
361CSL1601 ^①	569	12	208Y-240Y/416Y-480Y	Yes	45	50	55	55	58	\$5,265
361CSL1602 ^①	620	12	208Y-240Y/416Y-480Y	Yes	53	60	65	65	68	\$5,982
362CSL1604 ^①	706	12	208Y-240Y/416Y-480Y	Yes	65	72	80	80	85	\$6,464
362CSL1606 ^①	796	12	208Y-240Y/416Y-480Y	Yes	80	90	100	100	105	\$7,416
363CSL1607 ^①	943	12	208Y-240Y/416Y-480Y	Yes	100	110	125	125	135	\$7,978
364CSL1608	1086	12	208Y-240Y/416Y-480Y	Yes	125	140	155	155	160	\$8,740
364CSL1609	1096	12	208Y-240Y/416Y-480Y	Yes	125	140	160	160	165	\$9,597
431CSL6206 ^①	1415	12	208Y-240Y/416Y-480Y	Yes	165	191	202	210	217	\$10,942
431CSL6208 ^①	1455	12	208Y-240Y/416Y-480Y	Yes	176	203	216	225	227	\$11,563
432CSL6210 ^①	1685	12	208Y-240Y/416Y-480Y	Yes	211	255	275	280	287	\$12,210
432CSL6212 ^①	1760	12	208Y-240Y/416Y-480Y	Yes	225	260	276	280	300	\$13,810
433CSL6216 ^①	2235	12	208Y-240Y/416Y-480Y	Yes	280	342	366	375	387	\$15,480
433CSL6220 ^①	2245	12	208Y-240Y/416Y-480Y	Yes	310	362	385	400	417	\$16,426

MAGNAPLUS® Alternate Models ^③

281PSL1722	225	12	208Y-240Y/416Y-480Y	Ⓜ	8.8	10	11	11	12	\$2,954
282PSL1704	270	12	208Y-240Y/416Y-480Y	Ⓜ	12.5	15	16	16	17.5	\$3,269
282PSL1705	295	12	208Y-240Y/416Y-480Y	Ⓜ	17	20	21	21	22	\$3,516
283PSL1706	336	12	208Y-240Y/416Y-480Y	Yes	21	23	25	25	28	\$3,912
283PSL1707	366	12	208Y-240Y/416Y-480Y	Yes	24	28	30	30	33	\$4,227
284PSL1708	405	12	208Y-240Y/416Y-480Y	Yes	30	32	35	35	40	\$4,623
284PSL1742	436	12	208Y-240Y/416Y-480Y	Yes	32	36	40	40	42	\$4,794
285PSL1700	480	12	208Y-240Y/416Y-480Y	Yes	36	40	45	45	47	\$4,859
286PSL1701	600	12	208Y-240Y/416Y-480Y	Yes	42	50	55	55	58	\$5,265
287PSL1702	670	12	208Y-240Y/416Y-480Y	Yes	48	55	60	60	63	\$5,982
431CSL6202 ^①	1220	12	208Y-240Y/416Y-480Y	Yes	125	140	147	151	155	\$9,280
431CSL6204 ^①	1310	12	208Y-240Y/416Y-480Y	Yes	142	165	175	176	182	\$10,191

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation

208Y-240Y or
416Y-480Y Volts
240 or 120 Volts Delta
(12 Leads)

4-Pole
Three Phase
Broad Range
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Voltage	Regulator	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425①②	2730	12	208Y-240Y/416Y-480Y	PM500	380	435	440	440	450	\$19,295
572RSL6427①②	2840	12	208Y-240Y/416Y-480Y	PM500	400	445	470	475	505	\$19,626
572RSL6429①②	3050	12	208Y-240Y/416Y-480Y	PM500	445	510	525	525	535	\$21,852
572RSL6431①②	3110	12	208Y-240Y/416Y-480Y	PM500	460	525	555	565	600	\$22,660
573RSL6433①②	3400	12	208Y-240Y/416Y-480Y	PM500	570	650	685	700	725	\$26,480
573RSL6435①②	3620	12	208Y-240Y/416Y-480Y	PM500	585	680	720	725	725	\$28,872
574RSL6437①②	4080	12	208Y-240Y/416Y-480Y	PM500	630	725	770	785	825	\$30,798
741RSL4045	5490	12	208Y-240Y/416Y-480Y	DVR®2000E+	810	920	970	1000	1020	\$39,573
742RSL4049	6300	12	208Y-240Y/416Y-480Y	DVR®2000E+	950	1100	1160	1180	1250	\$49,472

① 12 lead reconnectable via bus bars.

② Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Three Phase Generators

200Y or 400Y Volts
(12 Leads)

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR

MAGNAPLUS® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ^④	Voltage	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	12	200Y/400Y	Yes	9.1	9.6	10.6	10.6	11.6	\$2,954
282PSL1703	240	12	200Y/400Y	Ⓜ	10.6	12.1	12.8	13.1	13.6	\$3,108
282CSL1504	250	12	200Y/400Y	Yes	12.8	15.3	16.3	16.3	16.8	\$3,269
282CSL1505	275	12	200Y/400Y	Yes	18.3	20	21	21	22	\$3,516
283CSL1506	310	12	200Y/400Y	Yes	19	23	25	25	26	\$3,912
283CSL1507	350	12	200Y/400Y	Yes	23	26	29	29	31	\$4,227
284CSL1508	405	12	200Y/400Y	Yes	29	34	37	37	38	\$4,623
284CSL1542	420	12	200Y/400Y	Yes	31	35	38	38	40	\$4,794
361CSL1600 ^①	518	12	200Y/400Y	Yes	34	38	40	40	43	\$4,859
361CSL1601 ^①	569	12	200Y/400Y	Yes	43	48	53	53	55	\$5,265
361CSL1602 ^①	620	12	200Y/400Y	Yes	51	58	63	63	65	\$5,982
362CSL1604 ^①	706	12	200Y/400Y	Yes	63	69	76	76	81	\$6,464
362CSL1606 ^①	796	12	200Y/400Y	Yes	76	86	96	96	101	\$7,416
363CSL1607 ^①	943	12	200Y/400Y	Yes	96	106	121	121	131	\$7,978
364CSL1608	1086	12	200Y/400Y	Yes	120	135	150	150	155	\$8,740
364CSL1609	1096	12	200Y/400Y	Yes	131	149	169	169	174	\$9,597
431CSL6206 ^①	1415	12	200Y/400Y	Yes	164	184	194	202	209	\$10,942
431CSL6208 ^①	1455	12	200Y/400Y	Yes	172	198	210	217	221	\$11,563
432CSL6210 ^①	1685	12	200Y/400Y	Yes	217	253	268	273	282	\$12,210
432CSL6212 ^①	1760	12	200Y/400Y	Yes	219	252	267	273	289	\$13,810
433CSL6216 ^①	2235	12	200Y/400Y	Yes	286	337	359	367	380	\$15,480
433CSL6220 ^①	2245	12	200Y/400Y	Yes	305	350	372	385	403	\$16,426

MAGNAPLUS® Alternate Models ^③

281PSL1722	225	12	200Y/400Y	Ⓜ	9.3	10.6	11.6	11.6	12.1	\$2,954
282PSL1704	270	12	200Y/400Y	Ⓜ	12.1	14.3	15.3	15.4	18.1	\$3,269
282PSL1705	295	12	200Y/400Y	Ⓜ	16.1	19.1	20	20	21	\$3,516
283PSL1706	336	12	200Y/400Y	Yes	20	22	24	24	27	\$3,912
283PSL1707	366	12	200Y/400Y	Yes	23	27	29	29	32	\$4,227
284PSL1708	405	12	200Y/400Y	Yes	29	31	34	34	39	\$4,623
284PSL1742	436	12	200Y/400Y	Yes	31	35	39	39	40	\$4,794
285PSL1700	480	12	200Y/400Y	Yes	35	39	43	43	45	\$4,859
286PSL1701	600	12	200Y/400Y	Yes	40	48	53	53	56	\$5,265
287PSL1702	670	12	200Y/400Y	Yes	46	53	58	58	61	\$5,982
431CSL6202 ^①	1220	12	200Y/400Y	Yes	121	136	142	146	151	\$9,280
431CSL6204 ^①	1310	12	200Y/400Y	Yes	139	161	171	172	178	\$10,191

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation

200Y or 400Y Volts
(12 Leads)
400Y Volts
(4-6 Leads)

4-Pole
Three Phase
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Voltage	Regulator	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425①②	2730	12	200Y/400Y	PM500	369	419	422	422	428	\$19,295
572RSL6427①②	2840	12	200Y/400Y	PM500	382	427	441	443	459	\$19,626
572RSL6429①②	3050	12	200Y/400Y	PM500	434	492	500	500	506	\$21,852
572RSL6431①②	3110	12	200Y/400Y	PM500	444	507	524	529	547	\$22,660
573RSL6433①②	3400	12	200Y/400Y	PM500	550	626	644	652	666	\$26,480
573RSL6435①②	3620	12	200Y/400Y	PM500	570	656	677	680	680	\$28,872
574RSL6437①②	4080	12	200Y/400Y	PM500	612	701	725	733	754	\$30,798
574RSL6438②	4240	4 Bars	400Y Only	PM500	651	741	768	776	802	\$31,906
575RSL4044	5000	4 Bars	400Y Only	DVR®2000E+	742	863	896	909	943	\$35,753
741RSL4044	5490	4 Bars	400Y Only	DVR®2000E+	779	884	911	927	938	\$37,176
741RSL4045	5490	12	200Y/400Y	DVR®2000E+	779	884	911	927	938	\$39,573
740RSL4046	5200	4 Bars	400Y Only	DVR®2000E+	856	987	1025	1035	1072	\$41,971
742RSL4048	6300	4 Bars	400Y Only	DVR®2000E+	928	1069	1102	1112	1149	\$46,278
742RSL4049	6300	12	200Y/400Y	DVR®2000E+	928	1069	1102	1112	1149	\$49,472
742RSL4050	7230	4 Bars	400Y Only	DVR®2000E+	1070	1221	1259	1275	1296	\$50,585
743RSL4052	7800	4 Bars	400Y Only	DVR®2000E+	1351	1552	1552	1552	1558	\$59,040
744RSL4054	8600	4 Bars	400Y Only	DVR®2000E+	1394	1640	1706	1727	1727	\$63,823
744RSL4056	9740	4 Bars	400Y Only	DVR®2000E+	1480	1722	1833	1879	1934	\$71,801
744RSL4057	9740	4 Bars	400Y Only	DVR®2000E+	1600	1863	1988	2028	2165	\$74,995
764RSL4063	9937	4 Bars	400Y Only	DVR®2000E+	1655	1870	1995	2070	2195	\$109,470
Form Wound Coil Designs										
573FSL4402	3400	4 Bars	400Y Only	DVR®2000E+	380	440	480	480	500	\$35,234
574FSL4404	3650	4 Bars	400Y Only	DVR®2000E+	480	570	630	630	650	\$39,054
742FSL4408	5900	4 Bars	400Y Only	DVR®2000E+	670	830	920	940	980	\$47,883
743FSL4410	6500	4 Bars	400Y Only	DVR®2000E+	750	920	1000	1020	1060	\$52,662
743FSL4412	6900	4 Bars	400Y Only	DVR®2000E+	850	1040	1100	1130	1150	\$55,855
744FSL4060	7300	4 Bars	400Y Only	DVR®2000E+	1159	1336	1368	1368	1368	\$62,233
744FSL4062	8300	4 Bars	400Y Only	DVR®2000E+	1475	1706	1750	1750	1750	\$68,617
744FSL4414	8300	4 Bars	400Y Only	DVR®2000E+	1575	1820	1950	1980	2050	\$76,851

See dedicated 400 Volt generators on page 14 for improved ratings and transient performance.

MAGNAPOWER® Standard Models ③

862RSL86006	13780	6	400Y Only	DVR®2000E+	2170	2500	2690	2690	2830	\$181,153
Form Wound Coil Designs										
1020FDL1100	15000	6	400Y Only	DVR®2000E+	1876	2132	2220	2260	2260	\$165,149
1020FDL1102	15900	6	400Y Only	DVR®2000E+	1990	2190	2430	2430	2430	\$181,912
1020FDL1104	16300	6	400Y Only	DVR®2000E+	2150	2445	2540	2590	2635	\$185,556
1020FDL1106	17000	6	400Y Only	DVR®2000E+	2440	2590	2640	2660	2680	\$190,687
863FSL86056	14500	6	400Y Only	DVR®2000E+	2080	2365	2600	2600	2730	\$218,290
1020FDL1108	17400	6	400Y Only	DVR®2000E+	2540	2740	2740	2740	2740	\$229,779
1030FDL1110	20000	6	400Y Only	DVR®2000E+	2580	3030	3100	3125	3125	\$264,195

① 12 lead reconnectable via bus bars.

② Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

③ All 860 & 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

60 Hertz

**4-Pole
Three Phase
(Std. 480 Volt Designs)
Generators**

**190Y or 380Y Volts
220 or 110 Volts Delta
(12 Leads)**

**1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR**

MAGNAPLUS® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ^④	Voltage	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	12	190Y/380Y	Yes	8.5	9	10	10	11	\$2,954
282PSL1703 ^③	240	12	190Y/380Y	⊙	10	11.5	12.5	12.5	13	\$3,108
282CSL1504	250	12	190Y/380Y	Yes	12	14.5	15.5	15.5	16	\$3,269
282CSL1505	275	12	190Y/380Y	Yes	17.5	19	20	20	21	\$3,516
283CSL1506	310	12	190Y/380Y	Yes	18	22	23	23	24	\$3,912
283CSL1507	350	12	190Y/380Y	Yes	22	25	27	27	29	\$4,227
284CSL1508	405	12	190Y/380Y	Yes	27	32	35	35	36	\$4,623
284CSL1542	420	12	190Y/380Y	Yes	29	33	36	36	38	\$4,794
361CSL1600 ^①	518	12	190Y/380Y	Yes	32	36	38	38	41	\$4,859
361CSL1601 ^①	569	12	190Y/380Y	Yes	41	45	50	50	52	\$5,265
361CSL1602 ^①	620	12	190Y/380Y	Yes	48	55	60	60	62	\$5,982
362CSL1604 ^①	706	12	190Y/380Y	Yes	60	65	72	72	77	\$6,464
362CSL1606 ^①	796	12	190Y/380Y	Yes	72	81	90	90	95	\$7,416
363CSL1607 ^①	943	12	190Y/380Y	Yes	90	100	115	115	125	\$7,978
364CSL1608	1086	12	190Y/380Y	Yes	115	130	140	140	145	\$8,740
364CSL1609	1096	12	190Y/380Y	Yes	125	140	160	160	165	\$9,597
431CSL6206 ^①	1415	12	190Y/380Y	Yes	156	176	185	191	200	\$10,942
431CSL6208 ^①	1455	12	190Y/380Y	Yes	167	192	203	207	213	\$11,563
432CSL6210 ^①	1685	12	190Y/380Y	Yes	213	245	260	265	275	\$12,210
432CSL6212 ^①	1760	12	190Y/380Y	Yes	212	243	256	265	275	\$13,810
433CSL6216 ^①	2235	12	190Y/380Y	Yes	281	330	350	357	370	\$15,480
433CSL6220 ^①	2245	12	190Y/380Y	Yes	292	335	355	367	385	\$16,426

MAGNAPLUS® Alternate Models^③

281PSL1722	225	12	190Y/380Y	⊙	8.5	10	11	11	11.5	\$2,954
282PSL1704	270	12	190Y/380Y	⊙	11.5	13.5	14.5	14.6	16	\$3,269
282PSL1705	295	12	190Y/380Y	⊙	15	18	19	19	20	\$3,516
283PSL1706	336	12	190Y/380Y	Yes	19	21	23	23	26	\$3,912
283PSL1707	366	12	190Y/380Y	Yes	22	26	27	27	30	\$4,227
284PSL1708	405	12	190Y/380Y	Yes	27	29	32	32	37	\$4,623
284PSL1742	436	12	190Y/380Y	Yes	29	33	37	37	38	\$4,794
285PSL1700	480	12	190Y/380Y	Yes	33	37	41	41	43	\$4,859
286PSL1701	600	12	190Y/380Y	Yes	38	46	50	50	53	\$5,265
287PSL1702	670	12	190Y/380Y	Yes	44	50	55	55	58	\$5,982
431CSL6202 ^①	1220	12	190Y/380Y	Yes	115	130	135	140	145	\$9,280
431CSL6204 ^①	1310	12	190Y/380Y	Yes	136	155	165	167	172	\$10,191

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation

190Y or 380Y Volts
220 or 110 Volts Delta
(12 Leads)
380Y Volts
(4-6 Leads)

4-Pole
Three Phase
(Std. 480 Volt Designs)
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Voltage	Regulator	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425①②	2730	12	190Y/380Y	PM500	350	400	400	400	400	\$19,295
572RSL6427①②	2840	12	190Y/380Y	PM500	360	405	405	405	405	\$19,626
572RSL6429①②	3050	12	190Y/380Y	PM500	415	470	470	470	470	\$21,852
572RSL6431①②	3110	12	190Y/380Y	PM500	425	485	485	485	485	\$22,660
573RSL6433①②	3400	12	190Y/380Y	PM500	525	595	595	595	595	\$26,480
573RSL6435①②	3620	12	190Y/380Y	PM500	545	625	625	625	625	\$28,872
574RSL6437①②	4080	12	190Y/380Y	PM500	590	670	670	670	670	\$30,798
574RSL6438②	4240	4 Bars	380Y Only	PM500	620	705	705	705	705	\$31,906
575RSL4044	5000	4 Bars	380Y Only	DVR®2000E+	720	830	830	830	830	\$35,753
741RSL4044	5490	4 Bars	380Y Only	DVR®2000E+	740	840	840	840	840	\$37,176
741RSL4045	5490	12	190Y/380Y	DVR®2000E+	740	840	840	840	840	\$39,573
740RSL4046	5200	4 Bars	380Y Only	DVR®2000E+	825	945	945	945	945	\$41,971
742RSL4048	6300	4 Bars	380Y Only	DVR®2000E+	900	1030	1030	1030	1030	\$46,278
742RSL4049	6300	12	190Y/380Y	DVR®2000E+	900	1030	1030	1030	1030	\$49,472
742RSL4050	7230	4 Bars	380Y Only	DVR®2000E+	1020	1160	1160	1160	1160	\$50,585
743RSL4052	7800	4 Bars	380Y Only	DVR®2000E+	1290	1480	1480	1480	1480	\$59,040
744RSL4054	8600	4 Bars	380Y Only	DVR®2000E+	1360	1590	1590	1590	1590	\$63,823
744RSL4056	9740	4 Bars	380Y Only	DVR®2000E+	1430	1650	1750	1790	1850	\$71,801
744RSL4057	9740	4 Bars	380Y Only	DVR®2000E+	1550	1790	1910	1950	2070	\$74,995
764RSL4063	9937	4 Bars	380Y Only	DVR®2000E+	1580	1790	1910	1970	2090	\$109,470
Form Wound Coil Designs										
573FSL4402	3400	4 Bars	380Y Only	DVR®2000E+	360	420	460	460	480	\$35,234
574FSL4404	3650	4 Bars	380Y Only	DVR®2000E+	450	540	590	590	610	\$39,054
742FSL4408	5900	4 Bars	380Y Only	DVR®2000E+	630	790	870	890	930	\$47,883
743FSL4410	6500	4 Bars	380Y Only	DVR®2000E+	710	870	950	970	1010	\$52,662
743FSL4412	6900	4 Bars	380Y Only	DVR®2000E+	810	990	1050	1070	1090	\$55,855
744FSL4060	7300	4 Bars	380Y Only	DVR®2000E+	1120	1280	1280	1280	1280	\$62,233
744FSL4062	8300	4 Bars	380Y Only	DVR®2000E+	1430	1650	1650	1650	1650	\$68,617
744FSL4414	8300	4 Bars	380Y Only	DVR®2000E+	1520	1750	1860	1900	1960	\$76,851

See dedicated 380 Volt generators on page 14 for improved ratings and transient performance.

MAGNAPOWER® Standard Models ③

862RSL86006	13780	6	380Y Only	DVR®2000E+	2060	2360	2560	2560	2690	\$181,153
Form Wound Coil Designs										
1020FDL1100	15000	6	380Y Only	DVR®2000E+	1820	2060	2140	2180	2180	\$165,149
1020FDL1102	15900	6	380Y Only	DVR®2000E+	1930	2115	2340	2340	2340	\$181,912
1020FDL1104	16300	6	380Y Only	DVR®2000E+	2090	2360	2450	2500	2540	\$185,556
1020FDL1106	17000	6	380Y Only	DVR®2000E+	2430	2510	2525	2550	2570	\$190,687
863FSL86056	14500	6	380Y Only	DVR®2000E+	2000	2275	2500	2500	2625	\$218,290
1020FDL1108	17400	6	380Y Only	DVR®2000E+	2530	2600	2600	2600	2600	\$229,779
1030FDL1110	20000	6	380Y Only	DVR®2000E+	2540	3000	3000	3000	3000	\$264,195

① 12 lead reconnectable via bus bars.

② Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

③ All 860 & 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

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Hertz

**4-Pole
Three Phase
Dedicated Design
Generators**

**380Y/219 Volts
(4 Leads)**

**1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Includes PMG Excitation**

MAGNAMAX[®] Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ①	Std. AVR	kW Rating @ Designated NEMA Rise					List Price
				Continuous			Standby		
				NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL4160	2730	4	DVR [®] 2000E+	355	425	450	450	480	\$18,267
572RSL4162	2840	4	DVR [®] 2000E+	425	485	500	500	525	\$19,626
573RSL4164	3400	4	DVR [®] 2000E+	510	605	640	640	700	\$23,452
574RSL4166	4080	4	DVR [®] 2000E+	670	800	830	830	900	\$30,312
574RSL4168	4240	4	DVR [®] 2000E+	715	855	910	915	965	\$31,906
741RSL4170	5490	4 Bars	DVR [®] 2000E+	850	1015	1065	1085	1085	\$37,171
742RSL4172	6300	4 Bars	DVR [®] 2000E+	1000	1200	1260	1300	1300	\$46,278
743RSL4174	7800	4 Bars	DVR [®] 2000E+	1260	1550	1650	1700	1700	\$59,040
744RSL4176	8600	4 Bars	DVR [®] 2000E+	1500	1850	1950	2000	2000	\$63,823
764RSL4177	8797	4 Bars	DVR [®] 2000E+	1750	2000	2100	2150	2250	\$93,162

60
Hertz

**4-Pole
Three Phase
Dedicated Design
Generators**

**400Y/231 Volts
(4 Leads)**

**1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging**

MAGNAMAX[®] Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads ①	Std. AVR	kW Rating @ Designated NEMA Rise					List Price
				Continuous			Standby		
				NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL4160	2730	4	DVR [®] 2000E+	350	415	440	440	465	\$18,267
572RSL4162	2840	4	DVR [®] 2000E+	385	436	450	450	490	\$19,626
573RSL4164	3400	4	DVR [®] 2000E+	507	605	623	623	680	\$23,452
574RSL4166	4080	4	DVR [®] 2000E+	620	737	760	800	830	\$30,312
574RSL4168	4240	4	DVR [®] 2000E+	665	793	843	850	895	\$31,906
741RSL4170	5490	4 Bars	DVR [®] 2000E+	865	1030	1080	1100	1100	\$37,171
742RSL4172	6300	4 Bars	DVR [®] 2000E+	1000	1200	1260	1300	1300	\$46,278
743RSL4174	7800	4 Bars	DVR [®] 2000E+	1310	1600	1700	1750	1750	\$59,040
744RSL4176	8600	4 Bars	DVR [®] 2000E+	1500	1850	1960	2000	2000	\$63,823
764RSL4177	8797	4 Bars	DVR [®] 2000E+	1750	2000	2100	2150	2250	\$93,162

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging

600Y/346 Volts

4-Pole
Three Phase
Dedicated Design
Generators

60
Hertz

MAGNAPLUS® Standard Models, Shunt (Non-PMG) Excitation

Base Model	Net Wt. (lbs.)	No. of Leads ^③	Bolt-on PMG Option Avail.	Std. AVR	kW Rating @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281PSL5246	220	4	No	SE350E	8.8	10	11	11	12	\$2,954
282PSL5247	240	4	No	SE350E	11.5	13.5	14.5	15	15.5	\$3,108
282PSL5248	270	4	No	SE350E	12.5	15	16.5	16.5	17.5	\$3,269
282PSL5249	295	4	No	SE350E	17	20	21	21	22	\$3,516
283PSL5250	336	4	Yes	SE350E	22	25	27	27	29	\$3,912
283PSL5251	366	4	Yes	SE350E	25	30	33	33	35	\$4,227
284PSL5252	405	4	Yes	SE350E	30	32	35	35	40	\$4,623
284PSL5253	436	4	Yes	SE350E	32	36	40	40	45	\$4,794
285PSL5254	480	4	Yes	SE350E	38	43	45	45	50	\$4,859
361PSL1632	518	4	Yes	SE350E	40	45	48	48	50	\$4,859
361PSL1633	569	4	Yes	SE350E	49	55	60	60	65	\$5,265
361PSL1634	620	4	Yes	SE350E	58	65	70	70	76	\$5,982
362PSL1635	706	4	Yes	SE350E	75	84	90	90	95	\$6,464
362PSL1636	796	4	Yes	SE350E	80	96	105	105	113	\$7,416
363PSL1658	943	4	Yes	SE350E	110	125	135	135	150	\$7,978
431PSL6240	1220	4	Yes	SE350E	125	140	150	155	160	\$9,010
431PSL6242	1415	4	Yes	SE350E	140	170	175	180	190	\$9,894
431PSL6243	1455	4	Yes	SE350E	180	210	225	230	240	\$11,563
432PSL6246	1760	4	Yes	SE350E	230	275	300	305	310	\$13,810
433PSL6248	2245	4	Yes	SE350E	310	375	400	410	430	\$16,426

MAGNAMAX® Standard Models, PMG Excitation

Base Model	Net Wt. (lbs.)	No. of Leads	Std. AVR	kW Rating @ Designated NEMA Rise					List Price
				Continuous			Standby		
				NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSS4270	2840	4	DVR®2000E+	420	475	500	510	540	\$19,626
572RSS4272	3110	4	DVR®2000E+	485	575	600	600	640	\$22,345
573RSS4274	3400	4	DVR®2000E+	565	640	700	700	725	\$26,004
573RSS4276	3620	4	DVR®2000E+	575	685	725	725	780	\$28,402
574RSS4278	4080	4	DVR®2000E+	700	825	875	875	900	\$30,312
574RSS4280	4240	4	DVR®2000E+	800	900	960	960	980	\$31,906
741RSS4282	5300	4 Bars	DVR®2000E+	765	950	1000	1040	1050	\$35,753
741RSS4284	5490	4 Bars	DVR®2000E+	865	1030	1080	1100	1100	\$37,171
742RSS4286	5950	4 Bars	DVR®2000E+	960	1100	1180	1200	1200	\$42,447
743RSS4288	7230	4 Bars	DVR®2000E+	1120	1330	1330	1400	1400	\$50,585
743RSS4290	7800	4 Bars	DVR®2000E+	1300	1550	1650	1700	1700	\$59,040
744RSS4292	8600	4 Bars	DVR®2000E+	1500	1850	1950	2000	2000	\$63,823
744RSS4293	9740	4 Bars	DVR®2000E+	1600	2000	2100	2150	2250	\$74,995
764RSS4295	9937	4 Bars	DVR®2000E+	1850	2100	2300	2400	2400	\$109,470

MAGNAPOWER® Standard Models, PMG Excitation ①②

1020FDS1120	15430	6	DVR®2000E+	1750	2000	2250	2250	2250	\$175,053
1020FDS1122	15835	6	DVR®2000E+	2000	2250	2500	2500	2500	\$192,838
1020FDS1124	17850	6	DVR®2000E+	2250	2500	2800	2800	2800	\$202,175
1030FDS1126	19875	6	DVR®2000E+	2500	2800	3000	3000	3000	\$215,648
1030FDS1128	20000	6	DVR®2000E+	2500	3000	3250	3250	3250	\$236,141

① All 1000 frame generators have 4 bus bars, with the capability of differential protection.

② All 1000 frame generators incorporate form wound coils and VPI insulation systems.

③ All MAGNAPLUS models have linkboard as standard.

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Single Phase Generators

240/120 Volts
480/240 Volts
120 Volts Delta
(12 Leads)

1800 RPM
NEMA Class H Insulation
40°C Ambient

MAGNAPLUS® Standard ModelsⓄⓈ, SE350E AVR with Shunt (Non-PMG) Excitation

Base Model	Net Wt. (lbs.)	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise										List Price
			0.8 Power Factor Lagging					1.0 Power Factor					
			Continuous			Standby		Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1502	220	Yes	6.2	6.8	7.5	7.5	7.7	8	8.5	9.5	9.5	10	\$2,954
282PSL1703Ⓞ	240	Ⓞ	7	7.8	8.1	8.2	8.5	9.2	10	11	11	12	\$3,108
282CSL1504	250	Yes	8.7	9.5	10	10	11	11	12	13	13	14	\$3,269
282CSL1505	275	Yes	11	12	13	13	14	14	16	17	17	18	\$3,516
283CSL1506	310	Yes	13.5	15	16	16	17	17.5	19	20	20	22	\$3,912
283CSL1507	350	Yes	15.5	17	18	18	20	20	22	25	25	26	\$4,227
284CSL1508	405	Yes	20	22	24	25	26	25	29	31	31	33	\$4,623
284CSL1542	420	Yes	20	23	24	24	27	26	29	32	32	33	\$4,794
361CSL1600Ⓞ	518	Yes	25	28	30	30	32	31	36	38	39	40	\$4,859
361CSL1601Ⓞ	569	Yes	30	33	35	35	37	38	42	45	45	48	\$5,265
361CSL1602Ⓞ	620	Yes	35	40	42	42	45	45	51	55	55	60	\$5,982
362CSL1604Ⓞ	706	Yes	41	47	50	51	54	53	61	66	66	71	\$6,464
362CSL1606Ⓞ	796	Yes	49	55	59	60	64	66	76	78	79	85	\$7,416
363CSL1607Ⓞ	943	Yes	60	66	72	73	78	80	90	95	97	100	\$7,978
364CSL1609	1096	Yes	75	90	95	95	105	100	110	120	125	130	\$8,517
431CSL6206Ⓞ	1415	Yes	105	120	130	132	135	131	150	165	166	175	\$10,942
431CSL6208Ⓞ	1455	Yes	105	120	130	132	136	131	150	165	166	175	\$11,563
432CSL6210Ⓞ	1685	Yes	125	147	158	161	165	156	185	200	201	206	\$12,210
432CSL6212Ⓞ	1760	Yes	125	147	158	161	165	156	185	200	201	206	\$13,810
433CSL6216Ⓞ	2235	Yes	150	175	190	193	200	190	220	240	241	250	\$15,480
433CSL6220Ⓞ	2245	Yes	150	175	190	193	200	190	220	240	241	250	\$16,426

MAGNAPLUS® Alternate ModelsⓄⓈ, SE350E AVR with Shunt (Non-PMG) Excitation

281PSL1722Ⓞ	225	Ⓞ	6	7	7.5	7.5	7.8	8	9	10	10	10.5	\$2,954
282PSL1704Ⓞ	270	Ⓞ	8	10	10.5	10.5	11	10.5	12.5	14	14	15	\$3,269
282PSL1705Ⓞ	295	Ⓞ	11	12.5	13.5	13.5	14	14	16	17.5	17.5	18.5	\$3,516
283PSL1706Ⓞ	336	Yes	13	15	16	16	17	17	20	21	21	23	\$3,912
283PSL1707Ⓞ	366	Yes	15	17	18	18	20	19	22	25	25	26	\$4,227
284PSL1708Ⓞ	405	Yes	19	21	23	23	25	25	28	30	30	32	\$4,623
284PSL1742Ⓞ	436	Yes	20	23	25	25	27	25	30	32	32	35	\$4,794
285PSL1700Ⓞ	480	Yes	21	25	28	28	30	30	35	37	37	40	\$4,859
286PSL1701Ⓞ	600	Yes	24	28	32	32	34	32	38	42	42	45	\$5,265
287PSL1702Ⓞ	670	Yes	25	30	33	33	34	36	42	45	45	50	\$5,982
431CSL6202Ⓞ	1220	Yes	77	90	95	96	100	96	115	120	121	125	\$9,044
431CSL6204Ⓞ	1310	Yes	85	100	106	107	110	106	125	133	135	140	\$9,894

MAGNAMAX® Standard Models, PM500 AVR with PMG Excitation

Base Model ⓄⓈ	Net Wt. (lbs.)	kW Rating @ Designated NEMA Rise										List Price
		0.8 Power Factor Lagging					1.0 Power Factor					
		Continuous			Standby		Continuous			Standby		
		NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
572RSL6425	2730	167	198	209	209	222	209	248	261	261	278	\$19,295
572RSL6427	2840	194	220	227	227	246	242	275	283	283	308	\$19,626
572RSL6429	3050	196	235	246	246	268	245	294	308	308	336	\$21,852
572RSL6431	3110	213	253	264	264	284	267	316	330	330	355	\$22,660
573RSL6433	3400	251	299	308	308	337	314	374	385	385	421	\$26,480
573RSL6435	3620	257	312	330	330	356	322	391	413	413	446	\$28,872
574RSL6437	4080	295	352	363	363	396	369	440	454	454	495	\$30,798

- Ⓞ 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.
- Ⓢ PMG Option available as build-up only.
- Ⓞ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.
- Ⓢ All MAGNAPLUS models have linkboard as standard.
- Ⓢ For 120 volt only service, use an SE350EL voltage regulator to replace the standard SE350E regulator. See Modification Section for price adder.
- Ⓢ 12 lead reconnectable via bus bars.
- Ⓢ Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).

General notes on page 46 may apply to this page.

1800 RPM
40°C Ambient
Shunt (Non-PMG) Excitation
SE350EL AVR

240/120 or 120 Volts
(4 Leads)

4-Pole
Dedicated
Single Phase
Generators

60
Hertz

MAGNAPLUS®

Standard Models®

NEMA Class H Insulation

Base Model	Net Wt. (lbs.)	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise										List Price
			0.8 Power Factor Lagging					1.0 Power Factor					
			Continuous			Standby		Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281CSL1513	216	Yes	6.5	7.5	8	8	8.5	10	12	12.5	12.5	13.5	\$2,985
282PSL1714③	236	②	7	7.7	8.4	8.5	9	10.5	12	13	13	13.5	\$3,125
282CSL1515	250	Yes	10	11	12	12	13	16	18	19	19	20	\$3,210
282PSL1716	288	②	12	14	15	15	16	18	20	22	22	25	\$3,601
283CSL1517	349	Yes	16.5	19	21	21	22	26	30	32	32	35	\$4,035
284CSL1518	398	Yes	14	16	18	18	20	24	30	32	32	35	\$4,356
284CSL1550	447	Yes	21	24	26	27	28	30	37	40	41	42	\$4,944
361CSL1611①	513	Yes	22	26	29	30	32	35	37	40	40	45	\$5,201
361CSL1612①	578	Yes	28	33	36	36	40	40	45	50	50	55	\$5,576
361CSL1613①	626	Yes	38	43	47	47	50	50	55	60	60	65	\$6,078
362CSL1615①	779	Yes	48	54	59	60	65	65	70	75	75	80	\$6,464
363CSL1617①	929	Yes	50	58	66	66	70	75	90	100	100	105	\$7,501
364CSL1618	1080	Yes	75	90	95	95	105	100	110	120	125	130	\$9,379
431PSL6224①	1280	Yes	80	90	100	100	110	130	145	155	155	165	\$9,739
431PSL6226①	1600	Yes	85	100	110	110	115	135	155	175	175	185	\$10,771
432PSL6228①	1720	Yes	125	145	155	155	170	170	195	210	210	225	\$11,493

MAGNAPLUS®

Alternate Models®③④

NEMA Class H Insulation

Base Model	Net Wt. (lbs.)	Bolt-on PMG Option Avail.	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	List Price
281PSL1763	220	②	6	7	7.5	7.5	8	10.5	12	13	13	13.5	\$2,985
282PSL1715	265	②	10	11	12	12	12.5	15	17	18	18	20	\$3,210
283PSL1717	331	②	15	17	18.5	18.5	20	22	25	27	27	30	\$4,035
283PSL1718	360	②	17	20	22	22	23	26	30	32	32	35	\$4,356
284PSL1750	430	Yes	23	26	27	27	30	34	38	41	41	45	\$4,944
285PSL1711	470	Yes	24	28	32	32	34	36	40	45	45	50	\$5,201
286PSL1712	590	Yes	30	33	36	36	38	45	50	52	52	55	\$5,576
287PSL1713	660	Yes	30	35	40	40	43	47	55	60	60	64	\$6,078
431PSL6222①	1070	Yes	60	68	73	73	78	100	110	115	115	125	\$9,044

Pancake

Standard Models®⑤⑥

NEMA Class F Insulation

Base Model	Net Wt. (lbs.)	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise										List Price
			0.8 Power Factor Lagging					1.0 Power Factor					
			Continuous			Standby		Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
331CSA/B3018	125	No	4.5	5	N/A	5.5	N/A	8	8.5	N/A	9	N/A	\$2,729
332CSA/B3020	143	No	6	6.5	N/A	7	N/A	10	10.5	N/A	11	N/A	\$2,954
333CSA/B3024	192	No	9	10	N/A	10	N/A	12.5	15	N/A	16.5	N/A	\$3,195
334CSA/B3028	214	No	11.5	13	N/A	14.5	N/A	17	20	N/A	22.5	N/A	\$3,601

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS® models have linkboard as standard.

⑤ Pancake generators are designed for space-critical single bearing applications. Double bearing models not available.

⑥ CSA models are SAE 5, CSB models are SAE 4.

General notes on page 46 may apply to this page.

marathon®
Generators

60 Hertz

**4-Pole
Three Phase
Medium Voltage
Generators**

**4160Y/2402 Volts
2402 Volts Delta
(6 Leads) ① ②**

**1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ AVR w/PMG Excitation**

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise					List Price
			Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
573FSM4352	2890	6	315	400	415	415	460	\$44,673
573FSM4354	3030	6	350	450	500	500	530	\$47,386
574FSM4356	3530	6	465	600	625	625	700	\$51,227
574FSM4358	4050	6	550	710	760	760	840	\$55,369
741FSM4360③	5300	6	730	900	925	925	930	\$59,832
742FSM4364③	6100	6	925	1120	1200	1200	1200	\$69,104
742FSM4366③	6900	6	1120	1360	1450	1450	1450	\$76,910
743FSM4368③	7500	6	1240	1520	1600	1600	1610	\$81,539
743FSM4370③	8200	6	1370	1680	1800	1800	1800	\$87,751
744FSM4374③	9300	6	1525	1875	2050	2050	2050	\$111,700
744FSM4375③	9340	6	1800	2150	2320	2320	2320	\$127,651
746FSM4377③	9540	6	2000	2250	2400	2500	2600	\$139,140

MAGNAPOWER® Standard Models ④

1020FDM1182③	15700	6	2250	2500	2800	2800	2800	\$186,690
1020FDM1184③	15900	6	2400	2800	3000	3000	3000	\$199,463
1030FDM1186③	16900	6	2650	3000	3000	3000	3000	\$219,388
1030FDM1188③	17100	6	2650	3000	3300	3350	3350	\$252,086
1030FDM1190③	17900	6	2800	3250	3420	3500	3500	\$276,047
1030FDM1192③	18100	6	2920	3340	3650	3680	3680	\$302,276
1040FDM1194③	20000	6	3300	3800	4150	4200	4200	\$347,531

① Medium voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required. See Modification Section for price adder.

② All medium voltage generators incorporate form wound coils and VPI insulation systems.

③ All 740, 760 and 1000 frame generators on this page have 100 ohm platinum winding RTDs as standard equipment.

④ All 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ regulator AVR w/PMG Excitation

2400Y/1386 Volts
1386 Volts Delta
(6 Leads)①②

4-Pole
Three Phase
Medium Voltage
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise					List Price
			Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
573FSM4304	2890	6	315	400	415	415	450	\$46,920
573FSM4306	3030	6	350	450	500	500	530	\$49,783
574FSM4308	3530	6	450	550	575	600	600	\$53,774
574FSM4310	4050	6	525	660	725	735	750	\$58,087
741FSM4314③	5300	6	700	875	890	900	900	\$62,875
742FSM4316③	6100	6	925	1090	1175	1200	1200	\$72,609
742FSM4318③	6900	6	1075	1270	1360	1400	1400	\$80,736
743FSM4320③	7500	6	1180	1410	1470	1550	1550	\$85,686
743FSM4322③	8200	6	1370	1630	1780	1800	1800	\$92,230

MAGNAPOWER® Standard Models ④

1020FDM5320③	14500	6	1750	2000	2100	2100	2100	\$161,964
1020FDM5322③	15900	6	2000	2300	2400	2400	2400	\$178,707
1020FDM5324③	16800	6	2250	2570	2700	2700	2700	\$186,690
1030FDM5326③	17900	6	2500	2860	3000	3000	3000	\$199,463

1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ AVR w/PMG Excitation

3300Y/1905 Volts
1905 Volts Delta
(6 Leads)①②

4-Pole
Three Phase
Medium Voltage
Generators

60
Hertz

MAGNAMAX® Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise					List Price
			Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
573FSM4326	2890	6	315	400	415	415	450	\$46,920
573FSM4328	3030	6	350	450	500	500	530	\$49,783
574FSM4330	3530	6	465	600	625	625	675	\$53,774
741FSM4334③	5300	6	700	850	900	900	925	\$62,875
742FSM4336③	6100	6	950	1120	1200	1200	1280	\$72,609
742FSM4338③	6900	6	1100	1310	1380	1400	1400	\$80,736
743FSM4340③	7500	6	1250	1470	1550	1550	1570	\$85,686
743FSM4342③	8200	6	1370	1625	1800	1800	1800	\$91,753
744FSM4344③	9300	6	1500	1850	2000	2000	2000	\$117,286
744FSM4345③	9340	6	1800	2150	2320	2320	2320	\$134,034
764FSM4347③	9540	6	2000	2250	2400	2500	2600	\$145,523

MAGNAPOWER® Standard Models ④

1020FDM5332③	15900	6	2000	2300	2400	2400	2400	\$178,707
1020FDM5334③	16800	6	2250	2570	2700	2700	2700	\$186,690
1020FDM5336③	17900	6	2500	2860	3000	3000	3000	\$199,463

① Medium voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required.

See Modification Section for price adder.

② All medium voltage generators incorporate form wound coils and VPI insulation systems.

③ All 740, 760 and 1000 frame generators on this page have 100 ohm platinum winding RTDs as standard equipment.

④ All 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

60 Hertz

**4-Pole
Three Phase
Medium Voltage
Generators**

**1800 RPM
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ regulator AVR w/PMG Excitation**

6300Y/3637 Volts or 3637 Volts Delta (6 Leads)①②

MAGNAMAX® Standard Models **NEMA Class H Insulation**

NOTE: 570, 740 & 760 Frame units
MUST employ solidly grounded neutral.

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise					List Price
			Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
574FSM4380	3650	6	450	525	560	570	600	\$67,825
741FSM4382③	5600	6	830	950	975	1000	1040	\$83,764
742FSM4384③	6100	6	1025	1150	1225	1250	1275	\$92,550
742FSM4386③	6500	6	1025	1150	1250	1250	1275	\$96,537
742FSM4388③	6900	6	1160	1360	1475	1475	1500	\$102,123
743FSM4390③	7500	6	1275	1450	1475	1525	1550	\$105,317
743FSM4392③	8200	6	1325	1575	1725	1725	1725	\$112,504
744FSM4394③	9300	6	1575	1875	2000	2025	2050	\$143,135
744FSM4395③	9300	6	1850	2150	2250	2275	2300	\$146,200
764FSM4397③	9500	6	2100	2300	2375	2450	2550	\$161,587

MAGNAPOWER® Standard Models ④ **NEMA Class F Insulation**

1020FDH1200③	13200	6	1850	2100	N/A	2300	N/A	\$226,740
1020FDH1202③	13700	6	1900	2210	N/A	2390	N/A	\$257,068
1020FDH1204③	14500	6	2120	2440	N/A	2660	N/A	\$287,379
1030FDH1206③	16600	6	2400	2800	N/A	3000	N/A	\$314,678
1030FDH1208③	16800	6	2560	3000	N/A	3300	N/A	\$344,583
1040FDH1210③	18900	6	2930	3430	N/A	3750	N/A	\$385,928

- ① Medium voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required. See Modification Section for price adder.
- ② All medium voltage generators incorporate form wound coils and VPI insulation systems.
- ③ All 740, 760 and 1000 frame generators on this page have 100 ohm platinum winding RTDs as standard equipment.
- ④ All 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

1800 RPM
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ regulator AVR w/PMG Excitation

4-Pole
Three Phase
Medium Voltage
Generators

60
Hertz

6600Y/3811 Volts or 3811 Volts Delta (6 Leads)^{①②}

MAGNAMAX® Standard Models

NEMA Class H Insulation

NOTE: 570, 740 & 760 Frame units
MUST employ solidly grounded neutral.

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise					List Price
			Continuous		Standby			
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
574FSM4380	3650	6	465	550	590	600	625	\$67,825
741FSM4382 ^③	5600	6	875	1000	1040	1050	1080	\$83,764
742FSM4384 ^③	6100	6	1000	1100	1200	1200	1250	\$92,550
742FSM4386 ^③	6500	6	1025	1200	1290	1300	1350	\$96,537
742FSM4388 ^③	6900	6	1100	1300	1400	1400	1450	\$102,123
743FSM4390 ^③	7500	6	1290	1460	1550	1600	1600	\$105,317
743FSM4392 ^③	8200	6	1370	1625	1800	1800	1800	\$112,504
744FSM4394 ^③	9300	6	1500	1850	2000	2000	2000	\$143,135
744FSM4395 ^③	9300	6	1800	2150	2320	2320	2320	\$146,200
764FSM4397 ^③	9500	6	2000	2250	2400	2500	2600	\$161,587

MAGNAPOWER® Standard Models ^④

NEMA Class F Insulation

Base Model	Net Wt. (lbs.)	No. of Leads	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	List Price
1020FDH1200 ^③	13200	6	1750	2050	N/A	2250	N/A	\$226,740
1020FDH1202 ^③	13700	6	1800	2170	N/A	2360	N/A	\$257,068
1020FDH1204 ^③	14500	6	2030	2340	N/A	2540	N/A	\$287,379
1030FDH1206 ^③	16600	6	2350	2800	N/A	3000	N/A	\$314,678
1030FDH1208 ^③	16800	6	2500	3000	N/A	3300	N/A	\$344,583
1040FDH1210 ^③	18900	6	2880	3390	N/A	3720	N/A	\$385,928

① Medium voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required. See Modification Section for price adder.

② All medium voltage generators incorporate form wound coils and VPI insulation systems.

③ All 740, 760 and 1000 frame generators on this page have 100 ohm platinum winding RTDs as standard equipment.

④ All 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

60 Hertz

**4-Pole
Three Phase
Medium Voltage
Generators**

**1800 RPM
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ regulator AVR w/PMG Excitation**

6900Y/3984 Volts or 3984 Volts Delta (6 Leads)①②

MAGNAMAX® Standard Models

NEMA Class H Insulation

NOTE: 570, 740 & 760 Frame units
MUST employ solidly grounded neutral.

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise					List Price
			Continuous			Standby		
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
574FSM4380	3650	6	475	575	600	615	625	\$67,825
741FSM4382③	5600	6	840	975	1025	1050	1060	\$83,764
742FSM4384③	6100	6	950	1075	1150	1175	1200	\$92,550
742FSM4386③	6500	6	975	1150	1225	1250	1250	\$96,537
742FSM4388③	6900	6	975	1160	1250	1250	1300	\$102,123
743FSM4390③	7500	6	1265	1450	1525	1575	1575	\$105,317
743FSM4392③	8200	6	1350	1600	1750	1750	1750	\$112,504
744FSM4394③	9300	6	1475	1825	1975	2000	2000	\$143,135
744FSM4395③	9300	6	1725	2075	2225	2250	2250	\$146,200
764FSM4397③	9500	6	1975	2225	2350	2400	2400	\$161,587

MAGNAPOWER® Standard Models ④

NEMA Class F Insulation

Base Model	Net Wt. (lbs.)	No. of Leads	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	List Price
1020FDH1200③	13200	6	1700	2000	N/A	2200	N/A	\$226,740
1020FDH1202③	13700	6	1750	2090	N/A	2270	N/A	\$257,068
1020FDH1204③	14500	6	2000	2310	N/A	2520	N/A	\$287,379
1030FDH1206③	16600	6	2375	2800	N/A	3000	N/A	\$314,678
1030FDH1208③	16800	6	2530	3000	N/A	3300	N/A	\$344,583
1040FDH1210③	18900	6	2810	3350	N/A	3680	N/A	\$385,928

- ① Medium voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required. See Modification Section for price adder.
- ② All medium voltage generators incorporate form wound coils and VPI insulation systems.
- ③ All 740, 760 and 1000 frame generators on this page have 100 ohm platinum winding RTDs as standard equipment.
- ④ All 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

1800 RPM
 NEMA Class F Insulation
 40°C Ambient
 0.8 Power Factor Lagging
 DVR®2000E+ AVR w/PMG Excitation

4-Pole
 Three Phase
 High Voltage
 Generators

60
 Hertz

MAGNAPOWER® Standard Models

12470Y/7200 Volts or 7200 Volts Delta (6 Leads)

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise			List Price
			Continuous		Standby	
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA F 130°C R/R	
861FSH86172	10582	6	900	1000	1050	\$138,660
862FSH86174	11784	6	1200	1340	1410	\$163,871
862FSH86176	12897	6	1280	1420	1500	\$189,082
863FSH86178	13173	6	1570	1740	1830	\$201,437
863FSH86180	14947	6	1750	1940	2040	\$239,452
863FSH86182	15650	6	1800	2000	2100	\$250,126
1020FDH1240	14000	6	1575	1825	1950	\$189,082
1020FDH1242	14200	6	1770	2010	2160	\$212,229
1020FDH1244	14475	6	1770	2000	2160	\$222,598
1020FDH1246	14900	6	1850	2120	2290	\$232,973
1020FDH1248	15500	6	2000	2250	2500	\$263,290
1030FDH1250	16200	6	2170	2500	2700	\$301,585
1030FDH1252	17700	6	2160	2500	2700	\$312,961
1030FDH1254	18000	6	2330	2750	3000	\$352,796
1040FDH1256	19750	6	2500	3000	3250	\$411,274
1040FDH1258	20250	6	2900	3380	3680	\$450,356
1040FDH1260	21500	6	3000	3540	3890	\$493,129

MAGNAPOWER® Standard Models

13200Y/7621 Volts or 7621 Volts Delta (6 Leads)

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise			List Price
			Continuous		Standby	
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA F 130°C R/R	
861FSH86172	10582	6	950	1050	1120	\$138,660
862FSH86174	11784	6	1250	1400	1480	\$163,871
862FSH86176	12897	6	1315	1460	1530	\$189,082
863FSH86178	13173	6	1620	1800	1900	\$201,437
863FSH86180	14947	6	1800	2000	2100	\$239,452
863FSH86182	15650	6	1850	2050	2160	\$250,126
1020FDH1240	14000	6	1500	1750	1875	\$189,082
1020FDH1242	14200	6	1750	2000	2180	\$212,229
1020FDH1244	14475	6	1800	2010	2250	\$222,598
1020FDH1246	14900	6	1800	2170	2360	\$232,973
1020FDH1248	15500	6	2000	2250	2500	\$263,290
1030FDH1250	16200	6	2150	2500	2700	\$301,585
1030FDH1252	17700	6	2200	2550	2800	\$312,961
1030FDH1254	18000	6	2350	2800	3070	\$352,796
1040FDH1256	19750	6	2500	3000	3250	\$411,274
1040FDH1258	20250	6	2800	3360	3690	\$450,356
1040FDH1260	21500	6	2840	3500	3870	\$493,129

MAGNAPOWER® Standard Models

13800Y/7967 Volts or 7967 Volts Delta (6 Leads)

Base Model	Net Wt. (lbs.)	No. of Leads	kW Rating @ Designated NEMA Rise			List Price
			Continuous		Standby	
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA F 130°C R/R	
861FSH86172	10582	6	950	1050	1120	\$138,660
862FSH86174	11784	6	1250	1400	1480	\$163,871
862FSH86176	12897	6	1350	1500	1575	\$189,082
863FSH86178	13173	6	1620	1800	1900	\$201,437
863FSH86180	14947	6	1800	2000	2100	\$239,452
863FSH86182	15650	6	1900	2100	2200	\$250,126
1020FDH1240	14000	6	1425	1700	1850	\$189,082
1020FDH1242	14200	6	1530	1840	2000	\$212,229
1020FDH1244	14475	6	1750	2000	2180	\$222,598
1020FDH1246	14900	6	1750	2090	2270	\$232,973
1020FDH1248	15500	6	1780	2130	2330	\$263,290
1030FDH1250	16200	6	1970	2350	2570	\$301,585
1030FDH1252	17700	6	2100	2500	2700	\$312,961
1030FDH1254	18000	6	2440	2800	3250	\$352,796
1040FDH1256	19750	6	2500	3000	3250	\$411,274
1040FDH1258	20250	6	2800	3300	3660	\$450,356
1040FDH1260	21500	6	2800	3300	3660	\$493,129

- High voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required.
- All 860 and 1000 frame generators on this page have 100 ohm platinum winding RTDs as standard equipment.
- All high voltage generators incorporate form wound coils and VPI insulation systems.
- All 860 and 1000 frame generators have 4 bus bars, with the capability of differential protection.
- Consult factory for altitude above 3300 feet.

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Three Phase Generators

480Y/277Y Volts

1800 RPM
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ AVR with PMG Excitation

FEATURES:

- Low Reactance Designs (*Contact factory for other custom reactance value designs)
- 5 Year Warranty
- Other voltage designs available (Contact factory for details)

DATAMAX™ Standard Models

Base Model	Net Wt. (lbs.)	No. of Leads	Winding	80°C		105°C		125°C		130°C		150°C		List Price
				kW	X"d*	kW	X"d*	kW	X"d*	kW	X"d*	kW	X"d*	
743RSL1352	7800	4 Bars	Random	1310	0.084	1600	0.102	1700	0.109	1750	0.112	1750	0.112	\$63,763
744RSL1354	8600	4 Bars	Random	1500	0.06	1850	0.074	1960	0.078	2000	0.08	2000	0.08	\$68,929
744RSL1356	9740	4 Bars	Random	1700	0.081	2010	0.095	2160	0.103	2210	0.105	2260	0.107	\$77,545
764RSL1364	9937	4 Bars	Random	2000	0.07	2250	0.079	2400	0.084	2500	0.088	2650	0.093	\$121,942
862RSL13006Ⓞ	13780	6	Random	2300	0.089	2685	0.104	2880	0.112	2880	0.112	3110	0.121	\$195,645
863FSL13056Ⓞ	14500	6	Form	2400	0.094	2730	0.106	3000	0.117	3000	0.117	3100	0.121	\$235,753
1020FDL1300Ⓞ	15000	6	Form	1880	0.113	2190	0.131	2290	0.137	2340	0.14	2340	0.14	\$178,361
1020FDL1302Ⓞ	15900	6	Form	2000	0.102	2250	0.115	2500	0.128	2500	0.128	2500	0.128	\$196,465
1020FDL1306Ⓞ	17000	6	Form	2250	0.096	2710	0.116	2800	0.12	2800	0.12	2800	0.12	\$205,942
1020FDL1308Ⓞ	17400	6	Form	2340	0.1	2800	0.12	2900	0.124	3000	0.129	3000	0.129	\$248,161
1030FDL1310Ⓞ	20000	6	Form	2530	0.085	3080	0.104	3260	0.11	3350	0.113	3350	0.113	\$285,331

60 Hertz

4-Pole Three Phase Generators

13200Y/7621Y Volts

1800 RPM
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ AVR with PMG Excitation

FEATURES:

- Low Reactance Designs (*Contact factory for other custom reactance value designs)
- 5 Year Warranty
- Other voltage designs available (Contact factory for details)

DATAMAX™ Standard Models ①②③④

Base Model	Net Wt. (lbs.)	No. of Leads	Winding	80°C		105°C		130°C		List Price
				kW	X"d*	kW	X"d*	kW	X"d*	
861FSH14172	10582	6	Form	950	0.092	1050	0.102	1120	0.109	\$149,753
862FSH14174	11784	6	Form	1250	0.101	1400	0.113	1480	0.120	\$176,981
862FSH14176	12897	6	Form	1315	0.113	1460	0.125	1530	0.131	\$204,209
863FSH14178	13173	6	Form	1620	0.108	1800	0.120	1900	0.127	\$217,552
863FSH14180	14947	6	Form	1800	0.108	2000	0.120	2100	0.126	\$258,608
863FSH14182	15650	6	Form	1850	0.115	2050	0.128	2160	0.135	\$270,136
1020FDH1440	14000	6	Form	1500	0.09	1750	0.106	1875	0.113	\$204,209
1020FDH1442	14200	6	Form	1750	0.105	2000	0.12	2180	0.131	\$229,208
1020FDH1444	14475	6	Form	1800	0.108	2010	0.121	2250	0.135	\$240,406
1020FDH1446	14900	6	Form	1800	0.096	2170	0.116	2360	0.126	\$251,611
1020FDH1448	15500	6	Form	2000	0.101	2250	0.113	2500	0.126	\$284,354
1030FDH1452	17700	6	Form	2200	0.09	2550	0.105	2800	0.115	\$337,997
1030FDH1454	18000	6	Form	2350	0.082	2800	0.098	3070	0.107	\$381,020
1040FDH1456	19750	6	Form	2500	0.072	3000	0.086	3250	0.093	\$444,176
1040FDH1458	20250	6	Form	2800	0.08	3250	0.093	3500	0.1	\$486,384

- ① All 860 & 1000 frame generators have 4 bus bars, with the capability of differential protection.
- ② Include 100 ohm platinum winding RTDs as standard equipment.
- ③ Consult factory for altitude above 3300 ft.
- ④ High voltage sensing potential transformers (P/Ts) are not included. For three phase sensing, a three phase PT is required.

General notes on page 46 may apply to this page.

1800 RPM
 NEMA Class H Insulation
 40°C Ambient
 Shunt (Non-PMG) Excitation
 SE350E AVR

MAGNASELECT®

4-Pole
 Three Phase
 Generators

60
 Hertz

FEATURES:

- The MAGNASELECT® Rental Line generators feature modular design rotary cam switches with solid metal shafts for durable, trouble free service.
- Premounted Voltage Change Switch saves assembly time and money.
- A Marathon® generator exclusive for enhanced reliability, all switches are mounted in vibration isolated conduit boxes.
- Silver plated contacts and the high tension springs inside the switch guarantee solid connections under rough conditions.
- Generator output terminals are clearly labeled and mounted on the switch for ease of connection to your distribution system. All switches are UL, CE and UL - Canada rated.

Model ①②	Net Wt. (lbs.)	Maximum Amps ③	Continuous Duty kW Rating @ Designated NEMA Rise									List Price
			480 V 3 Phase 0.8 PF High WYE			240/208 V 3 Phase 0.8 PF ④ Low WYE			240 V Single Phase 1.0 PF Low ZIG ZAG			
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	
282PSV28030	315	72	17	20	21	17	20	21	14	16	17.5	\$6,209
283PSV28031	386	104	25	30	33	24	28	30	19	22	25	\$6,921
284PSV28032	456	138	32	36	40	32	36	40	25	30	32	\$7,488
285PSV28033	500	156	38	43	45	36	40	45	30	35	37	\$7,552
361PSV36030	543	145	40	45	48	35	40	42	31	36	38	\$8,536
361PSV36031	594	190	49	55	60	45	50	55	38	42	45	\$8,943
361PSV36032	650	225	58	65	70	53	60	65	45	51	55	\$11,493
362PSV36033	736	277	75	84	90	65	72	80	53	61	66	\$11,975
362PSV36034	826	346	80	96	105	80	90	100	66	76	78	\$12,927
363PSV36035	978	433	110	125	135	100	110	125	80	90	95	\$15,234
431PSV6550	1255	510	125	142	151	125	140	147	96	115	120	\$16,346
431PSV6551	1345	607	143	170	180	142	165	175	106	125	133	\$17,229
431PSV6552	1455	700	165	200	211	170	191	202	131	150	165	\$24,131
431PSV6553	1495	749	180	211	226	176	203	216	131	150	165	\$24,751
432PSV6554	1730	954	220	260	275	220	260	275	156	185	200	\$25,400
432PSV6555	1805	957	230	275	300	225	260	276	156	185	200	\$26,998
433PSV6556	2280	1269	280	342	375	290	343	366	190	220	240	\$28,668
433PSV6557	2295	1335	310	375	403	315	362	385	N/A	N/A	N/A	\$36,885

Catalog models are standard, LEFT HAND switch mount, as shown.

Notes:

- ① Bolt-on PMG option available on all MAGNASELECT® models
- ② Maximum amperage determined using a parallel low WYE connection operation at 208V, 3Ph.
- ③ Regulator adjustment required for 208V operation.
- ④ All MAGNASELECT® models rated 40kW or higher are UL Listed. Models rated lower than 40 kW are UL recognized.

General notes on page 46 may apply to this page.



60 Hertz

4-Pole Three Phase Generators



NEMA Class H Insulation
0.8 Power Factor Lagging

FEATURES:

- Reinforced windings with multiple D/B cycles on main stator to handle high moisture salt-laden marine applications.
- Heavy duty rectifier assembly designed to handle extreme voltage transient surges and over-current situations.
- Wrapped and polybutadiene coated exciter stator for maximum environmental protection.

1800 RPM, 60Hz

Base model ①	Net Wt. (lbs.)	No. of Leads	Regulator	PMG Available	kW Ratings @ 50°C Ambient, Cont.			kW Ratings @ 40°C Ambient, Cont.			List Price
					208Y - 240D 95°C R/R	450Y 95°C R/R	480Y 95°C R/R	208Y - 240D 80°C R/R	450Y 80°C R/R	480Y 80°C R/R	
281PSL28040	225	12	SE350E	Yes	10.5	9.5	9.3	10	9.3	8.8	\$3,922
282PSL28041	240	12	SE350E	Yes	11.3	12	12	11	11.5	11.5	\$4,077
282PSL28042	270	12	SE350E	Yes	13	13	13	12.5	12.5	12.5	\$4,238
282PSL28043	295	12	SE350E	Yes	17.5	17.5	17.5	17	17	17	\$4,484
283PSL28044	336	12	SE350E	Yes	22	22	23	21	21	22	\$4,880
283PSL28045	366	12	SE350E	Yes	25	25	26	24	24	25	\$5,195
284PSL28046	405	12	SE350E	Yes	31	31	31	30	30	30	\$5,591
284PSL28047	436	12	SE350E	Yes	33	33	33	32	32	32	\$5,762
285PSL28048	480	12	SE350E	Yes	37	38	40	36	37	38	\$5,674
286PSL28049	600	12	SE350E	Yes	44	44	46	42	43	44	\$6,059
287PSL28050	670	12	SE350E	Yes	50	51	52	48	49	50	\$6,768
361PSL3120	518	12	SE350E	Yes	37	40	41	35	37	40	\$5,827
361PSL3121	569	12	SE350E	Yes	46	48	50	45	48	49	\$6,223
361PSL3122	620	12	SE350E	Yes	55	58	60	53	55	58	\$6,950
362PSL3124	706	12	SE350E	Yes	67	70	77	65	68	75	\$7,416
362PSL3126	796	12	SE350E	Yes	82	83	83	80	80	80	\$8,390
363PSL3127	943	12	SE350E	Yes	105	110	115	100	105	110	\$8,935
431PSL6252	1220	12	SE350E	Yes	133	135	135	125	125	125	\$10,134
431PSL6254	1310	12	SE350E	Yes	156	160	160	142	143	143	\$11,007
431PSL6256	1415	12	SE350E	Yes	183	190	186	170	170	165	\$12,044
431PSL6258	1455	12	SE350E	Yes	195	198	200	176	180	180	\$12,692
432PSL6260	1685	12	SE350E	Yes	245	245	245	220	220	220	\$13,326
432PSL6262	1760	12	SE350E	Yes	245	255	260	225	227	230	\$14,917
433PSL6266	2235	12	SE350E	Yes	325	325	321	290	285	280	\$16,598
433PSL6270	2245	12	SE350E	Yes	345	355	352	315	315	310	\$17,545
572RSL6325	2730	12	DVR®2000E+	Std	400	430	430	385	400	380	\$20,578
572RSL6327	2840	12	DVR®2000E+	Std	415	440	475	400	417	440	\$20,911
572RSL6329	3050	12	DVR®2000E+	Std	470	505	505	450	475	445	\$23,137
572RSL6331	3110	12	DVR®2000E+	Std	470	500	515	460	487	485	\$23,944
573RSL6333	3400	12	DVR®2000E+	Std	610	645	645	570	595	570	\$27,765
573RSL6335	3620	12	DVR®2000E+	Std	625	652	670	590	617	585	\$30,157
574RSL6337	4080	12	DVR®2000E+	Std	655	690	700	630	667	670	\$32,082

① 280 - 430 frame models include linkboard as standard

General notes on page 46 may apply to this page.

NEMA Class H Insulation
0.8 Power Factor Lagging
40°C Ambient

HARSH DUTY
Generators

**4-Pole
Three Phase
Generators**

**60
Hertz**

FEATURES:

- Reinforced windings with multiple D/B cycles on main stator to handle dust-laden and/or harsh industrial applications.
- Heavy duty rectifier assembly designed to handle extreme voltage transient surges and over-current situations.
- Wrapped and polybutadiene coated exciter stator for maximum environmental protection.

240Y or 480Y, 1800 RPM, 60Hz

Base model ①	Net Wt. (lbs.)	No. of Leads	Regulator	PMG Available	kW Ratings @ Designated NEMA Rise					List Price
					Continuous			Standby		
					NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281PSL28040	225	12	SE350E	Yes	8.8	10	11	11	12	\$3,922
282PSL28041	240	12	SE350E	Yes	11.5	13.5	14.5	15	15.5	\$4,077
282PSL28042	270	12	SE350E	Yes	12.5	15	16.5	16.5	17.5	\$4,238
282PSL28043	295	12	SE350E	Yes	17	20	21	21	22	\$4,484
283PSL28044	336	12	SE350E	Yes	22	25	27	27	29	\$4,880
283PSL28045	366	12	SE350E	Yes	25	30	33	33	35	\$5,195
284PSL28046	405	12	SE350E	Yes	30	32	35	35	40	\$5,591
284PSL28047	436	12	SE350E	Yes	32	36	40	40	45	\$5,674
285PSL28048	480	12	SE350E	Yes	38	43	45	45	50	\$5,762
286PSL28049	600	12	SE350E	Yes	44	52	58	58	62	\$6,059
287PSL28050	670	12	SE350E	Yes	50	58	62	62	67	\$6,768
361PSL3120	518	12	SE350E	Yes	40	45	48	48	50	\$5,827
361PSL3121	569	12	SE350E	Yes	49	55	60	60	65	\$6,223
361PSL3122	620	12	SE350E	Yes	58	65	70	70	76	\$6,950
362PSL3124	706	12	SE350E	Yes	75	84	90	90	95	\$7,416
362PSL3126	796	12	SE350E	Yes	80	96	105	105	113	\$8,390
363PSL3127	943	12	SE350E	Yes	110	125	135	135	150	\$8,935
431PSL6252	1220	12	SE350E	Yes	125	142	151	155	160	\$10,134
431PSL6254	1310	12	SE350E	Yes	143	170	180	181	190	\$11,007
431PSL6256	1415	12	SE350E	Yes	165	200	211	215	225	\$12,044
431PSL6258	1455	12	SE350E	Yes	180	211	226	230	240	\$12,692
432PSL6260	1685	12	SE350E	Yes	220	260	275	280	291	\$13,326
432PSL6262	1760	12	SE350E	Yes	230	275	300	300	310	\$14,917
433PSL6266	2235	12	SE350E	Yes	280	342	375	380	400	\$16,598
433PSL6270	2245	12	SE350E	Yes	310	375	403	415	430	\$17,545
572RSL6325	2730	12	DVR®2000E+	Std	380	450	475	475	505	\$20,578
572RSL6327	2840	12	DVR®2000E+	Std	440	500	515	515	560	\$20,911
572RSL6329	3050	12	DVR®2000E+	Std	445	535	560	560	610	\$23,137
572RSL6331	3110	12	DVR®2000E+	Std	485	575	600	600	645	\$23,944
573RSL6333	3400	12	DVR®2000E+	Std	570	680	700	700	765	\$27,765
573RSL6335	3620	12	DVR®2000E+	Std	585	710	750	750	810	\$30,157
574RSL6337	4080	12	DVR®2000E+	Std	670	800	825	825	900	\$32,082

① 280 - 430 frame models include Linkboard as standard.

General notes on page 46 may apply to this page.

60 Hertz

4-Pole Three Phase Generator

1800 RPM
NEMA Class H Insulation
0.8 Power Factor Lagging
Dripcover as Required by Marine Agency
DVR®2000E+ AVR with PMG

Marine Agency Certified Generators

- 430 frame MARINER® ABS / Lloyd's Register / DNV-GL Pre-Certified Generators now in stock for rapid response
- NEMA Class H Non-hygroscopic Insulation Systems
- Space Heaters standard on all frame sizes
- ABS List Pricing shown. Includes all ABS Agency Fees
- All generators include PMG excitation support
- For certification by other Marine Agencies, contact factory for availability and pricing



Base model	Net Wt. (lbs.)	No. of Leads	NEMA Class F			NEMA Class H			ABS List Price
			kW Ratings @ 95°C R/R over 50°C Ambient			kW Ratings @ 110°C R/R over 45°C Ambient			
			208Y - 240D	450Y	480Y	208Y - 240D	450Y	480Y	
431PSL6252	1220	12⓪	133	135	135	140	143	142	\$16,357
431PSL6254	1310	12⓪	156	160	160	165	168	170	\$17,218
431PSL6256	1415	12⓪	183	190	186	191	200	200	\$18,245
431PSL6258	1455	12⓪	195	198	200	203	210	211	\$18,909
432PSL6260	1685	12⓪	245	245	245	260	260	260	\$19,525
432PSL6262	1760	12⓪	245	255	260	260	270	275	\$21,114
433PSL6266	2235	12⓪	325	325	321	343	346	342	\$22,794
433PSL6270	2245	12⓪	345	355	352	362	375	375	\$23,763
572RSL6325	2730	12	400	430	430	435	462	450	\$25,934
572RSL6327	2840	12	415	440	475	445	470	500	\$26,250
572RSL6329	3050	12	470	505	505	510	547	535	\$28,482
572RSL6331	3110	12	470	500	515	525	557	575	\$29,290
573RSL6333	3400	12	610	645	645	650	690	680	\$33,126
573RSL6335	3620	12	625	652	670	680	725	710	\$35,502
574RSL6337	4080	12	655	690	700	725	770	800	\$37,439

MAGNAMAX® Models

574RSL4038	4240	4	Not Normally Used	720	750	Not Normally Used	825	860	\$38,329
575RSL4044	5000	4 Bars		825	870		937	975	\$41,099
741RSL4045	5490	12		880	940		980	1030	\$44,919
740RSL4046	5200	4 Bars		925	970		1080	1120	\$47,316
742RSL4048	6300	4 Bars		1010	1040		1165	1200	\$51,870
742RSL4050	7230	4 Bars		1175	1220		1365	1430	\$56,166
743RSL4052	7800	4 Bars		1425	1425		1660	1600	\$64,631
744RSL4054	8600	4 Bars		1475	1650		1775	1850	\$69,425
744RSL4056	9740	4 Bars		1790	1800		1890	2010	\$81,268
744RSL4058	9740	4 Bars		1880	1880		2020	2100	\$84,610

- ABS witness testing may not be required for units rated below 100 kW.
- Required information at time of order placement: Vessel Name/Hull Number, shipyard, nameplate ratings, and mounting arrangements.
- Winding RTD's are required on Mobil Offshore Drilling Units (MODU) for units rated 400 kW (500 kVA) and above. See Modification Section for pricing.
- Winding RTD's are required on all units rated 1000 Volts and above. See Modification Section for pricing.

⓪ 430 frame models have linkboard as standard

General notes on page 46 may apply to this page.

Marine Agency Classification Requirements for Certification of Shipboard Generators

Subject	American Bureau Of Shipping (ABS)	Lloyd's Register Of Shipping	DNV • GL	Bureau Veritas
Minimum Rating Requiring Certification	100 kW	100 kW	100 kW	100 kW
Ambient Temperature	45° C	45° C	45° C	45° C
Temperature Rise	110° C	110° C	110° C	110° C
Embedded ③ Temperature Detectors	Required for all units 1 kV and over	Required for propulsion systems only	Required for all units 1000 kW and over	Required for all units 1000 kW and over
Space Heaters	Required	Not Specified ①	Required	Required
Sustain Short Circuit Current in Percent (%) Rated F.L. Current	300% for 2 Sec.	300% for 2 Sec.	300% for 2 Sec.	300% for 2 Sec.
Drip Cover or Minimum Enclosure Required	IP22	IP23	IP23	IP23
Fixed Termination of Load Leads ②	Not Specified	Required	Required	Required
Shaft Material Test ③	Propulsion Only	Required	Required	Required

Notes: ① Not required by Agency Rules, but strongly advised.
 ② Generator load leads must be terminated on a fixed terminal such as a bus bar, link board or insulated stand-off.
 ③ Requires generator to be a build-up
 • For generators requiring certification by agencies other than those listed in the above table, please consult factory.

Designed for Marine Diesel Electric Propulsion and Ship Service applications.



**4-Pole
Three Phase
Generators**

**60
Hertz**

FEATURES AND BENEFITS:

- 450 kW - 2500 kW w/Engine Specific Power Nodes
- Supports SCR and IGBT Propulsion Systems
- Fully Taped, Form Coil, 100% VPI, 4kV, Class H, Non-hygroscopic Insulation System
- Exciter Assembly Over Dimensioned for Durability
- Hardened Steel Surge Ring with Coil Spacers
- Rotor Design Lowers Rotor Temperatures
- Bolt-in, Replaceable Bearing Well
- Subtransient Reactance of 12% - 14%
- Enclosures: IP23 + SOLAS, and IP54 TEWAC
- Design: IMB20 / IM 1101 raised foot
- Shaft end: Cylindrical shaft suitable for mounting customers coupling
- Three differential CT's mounted on Generator Neutral, 5 amp secondary, C100 class
- Oversized Terminal Box
- Space heater single phase, 120 or 240V
- Marathon® DVR®2000E+ AVR, 3 phase sensing with Mil RFI Suppression (supplied loose)
- Manual Voltage Control (supplied loose)
- Cross Current CT (supplied loose)
- Stator RTD's, 2 per phase, 100 ohm Platinum
- Bearing RTD's, 1 per bearing, 100 ohm Platinum
- PMG - 300% short circuit Fault Clearing
- Anti-friction Bearings on DE / NDE, Re-greasable, L10 life of 40,000 hrs
- Marine Certification for ABS/ Coast Guard, DNV, BV, Lloyds
- IP54 TEWAC features:
 - Double Tube Cooler with Leak Detector for 38°C salt water, with 10°C rise
 - Cooling air RTD, 100 ohm platinum
 - Exhaust air RTD, 100 ohm platinum

60 Hertz

**4-Pole
Three Phase
Multivoltage
Generators**

**480Y-600Y or
208Y-240Y Volts
(12 Lead)**

**1800 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
SE350E AVR**

FEATURES:

Twelve (12) lead, re-connectable main stator windings provide the maximum in flexibility. This allows a single generator to provide 480-600V, 208-240V 3 Phase and 240V/120V Single Phase power for mobile and rental applications.

MAGNAPLUS® 600Y/384 Volt Models - Consult Website Datasheets for other voltages

Base Model	Net Wt. (lbs.)	No. of Leads①	Bolt-on PMG Option Avail.	kW Rating @ Designated NEMA Rise					List Price
				Continuous			Standby		
				NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
281PSL28102	220	12	No	8.8	10	11	11	12	\$3,250
282PSL28103	240	12	No	11.5	13.5	14.5	15	15.5	\$3,419
282PSL28104	270	12	No	12.5	15	16.5	16.5	17.5	\$3,596
282PSL28105	295	12	No	17	20	21	21	22	\$3,867
283PSL28106	336	12	Yes	22	25	27	27	29	\$4,302
283PSL28107	366	12	Yes	25	30	33	33	35	\$4,649
284PSL28108	405	12	Yes	30	32	35	35	40	\$5,086
284PSL28109	436	12	Yes	32	36	40	40	45	\$5,274
285PSL28110	480	12	Yes	38	43	45	45	50	\$5,344
361PSL36111	518	12	Yes	40	45	48	48	50	\$5,344
361PSL36112	569	12	Yes	49	55	60	60	65	\$5,791
361PSL36113	620	12	Yes	58	65	70	70	76	\$6,580
362PSL36114	706	12	Yes	75	84	90	90	95	\$7,110
362PSL36115	796	12	Yes	80	96	105	105	113	\$8,158
363PSL36116	943	12	Yes	110	125	135	135	150	\$8,776
431PSL6610	1220	12	Yes	125	140	150	155	160	\$9,912
431PSL6611	1415	12	Yes	140	170	175	180	190	\$10,884
431PSL6612	1455	12	Yes	180	210	225	230	240	\$12,720
432PSL6613	1760	12	Yes	230	275	300	305	310	\$15,190
433PSL6614	2245	12	Yes	310	375	400	410	430	\$18,068

① All MAGNAPLUS® models have linkboard as standard.

General notes on page 46 may apply to this page.

HAZARDOUS DUTY GENERATORS

4-Pole
Generators

60
Hertz

MAGNAPLUS® Models, Shunt (Non-PMG) Excitation SE350E Voltage regulator shipped loose

Dedicated Single Phase,
4 Leads, 120 Volt or 240/120 Volt

Base model	kW Rating		List Price
	80°C R/R @ 40°C Amb.		
	0.8 P.F.	1.0 P.F.	
282PDL1715	10	15	\$4,414
282PDL1716	12	18	\$4,805
283PDL1717	15	22	\$5,238
283PDL1718	17	26	\$5,559
284PDL1750	23	34	\$6,148
285PDL1711	24	36	\$6,404
286PDL1712	30	45	\$6,779
287PDL1713	30	47	\$7,281

STANDARD FEATURES:

- **Dual Certification**
 - ATEX Zone 2, Ex II 3 D Ex nA IIC T3
 - CSA Class I, Div 2, Groups A, B, C, & D, Temp Code T3 (200°C)
- Two Bearing and Single Bearing Designs
- Polybutadiene coated windings for use in harsh industrial or environmental applications

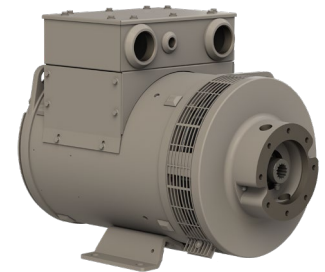
OPTIONAL FEATURES:

- Integral Hydraulic Adaption - See MODIFICATION Section, p.43 for List Add.
 - Limited to ≤ 34kW due to mechanical limitations
- Contact factory for Pricing and Availability of Optional Certification
 - IECEx Zone 2, Temperature Code T3 (200°C), nA nC

Three Phase,
12 Leads, 0.8 Power Factor

Base model	kW Rating		List Price
	80°C R/R @ 40°C Amb.		
	480Y / 240Y	208Y	
282PDL1704	12.5	12.5	\$4,472
282PDL1705	17	17	\$4,719
283PDL1706	22	21	\$5,115
283PDL1707	25	24	\$5,431
284PDL1708	30	30	\$5,826
284PDL1742	32	32	\$5,998
285PDL1700	38	36	\$6,062
286PDL1701	44	42	\$6,469
287PDL1702	50	48	\$7,186

Note: 12 lead generators can be reconnected for single phase service. Consult factory for ratings.



Shown with optional Hydraulic Adaption

MAGNAMAX® Models, PMG Excitation
DVR®2000E+ AVR w/ PMG Excitation

Base model	Net Wt. (lbs.)	No. of Leads	kW Rating		List Price
			Voltage	80°C R/R @ 40°C Amb.	
IP44 double bearing random wound coil designs					
431RDL4007	1907	12	240Y/480Y	123	\$33,032
432RDL4017	2367	12	240Y/480Y	202	\$36,943
433RDL4021	2902	12	240Y/480Y	290	\$39,581
572RDL4031	3530	12	240Y/480Y	427	\$45,362
573RDL4035	4040	12	240Y/480Y	515	\$51,574
574RDL4038	4660	6	480Y Only	634	\$54,608
742RDL4049	6985	12	240Y/480Y	850	\$79,260
743RDL4052	8485	6 Bar	480Y Only	1114	\$88,827
744RDL4058	10425	6 Bar	480Y Only	1496	\$104,782

STANDARD FEATURES:

- 80°C Maximum Rise by Resistance at 40°C Ambient
- Two Bearing Close-Coupled Adapter
- 100 Ohm Platinum Winding and Bearing RTDs
- Current Transformers for Metering (3) and Paralleling (1)

Triple Certification:

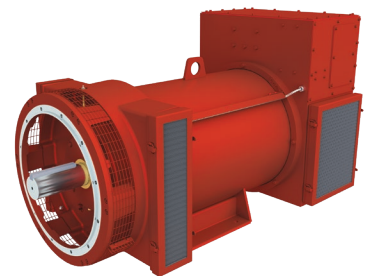
ATEX Zone 2, Temperature Code T3, nA nC
IECEx Zone 2, Temperature Code T3, nA nC
CSA Class 1 Group A, B, C, D, Division 2/Zone 2,
Group IIA, IIB, IIC Temperature Code T3

OPTIONS:

- Voltages: 120 thru 1000V
- IP23 Single Bearing - or - IP23 or IP44 Double Bearing
- Random or Form Wound available
- 6-Pole Ratings also available upon request

Optional Certification:

Marine (ex. ABS, DNV-GL, Lloyds)



400
Hertz

**24-Pole
Three Phase
Generators**

**208Y or 416Y Volts
(10 Leads)^①**

**2000 RPM
40°C Ambient
0.8 Power Factor Lagging
Shunt (Non-PMG) Excitation
AVC63-12B2 Voltage Regulator**

Type	Base model	Net Wt. (lbs.)	kW Rating @ 208 or 416 Volts		List Price
			80°C R/R	105°C R/R	
LIMA®SER	360SSL1311	450	25	30	\$11,659
LIMA®SER	360SSL1312	570	30	35	\$12,601
LIMA®SER	360SSL1313	590	40	50	\$13,569
MAGNAPLUS®	430PSL1314	1200	60	70	\$16,919
MAGNAPLUS®	430PSL1315	1220	75	90	\$18,358
MAGNAPLUS®	430PSL1316	1240	100	120	\$20,578
MAGNAPLUS®	432PSL1821	1575	108	144	\$25,538

60
Hertz

50
Hertz

**Single Phase
Capacitor
Designs
Generators**

**Light Tower
Applications^②
(4 Leads)**

**NEMA Class F Insulation
40°C Ambient
1.0 Power Factor**

Pancake

Base model	rpm	Voltage	kW @ 80°C R/R	kW @ 105°C R/R	Length (in.)	Weight (lbs.)	List Price
201CSA5411	1800	240/120 or 120	5.4	6	9.72	110	\$2,007
201CSA5420	1800	240/120 or 120	7.2	8	10.71	127	\$2,354
201CSA5422	1500	220/110 or 110	5.4	6	10.71	127	\$2,354

① Consult factory for availability of 12 leads.

② CSA models are SAE 5, CSB models are SAE 4.

General notes on page 46 may apply to this page.

1800 RPM
NEMA Class F-Stator/H-Rotor Insulation
40°C Ambient

LIMA®MAC
Inherently Voltage
Regulated^{①②}

4-Pole
Generators

60
Hertz

LIMA®MAC IRRIGATOR

Standard Models

0.8 Power Factor Lagging

Base model 10 Leads 240Y or 480Y 3Ø	Net Wt. (lbs.)	3 Phase Continuous NEMA B 80°C R/R	List Price
250MSL1237	150	5	\$2,905
250MSL1238	165	7.5	\$3,339
280MSL0054	245	10	\$3,584
280MSL0055	260	12	\$3,852
280MSL0056	275	15	\$4,361
360MSL0057	560	20	\$5,559
360MSL0058	635	25	\$6,228
360MSL0059	685	30	\$6,672
360MSL0060	720	40	\$7,180

LIMA®MAC Irrigator generators feature insulation systems with a polybutadiene overcoat for harsh duty in dust and moisture laden applications. The LIMA®MAC Irrigator generators above also come with a two year in-service warranty.

LIMA®MAC

Standard Models

0.8 Power Factor Lagging, 3 Phase
1.0 Power Factor, Single Phase

Base model ^③		Net Wt. (lbs.)	3 Phase Continuous NEMA B 80°C R/R	1 Phase Continuous NEMA F 105°C R/R	List Price
10 Leads	12 Leads				
240Y or 480Y 3Ø	208Y or 416Y 3Ø or 240/120 1Ø				
← See LIMA®MAC Irrigator Models ←	250MSL1235	150	5	5	\$2,793
	250MSL1236	165	7.5	7.5	\$3,210
	280MSL0079	245	10	10	\$3,446
	280MSL0080	260	12	12	\$3,702
	280MSL0081	275	15	15	\$4,195
	360MSL0082	560	20	20	\$5,345
	360MSL0083	635	25	25	\$5,993
	360MSL0084	685	30	30	\$6,416
	360MSL0085	720	40	40	\$6,902
	440MSL0885	440MSL0860	1035	50	50
440MSL0886	440MSL0861	1085	60	60	\$9,638
440MSL0887	440MSL0862	1185	75	75	\$11,656
440MSL0888	440MSL0863	1270	100	100	\$13,474

1800 RPM
NEMA Class F-Stator/H-Rotor Insulation
40°C Ambient
0.8 Power Factor Lagging

240Y or 480Y Volts
(10 Leads)^{①②}

4-Pole
Three Phase
Generators

60
Hertz

LIMA®MAC Reefer

Standard Models

Base Model	Number of Leads	Overall Length	Net Wt. (lbs.)	Standard Voltage Regulator	Continuous kW 105°C R/R	List Price
260MSL1361	10	17.0"	285	Not Required	15	\$4,356

① LIMA®MAC generators are specifically designed for starting three phase AC electric motors. LIMA®MAC generators provide 1 hp/kW, Code G induction motor starting capability with 35% voltage dip (80°C rise rating).

② LIMA®MAC generators are self-excited and inherently-regulated, providing 4% voltage regulation without external voltage regulator or transformers. LIMA®MAC generators inherently provide 500% 3 phase short circuit support and volts/hertz operation.

③ Only 12-lead units may be connected for single phase operation: 120 V Delta, 240/120 V Delta, 240/120 V Low Zigzag or 480 V High Zigzag.

General notes on page 46 may apply to this page.

60
Hertz

**6-Pole
Three Phase
Generators**

**240Y or 480Y Volts
(12 Leads)
480Y Volts
(6 Leads)**

**1200 RPM
NEMA Class H Insulation
40°C Ambient
0.8 Power Factor Lagging
DVR®2000E+ AVR w/PMG Excitation**

MAGNAMAX® Standard Models ①②③

Base model	Net Wt. (lbs.)	No. of Leads	Continuous			Standby		List price
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
			kW	kW	kW	kW	kW	
572RSL0120	2050	12	160	180	200	200	210	\$20,688
572RSL0122	2204	12	200	230	250	250	265	\$22,268
572RSL0124	2502	12	250	290	315	315	330	\$29,567
573RSL0126	2976	12	300	348	380	380	400	\$31,320
573RSL0128	3417	12	400	460	500	500	525	\$35,327
574RSL0130	4144	12	500	578	630	630	660	\$46,808
742RSL0132	6488	6	600	690	750	750	790	\$51,969
742RSL0134	7438	6	730	915	1000	1000	1050	\$64,356
743RSL0136	8708	6	925	1150	1250	1250	1315	\$83,301
744RSL0138	9340	6	1100	1375	1500	1500	1575	\$91,053

① Contact your sales representative for lead time on 740 six pole.

② UL not available on 570-740 frame 6 pole product.

③ Field CSA approval available upon request.

General notes on page 46 may apply to this page.

1200 RPM
 NEMA Class H Insulation
 40°C Ambient
 0.8 Power Factor Lagging
 DVR®2000E+ AVR w/PMG Excitation

600Y/346 Volts

6-Pole
 Three Phase
 Generators

60
 Hertz

MAGNAMAX® Standard Models ①②③

Base model	Net Wt. (lbs.)	No. of Leads	Continuous			Standby		List price
			NEMA B 80°C R/R	NEMA F 105°C R/R	NEMA H 125°C R/R	NEMA F 130°C R/R	NEMA H 150°C R/R	
			kW	kW	kW	kW	kW	
572RSS0140	2080	12	160	180	200	200	210	\$22,343
572RSS0142	2230	12	200	230	250	250	265	\$24,049
572RSS0144	2500	12	255	290	315	315	330	\$31,932
573RSS0146	3026	12	300	348	380	380	400	\$33,826
573RSS0148	3448	12	400	460	500	500	525	\$38,153
574RSS0150	4180	12	490	570	620	620	650	\$50,552
742RSS0152	6542	6	600	690	750	750	790	\$56,126
742RSS0154	7480	6	800	940	1000	1000	1050	\$69,504
743RSS0156	8760	6	950	1200	1300	1300	1360	\$89,965
744RSS0158	9386	6	1100	1375	1500	1500	1575	\$98,337

- ① Contact your sales representative for lead time on 740 six pole.
- ② UL not available on 570-740 frame 6 pole product.
- ③ Field CSA approval available upon request.

General notes on page 46 may apply to this page.

60 Hertz

4-Pole, Three Phase Generators

DRILL RIG DUTY GENERATORS[®]

1800 RPM
NEMA Class H Insulation
40°C Ambient
DVR[®]2000E+ AVR with PMG

MAGNAMAX[®] Standard Models

480Y/277 Volts (4 Leads)

Base model	Net Wt. (lbs.)	No. of Leads	kW Rating		List Price
			NEMA B 80°C R/R		
			0.7 P.F. Lagging	0.8 P.F. Lagging	
573FSL4202	3400	4 Bar	400	450	\$36,385
574FSL4204	3650	4 Bar	500	570	\$40,205
742FSL4208	5900	4 Bar	700	800	\$49,472
743FSL4210	6500	4 Bar	800	900	\$54,251
743FSL4212	6900	4 Bar	910	1025	\$57,444
744FSL4214	7300	4 Bar	1000	1140	\$63,823
744FSL4216	8300	4 Bar	1200	1375	\$70,206
744FSL4218	8900	4 Bar	1300	1500	\$89,774

MAGNAMAX[®] Standard Models

600Y/346 Volts (4 Leads)

Base model	Net Wt. (lbs.)	No. of Leads	kW Rating		List Price
			NEMA B 80°C R/R		
			0.7 P.F. Lagging	0.8 P.F. Lagging	
573FSS4224	3400	4 Bar	400	450	\$38,936
574FSS4226	3650	4 Bar	520	600	\$42,757
742FSS4230	5900	4 Bar	700	800	\$52,650
743FSS4232	6500	4 Bar	800	900	\$57,444
743FSS4234	6900	4 Bar	900	1025	\$62,233
744FSS4236	7300	4 Bar	1000	1140	\$68,617
744FSS4238	8300	4 Bar	1200	1375	\$76,601
744FSS4240	8600	4 Bar	1250	1425	\$86,831

Ⓛ Models include VPI insulation (on main stator, exciter stator, exciter rotor, and PMG stator), form wound main stator coil construction, PMG excitation support, IP22 dripcover, and space heaters as standard equipment. All models are specially designed to accept heavy SCR (Thyristor) loading.

60 Hertz

4-Pole Three Phase Generators

CRANE DUTY GENERATORS

Marathon[®] Crane Duty AC generators are designed for Rubber Tired Gantry Cranes or other mobile/stationary crane applications.

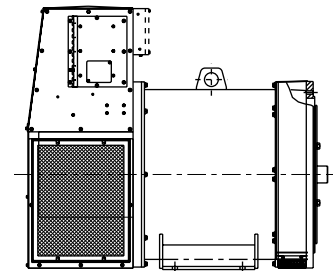
MAGNAMAX[®] Standard Models

STANDARD FEATURES:

- Form wound main stator coils with special VPI insulation system (VPI also on exciter stator, exciter rotor, and PMG stator).
- Epoxy overcoat for humid and salt air environments.
- Intake air filters with pressure shut-off switches.
- IP23 weather protected enclosures and space heaters.
- Heavy duty ball bearings with a B-10 life of 40,000 hours.
- Low sub-transient (X''d) reactance and low voltage dip.
- PMG excitation support system and three phase, true RMS sensing voltage regulator.
- Single or optional two bearing close-coupled engine mounting.

Ratings for all units on this page are very application specific and require an application review for proper sizing. Please contact factory for application assistance.

General notes on page 46 may apply to this page.



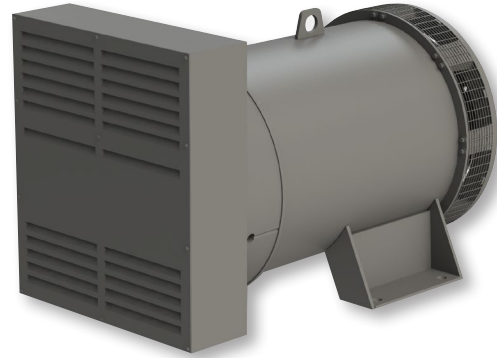
RAIL DUTY GENERATORS

4-Pole
Three Phase
Generators

60
Hertz

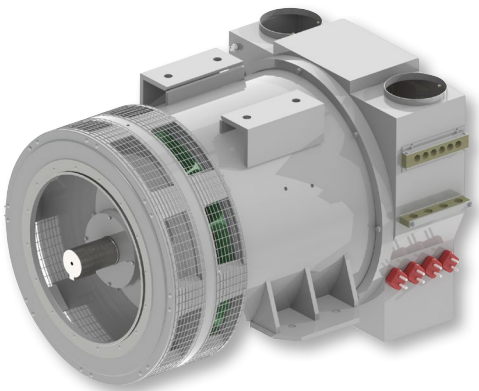
Head end power (Constant speed),
60 Hz, 1800 RPM, 240/480 V
0.8 Power Factor Lagging

Frame	kW @ 105°C R/R
431-433	145-380
571-575	495-975
741-744	1030-1800



MECHANICAL DESIGN

- Variable Speed / Constant speed
- Compact size
- Customized



Propulsion power,
60 Hz, 1800 RPM, 240/480 V
0.8 Power Factor Lagging

Frame	Max kW @ 105°C R/R
571-575	up to 975
741-744	up to 1800
1020-1030	up to 3000

ELECTRICAL DESIGN

- Optimized for the drive system
 - Active / Passive rectification
 - AC / DC Drive systems
 - Constant engine speed 1500 or 1800 RPM
 - Variable engine speed 900 to 2100 RPM
 - Voltage / Current range optimization
- Rail duty optimized insulation systems

MANUFACTURING RAIL GENERATORS FOR OVER 50 YEARS

Propulsion power,
60 Hz, 1800 RPM, 600 V
0.8 Power Factor Lagging

Frame	Max kW @ 105°C R/R
571-575	up to 900
741-744	up to 1850
1020-1030	up to 2800

60 Hertz

Three Phase Induction Generators

PRIMELINE®

NEMA Class F Insulation
40°C Ambient

4-Pole, Single Bearing Dripproof Induction Generators

240 or 480 Volts, 1800 RPM

Base model	Net Wt. (lbs.)	No. of Leads ^④	Continuous kW 80°C R/R	List price
364TTDS17033 ^{③⑤}	725	3	60	\$6,608
365TTDS8771 ^⑤	850	9	80	\$7,341
431ASL1415 ^②	1340	9	150	\$12,440
431ASL1417 ^②	1600	12	200	\$13,088
431ASL1414 ^②	1760	9	220	\$15,158
431ASL1421 ^{②③}	1925	3	250	\$15,629
431ASL1420 ^②	1425	9	265	\$15,950
431ASL1418 ^②	1425	9	300	\$16,753
572ASL1418 ^②	2650	9	350	\$22,821
572ASL1413 ^②	2650	9	400	\$23,142
572ASL1414 ^②	2950	12	450	\$30,858

208 or 416 Volts, 1800 RPM

Base model	Net Wt. (lbs.)	No. of Leads ^④	Continuous kW 80°C R/R	List price
365TTDS8771 ^⑤	850	9	80	\$7,341
431ASL1419 ^②	1025	12	150	\$13,088
431ASL1416 ^②	1525	12	160	\$14,040
431ASL1420 ^②	1425	9	200	\$15,950
572ASL1413 ^②	2650	9	350	\$23,142

① Pricing for 431 frame and 572 frame induction generators includes the conduit box; however, the conduit box must be listed as a separate line item on the order.

② The 431 frame and 572 frame induction generators are constructed in synchronous generator rolled steel housings with standard generator mounting feet.

The 431 and 572 frame units will accept Marathon standard SAE adapters and drive discs. Contact the factory to obtain pricing for specific customers.

③ This is a 3 lead unit, designed to operate at 480 V only.

④ Other designs available; please contact factory.

⑤ These are in motor frames and are not a standard generator frame type.

General notes on page 46 may apply to this page.

Two bearing dripproof induction generators^{①③}

4-Pole, 1800 RPM, 480 Volts

Frame	Net Wt. (lbs.)	No. of Leads ^②	Continuous kW		List Price
			80°C R/R	105°C R/R	
254	161	3	12	14	\$1,396
256	233	3	17	19	\$1,686
284	346	3	25	28	\$2,082
286	354	3	29	34	\$2,403
324	401	3	35	40	\$3,066
326	430	3	50	57	\$3,584
364	720	3	65	75	\$4,136
365	815	3	72	85	\$4,955
404	1040	3	100	110	\$6,153
405	1112	3	110	120	\$7,320
444	1335	3	130	157	\$9,059
445	1450	3	150	175	\$12,548
447	2064	3	275	315	\$15,613
505	2150	3	275	320	\$18,032
508	3050	3	400	425	\$26,170
510	3850	12	450	500	\$30,370

6-Pole, 1200 RPM, 480 Volts

Frame	Net Wt. (lbs.)	No. of Leads ^②	Continuous kW		List Price
			80°C R/R	105°C R/R	
284	346	3	14	17	\$2,019
286	354	3	18	21	\$2,331
324	401	3	22	24	\$2,974
326	430	3	25	29	\$3,477
364	720	3	40	46	\$4,012
365	815	3	50	55	\$4,806
404	1040	3	65	75	\$5,969
405	1112	3	80	88	\$7,100
444	1335	3	90	100	\$8,787
445	1450	3	110	125	\$12,172
447	1792	3	180	200	\$15,144
505	2100	3	190	220	\$17,491
508	2850	3	325	350	\$25,385
510	3750	12	400	440	\$29,459

① For modifications to PRIMELINE® two bearing generators, please contact factory.

② Other designs available; please contact factory.

③ These are in motor frames and are not a standard generator frame type.

General notes on page 46 may apply to this page.

SPECIFICATIONS:

General - all standard Marathon® induction generators are manufactured to NEMA dimensions. All testing is performed on a motoring dynamometer as an induction generator.

kW Rating 12 - 500
 Voltage 208/416, 240/480, 480
 Hertz 60
 RPM 1800, 1200
 Frame Sizes 254T-510U, 431, 572
 Enclosure. Open, Dripproof
 Mounting Rigid base - horizontal foot mounted
 Insulation Class F, 100% solids varnish, epoxy overcoat
 Thermal Protection. NC Tstats standard
 Bearings Double shielded ball bearings
 Shaft Dimension NEMA Standard
 Shaft Material Hot rolled steel
 Windings All copper

Hardware Corrosion resistant
 Nameplate Stainless steel
 Standard Ambient 40°C
 Standard Altitude. 3300 ft.

OPTIONS

- Special shaft dimensions
- C-Flange, D-Flange, Vertical Mounting
- Single phase designs up to 10kW
- Space heaters
- SAE close coupled
- Premium efficiency
- Thermal protection
- Belt Drive
- TEFC (254-510 Double Bearing)
- Encoder options

Modification Section: Induction Generators

All prices shown are list prices

**2 Bearing Induction
Generator Options**

	Frame								
	254-256	284-286	324-326	364-365	404-405	444-445	447-449	505-510	
Bearings									
Insulated Bearings**	\$1,696	\$1,825	\$1,825	\$1,927	\$1,969	\$2,087	\$2,087	\$2,087	
Mounting									
"C" Face- (Non-explosion Proof)	\$220	\$321	\$369	\$369	\$369	\$369	\$369	\$369	
"C" Face- (Explosion Proof)	\$364	\$536	\$722	\$722	\$722	\$722	\$722	\$722	
"D" Face-	\$188	\$268	\$454	\$454	NA	NA	NA	NA	
Construction									
TEFC-(Totally Enclosed Fan Cooled) In some cases the frame may be one larger	1.25	1.25	1.25	1.25	1.25	1.25	1.25	NA	Multiplier
Premium Efficiency (1-2% improvement)	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	Multiplier
Shaft Modifications									
Drill & Tap Hole- Shaft End	\$353	\$353	\$508	\$562	\$637	\$802	\$802	\$802	
Mill Flat on shaft	\$278	\$278	\$321	\$321	\$391	\$391	\$391	\$391	
"Step" machined shaft	\$401	\$481	\$562	\$642	\$722	\$802	\$883	\$883	
Spline	\$1,333	\$1,333	\$1,552	NA	NA	NA	NA	NA	
Space Heaters									
Non-explosion Proof*	\$524	\$524	\$524	\$733	\$733	\$733	\$733	\$733	
Explosion Proof	\$733	\$733	\$733	\$888	\$888	\$888	\$888	\$888	
Thermal Protection									
Winding RTD's - 100 Ohm Plat (ALL)*	\$444	\$444	\$444	\$637	\$637	\$637	\$637	\$637	
Bearing RTD's - 100 Ohm Plat **	\$444	\$444	\$444	\$637	\$637	\$637	\$637	\$637	
Encoder									
ODP/TENV 5/8" Bore									
Dynapar® *** 1024	\$744	NA	NA	NA	NA	NA	NA	NA	
EPC 260 2048	\$744	NA	NA	NA	NA	NA	NA	NA	
TEFC 1" Bore									
Dynapar HS35R 1024	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	
Dynapar HS35R 2048	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	\$1,605	

* Option applies to 4 Pole Single Bearing Dripproof Induction Generators
 ** Option for single bearing .5 multiplier to be applied
 *** Dynapar is believed to be a trademark of Danaher Corporation and is not owned or controlled by Regal Beloit Corporation.

430 thru 570 frame single-bearing generator options are similar to standard MAGNPLUS® & MAGNAMAX® generator options for Drip covers Thermal Protection, SAE adaption. See modification section (page 42-45).

60 Hertz

**UL2200
Ratings®
4-Pole
Generators**

**Maximum kW Output
at 27°C ambient
and 130°C R/R
for UL 2200 Applications**

**1800 RPM
NEMA Class H Insulation
Shunt (Non-PMG) Excitation
SE350E AVR**

MAGNAPLUS® Standard Models

Base model	Net Wt. (lbs.)	No. of Leads④	Bolt-on PMG Option Avail.	60 Hz, Three Phase								60 Hz, 1 Phase		List Price
				0.8 PF Lagging								0.8 PF	1.0 PF	
				High Wye Connection					Delta	Low Wye	ZigZag			
				480 V	460 V	440 V	416 V	380 V	240 V	208 V	240 V	240 V		
281CSL1502	220	12	Yes	13	12.5	11.5	11	10	10.5	10.5	7.5	9.5	\$2,954	
282PSL1703③	240	12	Ⓜ	15	15	15	13.5	12.5	13.5	13.5	8.2	11	\$3,108	
282CSL1504	250	12	Yes	18	17.5	17.5	17	15.5	17	17	10	13	\$3,269	
282CSL1505	275	12	Yes	24	24	23	22	20	22	22	13	17	\$3,516	
283CSL1506	310	12	Yes	28	27	27	26	23	26	26	16	20	\$3,912	
283CSL1507	350	12	Yes	33	32	31	30	27	30	30	18	25	\$4,227	
284CSL1508	405	12	Yes	40	39	39	38	35	38	38	25	31	\$4,623	
284CSL1542	420	12	Yes	43	41	41	40	36	40	40	24	32	\$4,794	
361CSL1600⑤	518	12	Yes	48	46	45	42	38	42	42	30	39	\$4,859	
361CSL1601⑤	569	12	Yes	60	60	58	55	50	55	55	35	45	\$5,265	
361CSL1602⑤	620	12	Yes	70	67	68	65	60	65	65	42	55	\$5,982	
362CSL1604⑤	706	12	Yes	90	86	84	80	72	80	80	51	66	\$6,464	
362CSL1606⑤	796	12	Yes	105	105	102	100	90	100	100	60	79	\$7,416	
363CSL1607⑤	943	12	Yes	135	135	130	125	115	125	125	73	97	\$7,978	
364CSL1608	1086	12	Yes	155	155	155	155	140	155	155	N/A	N/A	\$8,740	
364CSL1609	1096	12	Yes	175	180	180	180	175	160	175	175	125	\$9,597	
431CSL6206⑤	1415	12	Yes	215	220	220	210	191	210	210	132	166	\$10,942	
431CSL6208⑤	1455	12	Yes	230	230	225	225	207	225	225	132	166	\$11,563	
432CSL6210⑤	1685	12	Yes	280	282	283	280	265	280	280	161	201	\$12,210	
432CSL6212⑤	1760	12	Yes	300	300	290	280	265	280	280	161	201	\$13,810	
433CSL6216⑤	2235	12	Yes	380	380	280	375	357	375	375	193	241	\$15,480	
433CSL6220⑤	2245	12	Yes	415	410	410	400	367	400	400	193	241	\$16,426	

MAGNAPLUS® Alternate Models③

281PSL1722	225	12	Ⓜ	11	11	12	12	11	12	12	7.5	10	\$2,954
282PSL1704	270	12	Ⓜ	16.5	16.5	16	16	14.5	16	16	10	14	\$3,269
282PSL1705	295	12	Ⓜ	21	21	20	20	18	20	20	13	17	\$3,516
283PSL1706	336	12	Ⓜ	27	26	26	25	23	25	25	16	21	\$3,912
283PSL1707	366	12	Ⓜ	33	32	31	30	27	30	30	18	25	\$4,227
284PSL1708	405	12	Yes	35	35	35	35	32	35	35	20	30	\$4,623
284PSL1742	436	12	Yes	40	40	40	40	37	40	40	25	32	\$4,794
285PSL1700	480	12	Yes	45	45	45	45	41	45	45	28	37	\$4,859
286PSL1701	600	12	Yes	60	58	56	55	50	55	55	32	42	\$5,265
287PSL1702	670	12	Yes	62	61	61	60	55	60	60	36	45	\$5,982
431CSL6202⑤	1220	12	Yes	155	155	153	151	140	151	151	96	121	\$9,280
431CSL6204⑤	1310	12	Yes	181	182	180	176	167	176	176	107	135	\$10,191

① 361 to 433 PSL (single bearing) or PDL (double bearing) models are the alternate to CSL models and have equivalent performance and dimensions.

② PMG Option available as build-up only.

③ Specialty and two bearing orders utilize these windings in place of 280 frame CSL models.

④ All MAGNAPLUS® models have linkboard as standard.

⑤ This chart depicts a suggested ambient and temperature rise (27°C ambient/130°C rise) that would be in accordance with the UL maximum temperature of 160°C.

General notes on page 46 may apply to this page.

UL nameplates are not available on units rated less than 40 kW.

1800 RPM
NEMA Class H Insulation
Includes PMG Excitation

Maximum kW Output
at 27°C ambient
and 130°C R/R
for UL 2200 Applications

UL2200
Ratings^①
4-Pole
Generators

60
Hertz

MAGNAMAX[®] Standard Models

Base model	Net Wt. (lbs.)	No. of Leads	Regulator	60 Hz, Three Phase								60 Hz, 1 Phase		List Price
				0.8 PF Lagging								0.8 PF	1.0 PF	
				High Wye Connection				Delta	Low Wye	ZigZag				
				480 V	440 V	416 V	400 V	380 V	240 V	208 V	240 V	240 V		
572RSL6425 ②③	2730	12	PM500	475	465	440	422	400	440	440	209	261	\$19,295	
572RSL6427 ②③	2840	12	PM500	515	500	475	443	405	475	475	227	283	\$19,626	
572RSL6429 ②③	3050	12	PM500	560	560	525	500	470	525	525	246	308	\$21,852	
572RSL6431 ②③	3110	12	PM500	600	590	565	529	485	565	565	264	330	\$22,660	
573RSL6433 ②③	3400	12	PM500	700	730	700	652	595	700	700	308	385	\$26,480	
573RSL6435 ②③	3620	12	PM500	750	765	725	680	625	725	725	330	413	\$28,872	
574RSL6437 ②③	4080	12	PM500	825	820	785	733	670	785	785	363	454	\$30,798	
574RSL6438 ③	4240	4 Bars	PM500	920	875	835	776	705	N/A	N/A	N/A	N/A	\$31,906	
575RSL4044	5000	4 Bars	DVR®2000E+	1060	1010	975	909	830	N/A	N/A	N/A	N/A	\$35,753	
741RSL4044	5490	4 Bars	DVR®2000E+	1100	1030	1000	927	840	N/A	N/A	N/A	N/A	\$37,176	
741RSL4045	5490	12	DVR®2000E+	1100	1030	1000	927	840	1000	1000	N/A	N/A	\$39,573	
740RSL4046	5200	4 Bars	DVR®2000E+	1220	1160	1110	1035	945	N/A	N/A	N/A	N/A	\$41,971	
742RSL4048	6300	4 Bars	DVR®2000E+	1300	1240	1180	1112	1030	N/A	N/A	N/A	N/A	\$46,278	
742RSL4049	6300	12	DVR®2000E+	1300	1240	1180	1112	1030	1180	1180	N/A	N/A	\$49,472	
742RSL4050	7230	4 Bars	DVR®2000E+	1500	1450	1370	1275	1160	N/A	N/A	N/A	N/A	\$50,585	
743RSL4052	7800	4 Bars	DVR®2000E+	1750	1710	1610	1552	1480	N/A	N/A	N/A	N/A	\$59,040	
744RSL4054	8600	4 Bars	DVR®2000E+	2000	1920	1840	1727	1590	N/A	N/A	N/A	N/A	\$63,823	
744RSL4056	9740	4 Bars	DVR®2000E+	2210	2030	1950	1879	1790	N/A	N/A	N/A	N/A	\$71,801	
744RSL4057	9740	4 Bars	DVR®2000E+	2320	2180	2090	2028	1950	N/A	N/A	N/A	N/A	\$74,995	
764RSL4063	9937	4 Bars	DVR®2000E+	2500	2300	2170	2070	1970	N/A	N/A	N/A	N/A	\$109,470	
Form Wound Coil Designs														
573FSL4402	3400	4 Bars	DVR®2000E+	575	530	500	480	460	N/A	N/A	N/A	N/A	\$35,234	
574FSL4404	3650	4 Bars	DVR®2000E+	750	690	650	630	590	N/A	N/A	N/A	N/A	\$39,054	
742FSL4408	5900	4 Bars	DVR®2000E+	1125	1030	980	940	890	N/A	N/A	N/A	N/A	\$47,883	
743FSL4410	6500	4 Bars	DVR®2000E+	1225	1120	1060	1020	970	N/A	N/A	N/A	N/A	\$52,662	
743FSL4412	6900	4 Bars	DVR®2000E+	1350	1240	1170	1130	1070	N/A	N/A	N/A	N/A	\$55,855	
744FSL4060	7300	4 Bars	DVR®2000E+	1500	1460	1440	1368	1280	N/A	N/A	N/A	N/A	\$62,233	
744FSL4062	8300	4 Bars	DVR®2000E+	1900	1860	1830	1750	1650	N/A	N/A	N/A	N/A	\$68,617	
744FSL4414	8300	4 Bars	DVR®2000E+	2000	1330	1260	1210	1150	N/A	N/A	N/A	N/A	\$76,851	

MAGNAPOWER[®] Standard Models ④

862RSL86006	13780	6	DVR®2000E+	2880	N/A	2800	2690	2560	N/A	N/A	N/A	N/A	\$181,153
Form Wound Coil Designs													
1020FDL1100	15000	6	DVR®2000E+	2340	N/A	2320	2260	2180	N/A	N/A	N/A	N/A	\$165,149
1020FDL1102	15900	6	DVR®2000E+	2500	N/A	2500	2430	2340	N/A	N/A	N/A	N/A	\$181,912
1020FDL1104	16300	6	DVR®2000E+	2680	N/A	2660	2590	2500	N/A	N/A	N/A	N/A	\$185,556
1020FDL1106	17000	6	DVR®2000E+	2800	N/A	2660	2660	2550	N/A	N/A	N/A	N/A	\$190,687
863FSL86056	14500	6	DVR®2000E+	3000	N/A	2700	2600	2500	N/A	N/A	N/A	N/A	\$218,290
1020FDL1108	17400	6	DVR®2000E+	3000	N/A	2850	2740	2600	N/A	N/A	N/A	N/A	\$229,779
1030FDL1110	20000	6	DVR®2000E+	3350	N/A	3250	3125	3000	N/A	N/A	N/A	N/A	\$264,195

- ① This chart depicts a suggested ambient and temperature rise (27°C ambient/°C rise) that would be in accordance with the UL maximum temperature of 160°C.
- ② 12 lead reconnectable via bus bars.
- ③ Painted black, PM500 standard (see modification section for DVR®2000E+ regulator option).
- ④ All 860 & 1000 frame generators have 4 bus bars, with the capability of differential protection.

General notes on page 46 may apply to this page.

Modification Section: Generators

All prices shown are list prices

Modification	Description	List Price	*Build To Order
Custom Build to Order Setup Charge	250 - 440 frame sizes (quantity 1 - 4) This charge is in addition to all other modification charges.	\$600	*
Adapters	Two bearing close-coupled adapters - 360 frame size - 430 frame size - 570 frame size - 740 frame size One bearing direct couple Lister** TR2 & TS2 Engines - 250 LIMA®MAC & 280 fr MAGNAPLUS® models only Automotive adapters models: GM*** 7.4/5.7 L, 280 & 360 fr MAGNAPLUS® models Automotive adapters models: Chrysler**** 2.8 L Automotive adapters models: GM 8.1 L Turbo, PSI 8.8L, 430 fr MagnaPLUS models, SAE #3 Only Automotive adapters models: GM 7.4/5.7L Adaptor, LIMA®MAC 360 models Automotive adapters models: GM 7.4/5.7L Adaptor, LIMA®MAC 440 models	\$1,065 \$1,439 \$1,927 \$3,210 N/C \$439 \$439 \$814 \$551 \$776	* * * * * * * * * *
Air Filters	Washable filters and pressure switch - MAGNAMAX® models (Specify end or side mounted) Catalog ratings must be reduced by 5% for units equipped with filters	\$1,611	
Altitude / Ambient	See Altitude / Ambient Rating Adjustment Chart on Page 54		
Bus Bar Kits	480 Volt (7 Bus Bars) - 572-574 frame size MAGNAMAX® 480-600 Volt (4 Bus Bars) - 571-574 frame size 480-600 Volt (6 Bus Bars) - 571-574 frame size 480-600 Volt (4 Bus Bars) - 575; 740-744 frame size 480-600 Volt (6 Bus Bars) - 740-744 frame size (Available on 4 bus bar generators only!) 600-6600 Volt (4 Bus Bars) - 573-574 frame size 600-6600 Volt (4 Bus Bars) - 741-744 frame size 600-6600 Volt (6 Bus Bars) - 741-744 frame size	standard \$1,675 \$2,526 standard \$1,333 \$1,300 \$1,579 \$2,413	* * * * * * *
Circuit Breakers Three Pole 80% Rated	Contact factory for price and availability on Three Pole Circuit Breakers.		*
Conduit Box (consult factory for optional boxes)	Oversized conduit box - 280 MAGNAPLUS® frame sizes (except 281fr) Low profile conduit box - 360 MAGNAPLUS® frame sizes Oversized conduit box - 360 LIMA®MAC frame sizes Support bar for circuit breaker extension box - 430 MAGNAPLUS® frame sizes Oversized conduit box - 430 MAGNAPLUS® frame sizes M-5 Rectangular Style Conduit Box (570 fr MAGNAMAX® models, box only) M-7 Rectangular Style Conduit Box (740 fr MAGNAMAX® models, box only) Circuit breaker extension box - 570 through 740 frame size	\$220 \$220 \$300 \$95 \$335 \$1,563 \$2,379 \$2,178	
Documentation	If required, two certified copies of production test reports, outline drawings, rotor weight & WK ² drawings and connection diagrams, and service manuals available upon receipt of purchase order.④ Performance data sheets, obsolete drawings, or drawings and additional technical data that is not available on website, a handling charge will apply. Decrement curves (calculated)	N/C \$140 \$230	
Dripcover	IP22 standards - Standard on all LIMA®MAC models IP22 standards - 280 to 740 frame size (MAGNAPLUS® 360 frame series with SAE #1 flywheel housing adaptor must use IP23 drip cover, see below) IP23 standards - 280 frame size (all), 360 MAGNAPLUS® models, 430 frame size (all) IP23 standards - 570 frame size IP23 standards - 740 frame size	N/C \$118 \$374 \$444 \$529	

* Build-to-Order modifications require normal lead time, and cannot be performed on stock generators. The base model number of generators may change when build-to-order modifications are made.

④ Please allow five to ten business days from P.O. receipt date for drawing delivery. Production test reports are not available until after generator shipment.

** Lister is believed to be a trademark of Lister Petter Power Systems Limited and is not owned or controlled by Regal Beloit Corporation.

*** GM is a trademark of General Motors and is not owned or controlled by Regal Beloit Corporation.

**** Chrysler is a trademark of Fiat Chrysler Automobiles and is not owned or controlled by Regal Beloit Corporation.

All prices shown are list prices

Modification Section: Generators

Modification	Description	List Price	*Build To Order
Export Crating	250, 280, 330, 360 frame sizes 430, 440, 570, 580 frame sizes 740 - 744 frame sizes 860 and 1000 frame sizes Note: Freight not included, see page 63 for freight policy. Typical delivery; add up to two weeks to lead time.	\$761 \$1,572 \$2,145 N/A	
Extended Leads	MAGNAPLUS® models 280 frame - up to 36" total lead length exiting frame, no linkboard MAGNAPLUS® models 360 frame - up to 36" total lead length exiting frame, no linkboard MAGNAPLUS® models 430 frame - up to 36" total lead length exiting frame, no linkboard 570 frame - up to 48" total lead length exiting frame, no bus bars	\$285 \$370 \$475 \$1,250	* * * *
Foot Options	MAGNAPLUS®, low rise feet on 360 & 430 frame sizes MAGNAMAX®, CAT® feet on 570 frame sizes MAGNAMAX®, CAT® feet on 740 frame sizes Consult factory for additional options. Details required for CAT® feet (ie. CAT® engine, Shaft height, Foot width)	\$664 \$824 \$1,241	* * *
Hazardous Duty	CSA Certified for Class I, Group A, B, C, D, Div. 2 / Zone 2 Group IIA, IIB, IIC; Temperature Code T3. Generator must be selected at 80°C rise. Generators equipped with space heaters will be temperature code T2B. Regulator shipped loose for remote mounting. 280-430 frame sizes 570 frame sizes 740 frame sizes	\$722 \$1,204 \$1,606	
Hydraulic Drive	MAGNAPLUS® 281-284 frame - Standard SAE A, B, or C mounting flange with 13 tooth (0.88"-13T) or 14 tooth (1.25"-14T) internal splined shaft. 34kW mechanical limit.	\$1,359	*
Instrument Panel 4-Lead Single Phase Generators	Meter panel with voltmeter, ammeter and frequency meter and selector switch including current transformers. (MAGNAPLUS® frames 280, 360 and 430 only) Panel not suited for 120 V only applications.	\$1,300	*
Instrument Panel Three Phase Generators	Meter panel with voltmeter, ammeter and frequency meter and selector switch including current transformers (not available on MAGNAMAX® models) 480 volts and lower	\$1,300	*
Pilot Shaft (for use with CAT® Engine)	Pilot diameters (3.148", 3.935", 4.723", and 5.116") Not available on 280-430 frame models	\$696	
PMG Excitation MAGNAPLUS® Units	Permanent Magnet Generator & PM300E Regulator Permanent Magnet Generator & PM500 Regulator Permanent Magnet Generator & DVR®2000E+ Regulator (280 Frame requires the oversized conduit box with the PM500 & DVR®2000E+ regulators)	\$668 \$824 \$1,107	
Space Heaters 240/120 Volt	LIMA®MAC 250 & 280 frame sizes - (250: 125 watt; 280: 150 watt) MAGNAPLUS® 280 & 360 frame sizes - (280: 84 watt; 360: 250 watt) LIMA®MAC & 6 Pole LIMA®SER 360 & 440 frame sizes - (360: 250 watt; 440: 350 watt) MAGNAPLUS® and MAGNAMAX® 430 & 570 frame sizes - (430: 250 watt; 570: 500 watt) MAGNAMAX® 740 frame sizes - (1000 watt) MAGNAPOWER® 1000 frame sizes - (1250 watt)	\$278 \$374 \$348 \$562 \$1,000 consult factory	* *

* Build-to-Order modifications require normal lead time and cannot be performed on stock generators. The base model number of generators may change when build-to-order modifications are made.

** CAT is a registered trademark of Caterpillar Inc. and is not owned or controlled by Regal Beloit Corporation;

Modification Section: Generators

All prices shown are list prices

Modification	Description	List Price	*Build To Order																																										
Special Insulation	Tropical insulation (epoxy overcoat) on MAGNAMAX®, MAGNAPLUS® and LIMA®MAC models	standard																																											
	MAGNAPLUS® & MAGNAMAX® Harsh Duty Generators: Special insulation system consisting of extra lacing and multiple dips and bakes of 100% solids varnish, wrapped and polybutadiene coated exciter stators, see pages 26-27.	standard on Harsh Duty																																											
	All Others	see description	*																																										
	<table border="1"> <thead> <tr> <th>Frame Size</th> <th>Harsh Duty</th> <th>VPI Main Str</th> <th>VPI Ex Str</th> <th>Toroidally Wrap Ex Str</th> <th>VPI Ex Rtr</th> <th>VPI PMG Str</th> </tr> </thead> <tbody> <tr> <td>250, 280</td> <td>\$481</td> <td>\$1,284</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> </tr> <tr> <td>360</td> <td>\$958</td> <td>\$1,606</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> </tr> <tr> <td>430</td> <td>\$1,118</td> <td>\$1,915</td> <td>\$406</td> <td>n/a</td> <td>n/a</td> <td>n/a</td> </tr> <tr> <td>570</td> <td>\$1,284</td> <td>\$2,484</td> <td>\$406</td> <td>\$348</td> <td>\$406</td> <td>\$214</td> </tr> <tr> <td>740</td> <td>\$1,498</td> <td>\$4,629</td> <td>\$406</td> <td>\$348</td> <td>\$406</td> <td>\$214</td> </tr> </tbody> </table>	Frame Size	Harsh Duty	VPI Main Str	VPI Ex Str	Toroidally Wrap Ex Str	VPI Ex Rtr	VPI PMG Str	250, 280	\$481	\$1,284	n/a	n/a	n/a	n/a	360	\$958	\$1,606	n/a	n/a	n/a	n/a	430	\$1,118	\$1,915	\$406	n/a	n/a	n/a	570	\$1,284	\$2,484	\$406	\$348	\$406	\$214	740	\$1,498	\$4,629	\$406	\$348	\$406	\$214		
	Frame Size	Harsh Duty	VPI Main Str	VPI Ex Str	Toroidally Wrap Ex Str	VPI Ex Rtr	VPI PMG Str																																						
	250, 280	\$481	\$1,284	n/a	n/a	n/a	n/a																																						
360	\$958	\$1,606	n/a	n/a	n/a	n/a																																							
430	\$1,118	\$1,915	\$406	n/a	n/a	n/a																																							
570	\$1,284	\$2,484	\$406	\$348	\$406	\$214																																							
740	\$1,498	\$4,629	\$406	\$348	\$406	\$214																																							
Fungus proofing overcoat for additional moisture protection during extended storage or transport prior to first startup of generator. 250, 280, 360, 430 & 440 frame sizes	\$364	*																																											
570 & 580 frame sizes	\$589	*																																											
680 & 740 frame sizes	\$770	*																																											
1000 frame sizes	consult factory	*																																											
Special Painting	280 - 430 frame sizes	\$250	*																																										
	570 frame sizes	\$705	*																																										
	740 frame sizes	\$970	*																																										
	Consult factory for available finishes. Additional charges may apply.																																												
Special Windings	Special windings are available for MAGNAPLUS®, MAGNAMAX® and MAGNAPOWER® products. Consult factory for ratings and pricing.	consult factory																																											
Standoff Assembly	For terminating generator leads in low or high wye connections MAGNAMAX® models 570 frame - 8-post standoff assembly	\$652																																											
Temperature Detectors	Consult factory for possible RTD generator rating adjustment																																												
	Winding RTDs, (2 per phase) 100 ohm platinum standard, others optional.	\$1,760	*																																										
	Thermocouples, Iron Constantan, Type J	\$797	*																																										
	Thermostats, specify normally open or normally closed	\$797	*																																										
	Thermistors (1 per phase) must specify operating temperature	\$797	*																																										
Bearing RTD, 100 ohm platinum standard, others optional - MAGNAMAX® models only.	\$1,183	*																																											
Two Bearing	MAGNAPLUS®, MAGNAMAX®, and LIMA®MAC generators are available in two bearing at same list price as single bearing. Generator shaft coupling not included.	N/C																																											
1000 Frame	Consult factory with your requirements.																																												

* Build-to-Order modifications require normal lead time and cannot be performed on stock generators. The base model number of generators may change when build-to-order modifications are made.

Modification Section: Voltage Regulators & Accessories

All prices shown are list prices

Modification	Description	List Price	*Build To Order
Current Transformers	MAGNAMAX® and MAGNAPLUS® generators only: Paralleling CT: Requires (1) per generator. factory will size the primary current at 1.25 times the generator nameplate rating with a 5 amp secondary current.		
	MAGNAMAX® generators only: Metering CT: Requires (3) per generator. Must specify required ratio; otherwise factory will size the primary current at 1.25 times the generator nameplate rating with a 5 amp secondary current. Note: 6 Bus bars may be required at an additional charge - Consult factory.		*
	Differential CT: Requires (3) mounted, and (3) loose or (3) by others, per generator. Must specify required ratio; otherwise factory will size the primary current at 1.25 times the generator nameplate rating with a 5 amp secondary current. Note: 6 or 12 lead generators only. Note: 6 Bus bars may be required at an additional charge - Consult factory.	\$685 (per CT)	*
	All CTs are 600 V Class. CT's will be mounted in the neutral leads for generators with voltages greater than 600 V. CT type, Vendor, accuracy, primary and secondary current are factory's choice. An additional adder may apply for special CT requirements (ie. preferred vendor or non-standard sizing). Subject to verification of capabilities.		
Dual Regulators	Two DVR®2000E+ Regulators with change-over switch (570 & 740 MAGNAMAX® models only) (includes one additional regulator to be used with one existing regulator)	\$3,040	*
Isolation / Step Down Transformer	SE350E Regulators: 312 VA, 240 V secondary, 240/480/600 V primary	\$712	
	APR125-5 Regulators: 1000 VA, 120/240 V secondary, 208/240/416/480 V primary	\$915	
	1000 VA, 120/240 V secondary, 600 V primary 1000 VA, 120/240 V secondary, 2400/3300/4160 V primary	\$915 \$2,205	
Manual Voltage Control Module	MVC 300 for APR125-5 and DVR®2000E+ regulators	\$1,611	
Paralleling Module (includes C/T)	APM 2000 for SE350E, PM300E, and APR125-5 regulators (three phase systems only)	\$787	
Sensing Transformer	Medium voltage potential transformer used for regulator sensing only - will not support additional accessories.		
	15 VA up to 4160 V, with 240 V secondary for DVR®2000E+ (Single Phase) Regulators	\$594	
	A 3 phase 15 VA/phase up to 7200 V, with 230 V secondary for DVR®2000E+ (Three Phase) Regulators A 3 phase 15 VA/phase up to 7200 V, with 120 V secondary for DVR®2000E+ (Three Phase) Regulators Consult factory for voltages greater than 7200 V.	\$1,193 \$1,563	
Voltage Adjust Rheostat	SE350E, SE350EL, PM500, PM300E, AVC63-12, APR-125-5	\$128	
Voltage Adjust Switch	For DVR®2000E+ regulator only	\$38	
Voltage Regulators List Price Adder (for substituting AVR for standard unit)	SE350E - MAGNAPLUS® models and Pancake No regulator - MAGNAPLUS® models and Pancake SE350EL - MAGNAPLUS® models (120 Volt systems only) APR125-5 - MAGNAPLUS® models AVC63-12B1 50/60 Hz AVC63-12B2 - 400 Hertz only DVR®2000E+ - 740 and 760 frame MAGNAMAX® and all MAGNAPOWER® models. DVR®2000E+ - 570 frame MAGNAMAX® models PM500 - 740 and 760 frame MAGNAMAX® and all MAGNAPOWER® models. No regulator - MAGNAMAX® and MAGNAPOWER® models DVR®2000EC+ - MAGNAMAX® and MAGNAPOWER® models (with VAR/PF controller installed)	standard deduct \$25 net \$118 \$1,123 \$845 standard standard \$625 deduct \$25 net deduct \$115 net \$572	

* Build-to-Order modifications require normal lead time and cannot be performed on stock generators. The base model number of generators may change when build-to-order modifications are made.

Modification Section: Testing

All prices shown are list prices

Special Testing* MIL-STD-705C Method	Description	List Price by frame size		
		280-430	570-742	743-1040
-	Basic setup charge	\$1,850	\$2,550	\$3,700
302.1a	High potential test on all windings (no basic setup charge required)	\$500	\$500	\$500
410.1	Open Circuit Saturation Curve	\$465	\$465	\$465
411.1	Synchronous Impedance Curve - Short-Circuit Saturation Curve	\$465	\$925	\$1,150
412.1	Zero-Power Factor Saturation Curve - 1875 kVA maximum @ 480 volts	\$465	\$925	\$1,150
413.1	Rated Load Current Saturation Curve - 1875 kVA maximum @ 480 volts	\$465	\$925	\$1,150
415.0	Summation of Losses - (efficiency)	\$1,855***	\$1,855***	\$1,855
420.1	Short Circuit Ratio	\$900	\$1,390	\$1,615
421.1	Direct-Axis Synchronous Reactance (Xd) - unsaturated	\$900	\$1,390	\$1,615
422.1	Negative Sequence Reactance (X2) - saturated	\$620	\$620	\$930
423.1	Zero-Sequence Reactance (X0) - saturated	\$620	\$1,235	\$1,850
425.1	Direct-Axis Transient Reactance (X'd) - saturated	\$1,235	\$3,700	\$4,950
426.1	Direct-Axis Subtransient Reactance (X''d) - saturated	\$880	\$1,100	\$1,320
427.1	Direct-Axis Transient Short Circuit Time Constant (T'd)	\$1,160	\$1,450	\$1,740
430.1	Direct-Axis Transient Open Circuit Time Constant (T'do)	\$720	\$900	\$1,080
432.1	Short Circuit Time Constant of Armature Windings (Ta)	\$1,160	\$1,450	\$1,740
505.1	Overspeed	\$500***	\$500***	\$500
511.1	Voltage Regulator Range - 1875 kVA maximum @ 480 volts	\$930	\$1,380	\$1850**
601.1	Voltage Waveform (Oscillographic)	\$850	\$850	\$850
601.1	Voltage Waveform (Deviation Factor) - run in conjunction with 601.4	N/C	N/C	N/C
601.4	Voltage Waveform (Harmonic Analysis)	\$600	\$600	\$600
611.1	Inherent Voltage Droop (generator only) - 1250 kVA maximum	\$750	\$750	\$750
615.1	Inherent Voltage Regulation (generator only) - 1125 kVA maximum @ 480 volts	\$750	\$750	\$750**
619.1	Voltage Dip for Low Power Factor Load - 1875 kVA maximum @ 480 V	\$1,850	\$1,850	N/A
619.2	Voltage Dip and Rise for Rated Load (Load App/Rej) - 1875 kVA maximum @ 480 V	\$1,390	\$1,390	N/A
620.1	Voltage Unbalance with Unbalanced Load (Line-to-Line Load)	\$695	\$695	\$695***
620.2	Voltage Unbalance with Unbalanced Load (Line-to-Neutral Load)	\$695	\$695	\$695***
625.1	Short Circuit (Mech. Strength) - 3 phase only, 7000 amp maximum, for LV, 600 A max. for MV/HV**	\$1,855	\$2,775	\$3,700
680.1	Temperature Rise (generator only) - Heat Run	\$1,390	\$2,315	\$3,250
Standard Testing*	Winding resistance, 401.1a		N/C	
	Insulation resistance of all windings, 301.1b		N/C	
	High potential test on all windings, 302.1a		N/C	
	Exciter field current - Open circuit		N/C	
	Voltage balance - Open circuit		N/C	
	Current balance - Short circuit		N/C	
	Overspeed (1 Min.)		N/C	
Witness Testing	Additional daily charge for witnessing by customer or customer's agents		\$1,000	

* Not all tests are available on all generators. Please contact factory for details.

** MIL Standard is a reference only, not exactly to standard.

*** May require a double basic setup charge, assuming the test is available for the requested frame size.

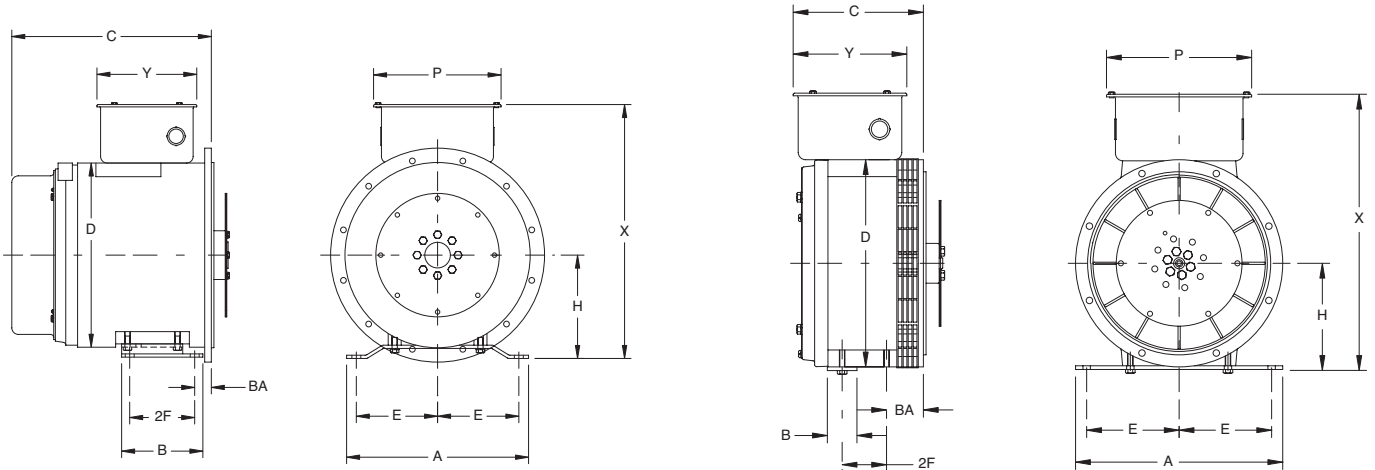
General Notes (Applicable to price on pages 2 through 41)

- A. All base models listed (except 1000 frame MAGNAPOWER® models) are single bearing with two bearings available as a no-charge option. Pricing includes flexible drive discs, SAE adapter, standard voltage regulator, and full guarding. Drip covers are optional. All voltage regulators have underspeed protection, EMI filtering, and are encapsulated for moisture protection.
- B. MAGNAPLUS® and MAGNAMAX® products have Class H insulation. LIMA®MAC products have Class H insulation on the rotor, and Class F insulation on the stator. MAGNAPOWER® products have Class H insulation for 4160V and below, and Class F insulation for above 4160V. Pancake products have Class F insulation. Rating columns headed NEMA B, F, and H indicate that generators operated at the specified ratings will not exceed the temperature rise limitation for the specified class of insulation specified in NEMA MG1-32.6. The rating columns do not specify the class of insulation used in the generator's construction.
- C. The frame size for each model is the first 3 or 4 digits of the model number.
- D. All generator ratings listed in this publication are based upon temperature rises measured by the resistance method as defined by MIL-STD-705C and IEEE STD 115, Method 6.4.4. For ratings at rises as measured by embedded temperature detectors, consult factory.
- E. Pancake AVR and MAGNAPLUS® products are shunt-excited (non-PMG) generators. The automatic voltage regulator derives input power from the generator's output leads.
- F. MAGNAMAX® and MAGNAPOWER® generators incorporate a permanent magnet generator (PMG) as the input power source for the voltage regulator.
- G. MAGNAMAX® and MAGNAPOWER® form wound coil generators include VPI insulation on main stator only. See Special Insulation on page 44 for options on other windings.

Dimensions in inches and (millimeters)

Pancake (AVR and Capacitor)

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data



AVR Ratings 331-334 Frames

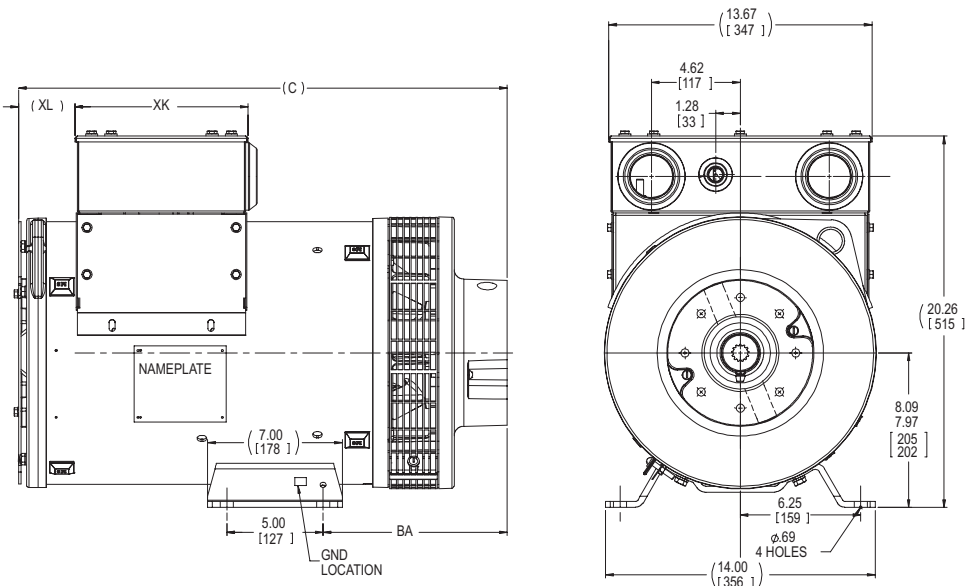
Capacitor Ratings 201 Frames

Type	Frame Size	A	B	C	D	E	H	P	X	Y	BA	2F
Pancake AVR	331	14.0 (356)	6.25 (159)	10.6 (269)	14.0 (356)	6.25 (159)	7.95 (202)	11.3 (287)	19.0 (483)	5.8 (147)	1.17 (30)	5.0 (127)
	332	14.0 (356)	6.25 (159)	11.6 (295)	14.0 (356)	6.25 (159)	7.95 (202)	11.3 (287)	19.0 (483)	5.8 (147)	1.17 (30)	5.0 (127)
	333	14.0 (356)	6.25 (159)	14.0 (356)	14.0 (356)	6.25 (159)	7.95 (202)	11.3 (287)	19.0 (483)	5.8 (147)	1.28 (33)	5.0 (127)
	334	14.0 (356)	6.25 (159)	14.4 (366)	14.0 (356)	6.25 (159)	7.95 (202)	11.3 (287)	19.0 (483)	5.8 (147)	1.28 (33)	5.0 (127)
Pancake Capacitor	201 6kW 60Hz	8.17 (208)	4.0 (102)	9.72 (247)	10.75 (273)	3.3 (84)	6.92 (176)	8.62 (219)	15.69 (399)	4.15 (113)	2.5 (63.5)	3.0 (76)
	201 8kW 60Hz	8.17 (208)	4.0 (102)	10.71 (272)	10.75 (273)	3.3 (84)	6.92 (176)	8.62 (219)	15.69 (399)	4.15 (113)	2.5 (63.5)	3.0 (76)
	201 6kW 50Hz	8.17 (208)	4.0 (102)	10.71 (272)	10.75 (273)	3.3 (84)	6.92 (176)	8.62 (219)	15.69 (399)	4.15 (113)	2.5 (63.5)	3.0 (76)

Dimensions in inches and (millimeters)

ATEX Hydraulic MAGNAPLUS® Generators

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data



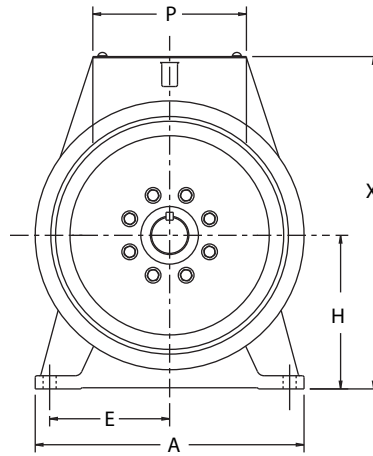
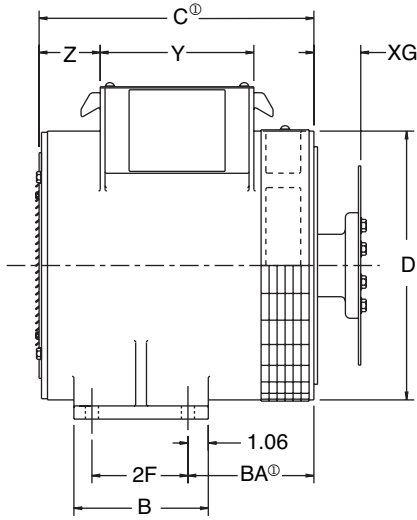
Frame Size	C	BA	XL	XK
281	18.44 (468)	9.57 (243)	3.14 (80)	6.86 (174)
282	21.13 (537)	9.57 (243)	3.05 (77)	8.93 (227)
283	23.13 (588)	9.57 (243)	3.05 (77)	8.93 (227)
284	25.38 (645)	9.57 (243)	3.05 (77)	8.93 (227)

Dimensions in inches and (millimeters)

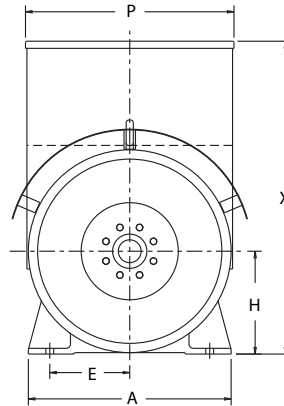
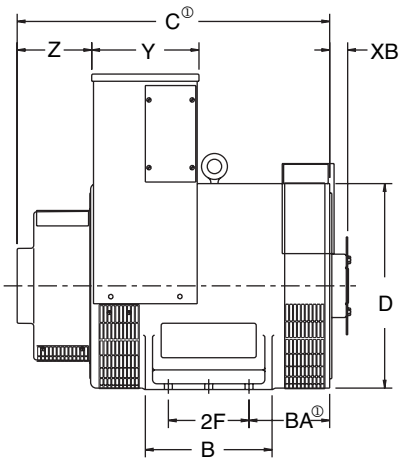
LIMA[®]SER Generators

LIMA[®]MAC Generators

ALL DIMENSIONS ARE APPROXIMATE: Refer to Dimension Section of the Generator Catalog for full dimensional data



250 Frame



280-440 Frame

280 LIMA[®]MAC Generator has split side-mount connection box.

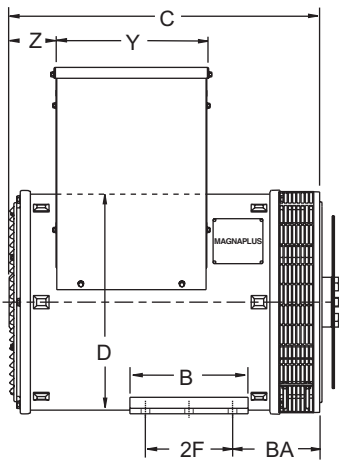
Frame Size	A	B	BA [Ⓛ]	C [Ⓛ]	D	E	2F	H	P	X	Y	Z
250	14.00 (356)	7.00 (178)	6.56 (167)	14.31 (363)	14.00 (356)	6.25 (159)	5.00 (127)	8.00 (203)	8.00 (203)	17.31 (440)	8.00 (203)	3.18 (81)
280	14.00 (356)	7.00 (178)	6.56 (167)	20.88 (530)	13.00 (330)	6.25 (159)	5.00 (127)	8.00 (203)	18.38 (467)	25.06 (637)	9.37 (238)	3.94 (100)
360	17.75 (451)	11.00 (279)	7.00 (178)	27.12 (689)	17.75 (451)	7.00 (178)	7.00 (178)	9.00 (229)	18.38 (467)	27.38 (695)	9.31 (236)	6.47 (164)
440	21.25 (540)	14.00 (356)	6.63 (168)	31.50 (800)	21.75 (552)	9.00 (229)	11.00 (279)	11.00 (279)	22.25 (565)	32.21 (818)	12.31 (313)	6.34 (161)

Notes: Ⓛ This dimension will vary dependent upon adaption used.

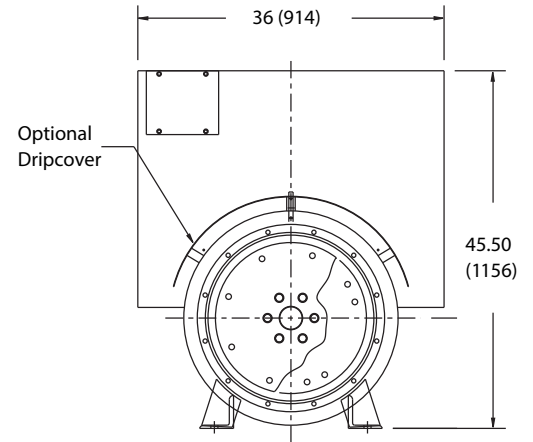
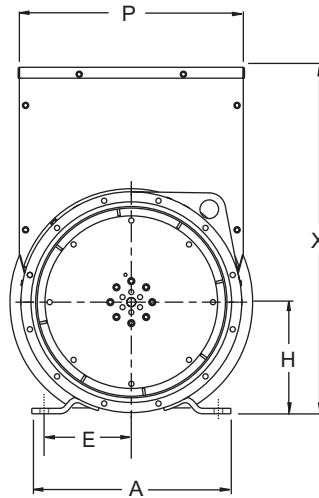
Dimensions in inches and (millimeters)

MAGNAPLUS[®] Generators

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data



280-430 frame



Optional Box (for 430 frame only)

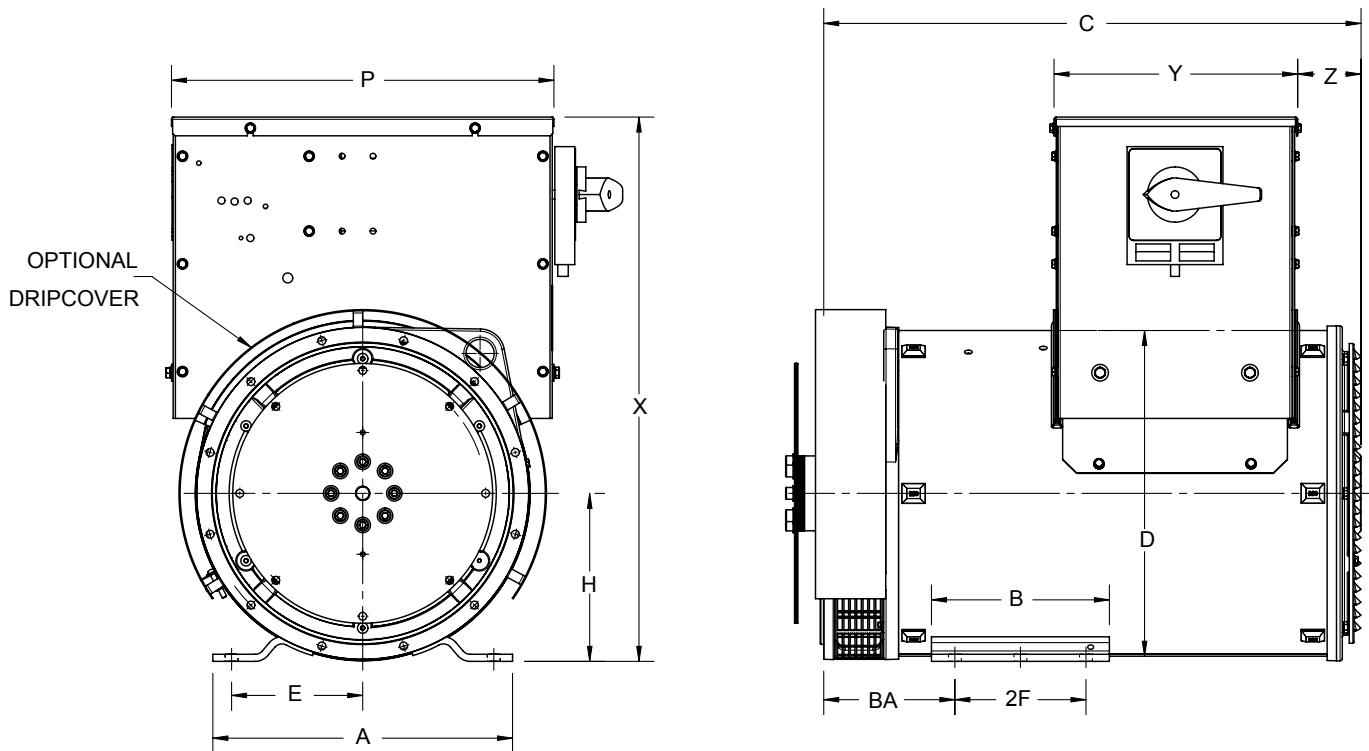
Frame Size	A	B	BA	C	C with PMG	D	E	2F	H	P	X	Y	Z
281PSL	14.00	7.00	6.56	15.95	N/A	13.64	6.25	5.00	8.00	13.55	18.56	6.86	3.50
	(356)	(178)	(167)	(405)		(349)	(159)	(127)	(203)	(344)	(471)	(174)	(89)
281CSL	14.00	7.00	6.56	16.34	N/A	13.75	6.25	5.00	8.00	13.55	18.56	6.86	3.50
	(356)	(178)	(167)	(415)		(349)	(159)	(127)	(203)	(344)	(471)	(174)	(89)
282PSL	14.00	7.00	6.56	18.50	23.10	13.64	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(167)	(470)	(587)	(346)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
282CSL	14.00	7.00	6.56	18.35	N/A	13.75	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(167)	(466)		(349)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
283PSL	14.00	7.00	6.56	20.50	25.10	13.64	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(167)	(521)	(638)	(346)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
283CSL	14.00	7.00	6.56	20.83	N/A	13.75	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(167)	(529)		(349)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
284PSL	14.00	7.00	6.56	22.75	27.40	13.64	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(167)	(578)	(696)	(346)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
284CSL	14.00	7.00	6.56	22.83	N/A	13.75	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(167)	(580)		(349)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
285PSL	14.00	7.00	11.56	25.00	29.60	13.64	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(294)	(635)	(752)	(346)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
286PSL	14.00	7.00	11.56	27.00	31.60	13.64	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(294)	(686)	(803)	(346)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
287PSL	14.00	7.00	11.56	29.00	33.60	13.64	6.25	5.00	8.00	13.55	18.56	8.93	3.42
	(356)	(178)	(294)	(737)	(853)	(346)	(159)	(127)	(203)	(344)	(471)	(227)	(87)
361	16.00	9.50	7.00	24.96	27.56	17.35	7.00	7.00	9.00	18.19	27.85	12.44	3.52
	(406)	(241)	(178)	(634)	(700)	(441)	(178)	(178)	(229)	(462)	(707)	(316)	(89)
362	16.00	9.50	7.00	28.59	31.18	17.35	7.00	7.00	9.00	18.19	27.85	12.44	3.52
	(406)	(241)	(178)	(726)	(792)	(441)	(178)	(178)	(229)	(462)	(707)	(316)	(89)
363	16.00	9.50	10.50	31.72	34.29	17.35	7.00	7.00	9.00	18.19	27.85	12.44	3.52
	(406)	(241)	(267)	(806)	(871)	(441)	(178)	(178)	(229)	(462)	(707)	(316)	(89)
364	16.00	9.50	10.50	34.92	37.28	17.35	7.00	7.00	9.00	18.19	27.85	12.44	3.52
	(406)	(241)	(267)	(887)	(947)	(441)	(178)	(178)	(229)	(462)	(707)	(316)	(89)
431	21.46	15.00	10.00	33.89	38.27	22.64	9.00	11.00	13.00	24.97	36.10	16.00	2.66
	(545)	(381)	(254)	(861)	(972)	(575)	(229)	(279)	(330)	(634)	(917)	(406)	(68)
432	21.46	15.00	10.00	37.39	41.77	22.64	9.00	11.00	13.00	24.97	36.10	16.00	2.66
	(545)	(381)	(254)	(950)	(1061)	(575)	(229)	(279)	(330)	(634)	(917)	(406)	(68)
433	21.46	15.00	10.00	42.39	46.77	22.64	9.00	11.00	13.00	24.97	36.10	16.00	2.66
	(545)	(381)	(254)	(1077)	(1188)	(575)	(229)	(279)	(330)	(634)	(917)	(406)	(68)

Must have minimum clearance of 6 inches for air flow in to the generator. Additional clearance may be required for servicing.

Dimensions in inches and (millimeters)

MAGNASELECT® Generators

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data
STANDARD LH SWITCH POSITION SHOWN



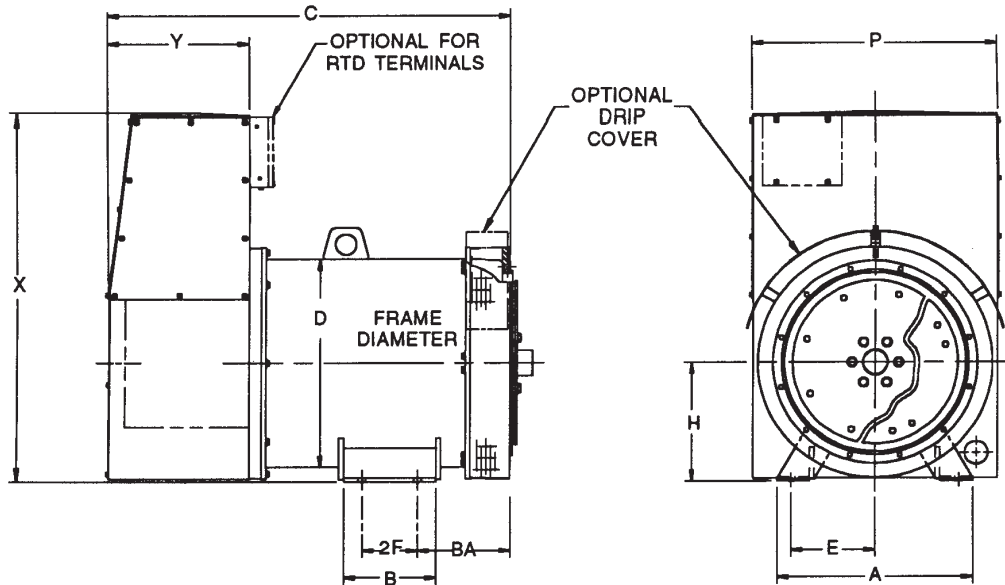
Frame Size	A	B	BA	C	C with PMG	D	E	2F	H	P	X	Y	Z
282	14.00	7.00	6.56	18.50	23.10	13.64	6.25	5.00	8.00	14.98	26.24	8.97	3.37
	(356)	(178)	(167)	(470)	(587)	(346)	(159)	(127)	(203)	(380)	(666)	(228)	(86)
283	14.00	7.00	6.56	20.50	25.10	13.64	6.25	5.00	8.00	14.98	26.24	8.97	3.37
	(356)	(178)	(167)	(521)	(638)	(346)	(159)	(127)	(203)	(380)	(666)	(228)	(86)
284	14.00	7.00	6.56	22.75	27.40	13.64	6.25	5.00	8.00	14.98	26.24	8.97	3.37
	(356)	(178)	(167)	(578)	(696)	(346)	(159)	(127)	(203)	(380)	(666)	(228)	(86)
285	14.00	7.00	11.56	25.00	29.60	13.64	6.25	5.00	8.00	14.98	26.24	8.97	3.37
	(356)	(178)	(294)	(635)	(752)	(346)	(159)	(127)	(203)	(380)	(666)	(228)	(86)
361	16.00	9.50	7.00	24.96	27.56	17.35	7.00	7.00	9.00	20.42	29.06	13.01	3.49
	(406)	(241)	(178)	(634)	(700)	(441)	(178)	(178)	(229)	(519)	(738)	(330)	(89)
362	16.00	9.50	7.00	28.59	31.18	17.35	7.00	7.00	9.00	20.42	29.06	13.01	3.49
	(406)	(241)	(178)	(726)	(792)	(441)	(178)	(178)	(229)	(519)	(738)	(330)	(89)
363	16.00	9.50	10.50	31.72	34.29	17.35	7.00	7.00	9.00	20.42	29.06	13.01	3.49
	(406)	(241)	(267)	(806)	(871)	(441)	(178)	(178)	(229)	(519)	(738)	(330)	(89)
431	21.46	15.00	10.00	33.89	38.27	22.64	9.00	11.00	13.00	30.10	37.08	16.81	2.20
	(545)	(381)	(254)	(861)	(972)	(575)	(229)	(279)	(330)	(765)	(942)	(427)	(56)
432	21.46	15.00	10.00	37.39	41.77	22.64	9.00	11.00	13.00	30.10	37.08	16.81	2.20
	(545)	(381)	(254)	(950)	(1061)	(575)	(229)	(279)	(330)	(765)	(942)	(427)	(56)
433	21.46	15.00	10.00	42.39	46.77	22.64	9.00	11.00	13.00	30.10	37.08	16.81	2.20
	(545)	(381)	(254)	(1077)	(1188)	(575)	(229)	(279)	(330)	(765)	(942)	(427)	(56)

Must have minimum clearance of 6 inches for air flow in to the generator. Additional clearance may be required for servicing.

Dimensions in inches and (millimeters)

MAGNAMAX® Generators

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data



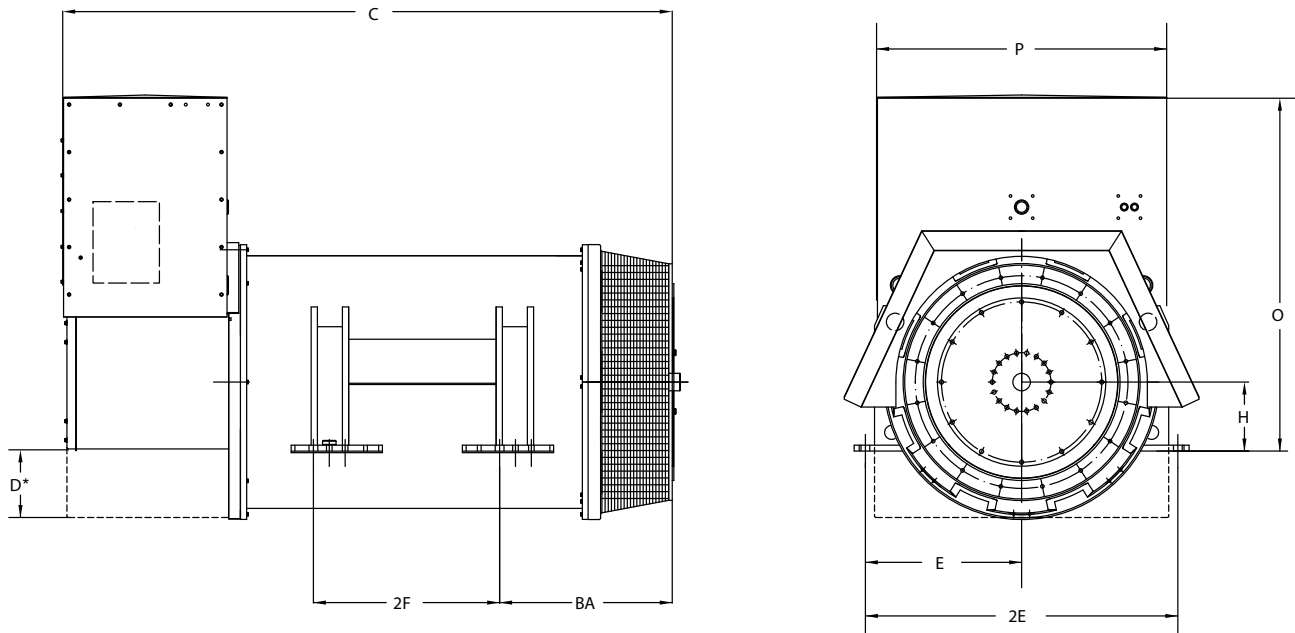
Frame Size	A	B	BA	C	D	E	2F	H	P	X	Y
431	21.00 (533)	10.00 (254)	10.00 (254)	38.40 (975)	22.64 (575)	9.00 (229)	6.00 (152)	13.00 (330)	26.51 (673)	39.77 (1010)	15.21 (386)
432	21.00 (533)	10.00 (254)	10.00 (254)	43.40 (1102)	22.64 (575)	9.00 (229)	6.00 (152)	13.00 (330)	26.51 (673)	39.77 (1010)	15.21 (386)
433	21.00 (533)	15.00 (381)	10.00 (254)	49.40 (1255)	22.64 (575)	9.00 (229)	11.00 (279)	13.00 (330)	26.51 (673)	39.77 (1010)	15.21 (386)
572	22.50 (572)	15.00 (381)	11.50 (292)	51.52 (1308)	27.64 (702)	10.00 (254)	11.00 (279)	15.50 (394)	30.77 (782)	42.64 (1083)	17.21 (437)
573	22.50 (572)	24.00 (610)	11.50 (292)	58.02 (1474)	27.64 (702)	10.00 (254)	20.00 (508)	15.50 (394)	30.77 (782)	42.64 (1083)	17.21 (437)
574	22.50 (572)	24.00 (610)	11.50 (292)	65.02 (1651)	27.64 (702)	10.00 (254)	20.00 (508)	15.50 (394)	30.77 (782)	42.64 (1083)	17.21 (437)
575	22.50 (572)	24.00 (610)	11.50 (292)	69.27 (1759)	27.64 (702)	10.00 (254)	20.00 (508)	15.50 (394)	30.77 (782)	42.64 (1083)	19.21 (488)
740	33.00 (838)	27.00 (686)	12.00 (305)	71.37 (1813)	27.64 (702)	15.00 (381)	23.00 (584)	19.00 (483)	30.77 (782)	51.45 (1307)	19.21 (488)
741	33.00 (838)	27.00 (686)	12.00 (305)	65.81 (1672)	34.24 (870)	15.00 (381)	23.00 (584)	19.00 (483)	38.08 (967)	51.45 (1307)	21.24 (539)
742	33.00 (838)	27.00 (686)	12.00 (305)	72.81 (1849)	34.24 (870)	15.00 (381)	23.00 (584)	19.00 (483)	38.08 (967)	51.45 (1307)	21.24 (539)
743	33.00 (838)	41.00 (1041)	12.00 (305)	79.31 (2014)	34.24 (870)	15.00 (381)	37.00 (940)	19.00 (483)	38.08 (967)	51.45 (1307)	21.24 (539)
744	33.00 (838)	41.00 (1041)	12.00 (305)	85.81 (2180)	34.24 (870)	15.00 (381)	37.00 (940)	19.00 (483)	38.08 (967)	51.45 (1307)	21.24 (539)
764	33.00 (838)	41.00 (1041)	14.52 (369)	87.32 (2218)	34.24 (870)	15.00 (381)	37.00 (940)	19.00 (483)	38.27 (972)	51.57 (1310)	22.76 (578)

Notes: • Connection boxes shown are furnished as standard product. Consult factory for optional connection boxes.
 • Must have a minimum clearance of 6 inches for air flow into the conduit box. However, additional clearance may be required for servicing.

Dimensions in inches and (millimeters)

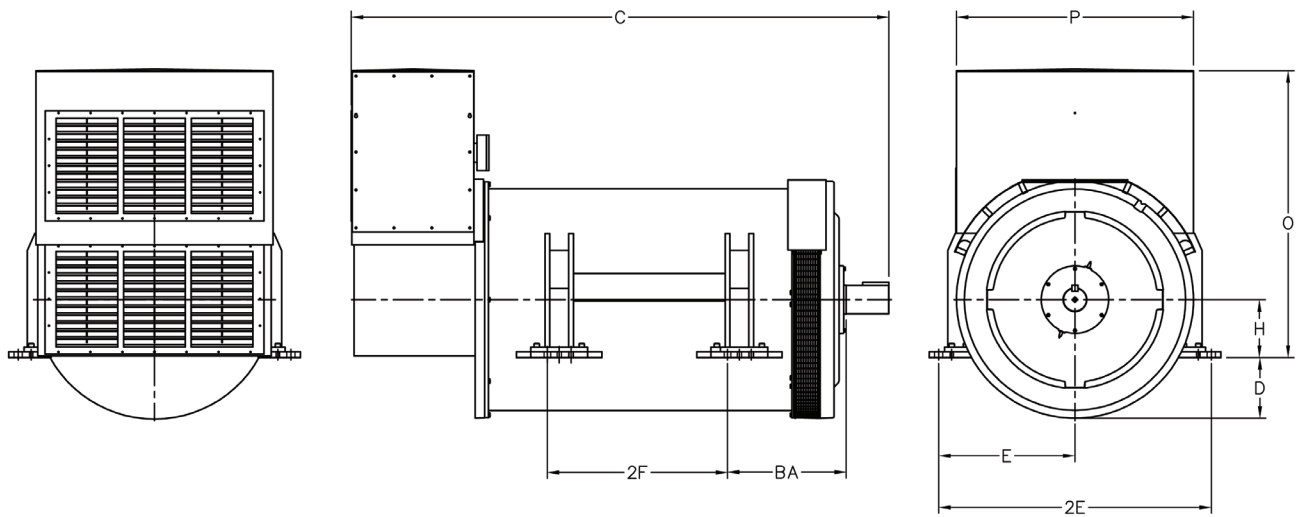
MAGNAPOWER® Generators

ALL DIMENSIONS ARE APPROXIMATE: Contact factory for full dimensional data



Frame Size	C	BA	2F	E	2E	H	O	P	D*
861	96.0 (2438)	27.2 (691)	29.3 (745)	24.6 (625)	49.2 (1250)	10.9 (276)	56.1 (1425)	45.7 (1161)	29.33 (2661)
862	102.7 (2608)	27.2 (691)	34.3 (870)	24.6 (625)	49.2 (1250)	10.9 (276)	56.1 (1425)	45.7 (1161)	29.33 (2661)
863	108.9 (2766)	27.2 (691)	39.4 (1000)	24.6 (625)	49.2 (1250)	10.9 (276)	56.1 (1425)	45.7 (1161)	29.33 (2661)

D* LOW VOLTAGE ONLY

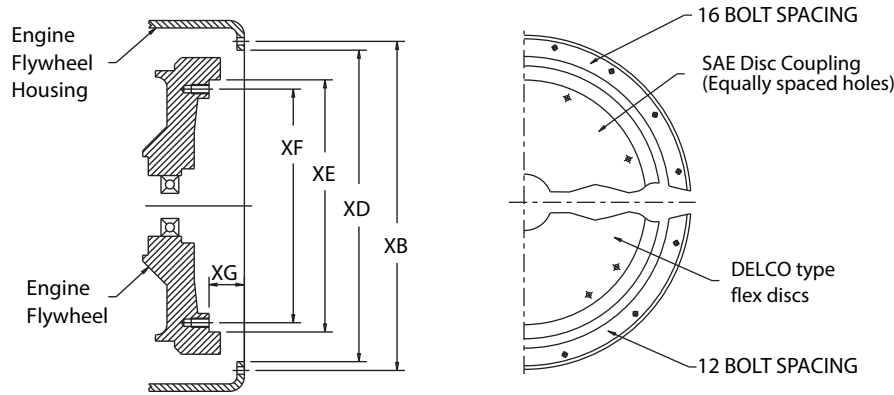


Frame Size	BA	C	D	E	2E	2F	H	O	P
1020	25.03 (636)	107.89 (2740)	12.78 (325)	28.75 (730)	57.50 (1460)	31.00 (787)	12.25 (311)	60.47 (1536)	50.00 (1270)
1030	25.03 (636)	113.36 (2879)	12.78 (325)	28.75 (730)	57.50 (1460)	38.00 (965)	12.25 (311)	60.47 (1536)	50.00 (1270)
1040	23.51 (597)	127.05 (3227)	12.78 (325)	28.75 (730)	57.50 (1460)	45.00 (1143)	12.25 (311)	63.42 (1610)	63.54 (1613)

- Notes:
- Connection boxes shown are furnished as standard product. Consult factory for optional connection boxes.
 - Must have a minimum clearance of 6 inches for air flow into the conduit box. However, additional clearance may be required for servicing.

Technical Data

Standard SAE Dimensions
in inches and (millimeters)



Engine Flywheel Housing Dimensions				
SAE No.	XD	XB	Tapped Holes	
			Qty.	Size
00	31.000 (787)	33.50 (851)	16	1/2-13
0	25.500 (648)	26.75 (679)	16	1/2-13
1/2	23.000 (584)	24.38 (619)	12	1/2-13
1	20.125 (511)	20.88 (530)	12	7/16-14
2	17.625 (448)	18.38 (467)	12	3/8-16
3	16.125 (410)	16.88 (429)	12	3/8-16
4	14.250 (362)	15.00 (381)	12	3/8-16
5	12.375 (314)	13.12 (333)	8	3/8-16
6	10.500 (267)	11.25 (286)	8	3/8-16

Engine Flywheel Dimensions					
Size	XE	XF	XG	Tapped Holes	
				Qty.	Size
SAE 21	26.500 (673)	25.25 (641)	0 (0)	12	5/8-11
SAE 18	22.500 (572)	21.38 (543)	.62 (16)	6	5/8-11
SAE 14	18.375 (467)	17.25 (438)	1.00 (25)	8	1/2-13
SAE 11-1/2	13.875 (352)	13.12 (333)	1.56 (40)	8	3/8-16
SAE 10	12.375 (314)	11.62 (295)	2.12 (54)	8	3/8-16
SAE 8	10.375 (264)	9.62 (244)	2.44 (62)	6	3/8-16
SAE 7-1/2	9.500 (241)	8.75 (222)	1.19 (30)	8	5/16-18
SAE 6-1/2	8.500 (216)	7.88 (200)	1.19 (30)	6	5/16-18
ACDelco** 17.75	17.755 (451)	15.50 (394)	.72 (18)	8	5/8-11
ACDelco 15.50	15.500 (394)	13.88 (353)	.72 (18)	8	5/8-11
ACDelco 12.75	12.750 (324)	11.00 (279)	0 (0)	4	1/2-13

Technical Data

Mounting Arrangement Cross Reference

Adapter Size	Coupling Size	Available in Frame Sizes													
		MAGNAPLUS® and MAGNAMAX® Generators						Pancake	LIMA®SER and LIMA®MAC Generators						
		280	360	430	570	740	760		330	250	280	360	440	580	680
5	6.5	Std.						Std.	Std.	Std.	Std.				
5	7.5	Std.						Std.	Std.	Std.	Std.				
5	8	Std.						Std.	Std.	Std.	Std.				
5	Lister** AI								Build-up	Build-up					
4	6.5	Std.						Std.	Std.	Std.	Std.				
4	7.5	Std.	Std.					Std.	Std.	Std.	Std.				
4	8	Std.	Std.					Std.	Std.	Std.	Std.				
4	10	Std.	Std.					Std.	Std.	Std.	Std.	Std.			
4	Lister TS	Build-up						Build-up	Build-up				Std.		
3	8	Std.	Std.					Std.1		Std.	Std.				
3	10	Std.	Std.	Std.				Std.1		Std.	Std.	Std.			
3	11.5	Std.	Std.	Std.						Std.	Std.	Std.			
3	ACDelco 12.75	Build-up	Build-up							Std.1	Std.1				
2	10	Std. 1	Std.	Std.						Std.	Std.	Std.			
2	11.5	Std. 1	Std.	Std.						Std.	Std.	Std.	Std.		
2	ACDelco 15.50		Build-up	Std.						Std.	Std.	Std.	Std.		
1	11.5		Std.	Std.							Std.	Std.	Std.	Std.	
1	14		Build-up	Std.	Std.						Std.	Std.	Std.	Std.	Std.
1	ACDelco 17.75		Build-up	Std.	Std.						Std.	Std.	Std.	Std.	Std.
1/2	ACDelco 17.75			Std.	Std.								Std.	Std.	Std.
1/2	14			Std.	Std.								Std.	Std.	Std.
0	ACDelco 17.75			Std.	Std.	Std.	Std.						Std.1	Std.	Std.
0	14			Std.	Std.								Std.1	Std.	Std.
0	18			Std.	Std.	Std.	Std.							Std.	Std.
00	18			Std.	Std.	Std.	Std.								
00	21			Std.	Std.	Std.	Std.								

Notes: Std. = Standard adaption available at no additional cost.
Std.1 = Adaption is available for standard units, but at extra cost. Consult factory for pricing.
Build-up = Requires non-standard shaft. Consult factory for lead times.

* ACDelco is believed to be a trademark of General Motors Company and is not owned or controlled by Regal Beloit Corporation.

** Lister is believed to be a trademark of Lister Petter Power Systems Limited and is not owned or controlled by Regal Beloit Corporation

Technical Data

Environmental and Special Considerations

Once the size of the generator has been determined, it is important to review the environmental and special conditions which may affect the life of the generator. Some of the most common conditions which may require special attention are outlined below.

ALTITUDE / AMBIENT - For applications over 3300 feet elevation or where the temperature of the ventilating air to the generator exceeds 40°C (104°F), derating of the generator will be necessary. To determine the derating, use the chart below by moving vertically on the specified altitude to the horizontal line that matches the required ambient temperature, then select the derating required.

Note: When a NEMA class of insulation is specified, additional derating of kW available may be necessary. Per NEMA MG 1-2011, Part 32.6: For successful operation of generators in ambient temperatures higher than 40°C, the temperature rises... shall be reduced by the number of degrees that the ambient temperature exceeds 40°C.

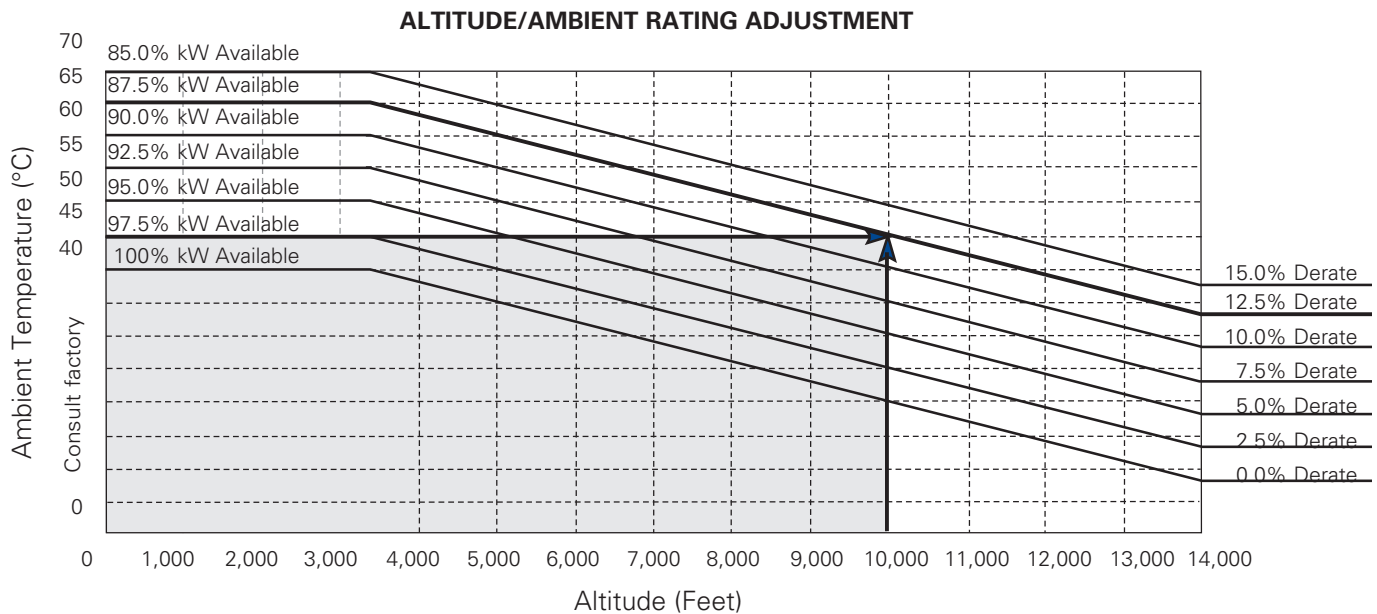
ABRASIVE DUSTS - When it is possible that airborne abrasive dusts will be introduced to the generator with the ventilating air, additional protection is recommended. Dirt, sand, volcanic ash, gravel, rock dust, etc. are typical of this type of application. Although the generator windings are protected against abrasive environments, severe conditions may warrant protection by means of baffles, housings and filters, or other suitable means. Refer to factory for recommendations.

HIGH HUMIDITY AND TROPICAL CLIMATE - In moist or humid areas such as the Tropics, coastal areas, and all marine service, additional protection is recommended. Although the standard windings are humidity and moisture resistant, space heaters are required for these environments.

OUTDOOR APPLICATION - All generators for outdoor application must be protected from the elements by sheet metal housings with the proper openings for ventilation. This protection should be designed to prevent the direct contact of wind driven rain, snow, or dust with the generator. Space heaters are recommended depending on location and type of service. Refer to factory for recommendations on enclosure requirements.

NON-LINEAR LOADING - Solid state electronic control devices which utilize thyristors or SCR firing circuits (such as variable frequency induction motor controls, precision motor speed controls, no-break powered battery chargers, etc.) can introduce high frequency harmonics which adversely affect the normal waveform of the generator. This creates additional heat in the generator stator and rotor and can cause overheating. These devices can and do present problems to non-utility power generating equipment or any limited power bus system. The problems which can occur are not limited to the generator itself, but can affect the solid state control device, the equipment it controls, other associated loads, monitoring devices or a number of combinations over the entire system.

It is important that the control manufacturer, the generator manufacturer, and the systems engineer work together to insure the proper selection of all components. Please refer to factory for application assistance.



Example:
 Elevation: 10,000 feet
 Ambient: 45°C
 Required Derate: 12.5%
 Catalog Rating x .875

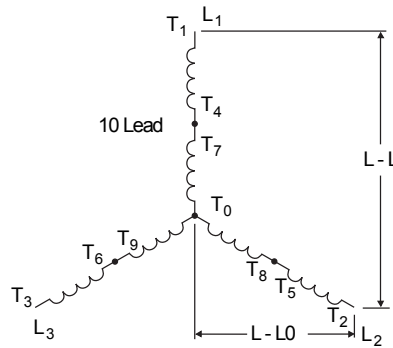
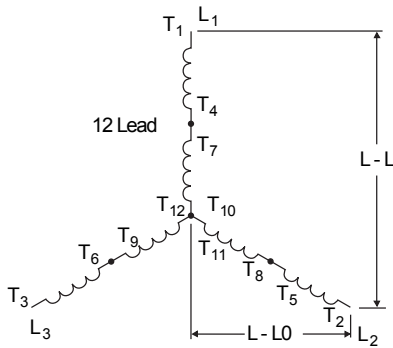
Example:
 NEMA B class of insulation is specified in a 45°C ambient.
 Maximum allowable temperature rise is reduced from 80°C to 75°C.

Technical Data

CONNECTION DIAGRAMS

SERIES

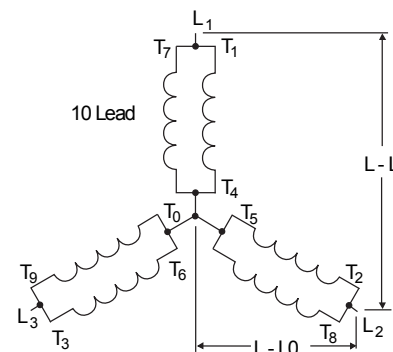
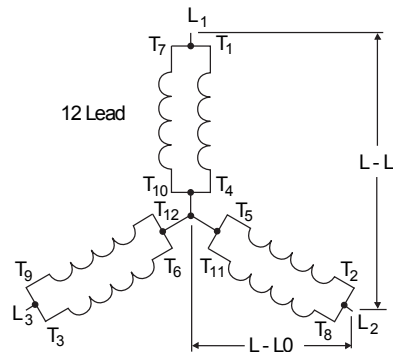
HIGH WYE



Voltage		
HZ	L-L	L-L0
60	380	219
	416	240
	440	254
	460	266
	480	277
	600	346
50	380	219
	400	231
	415	240
	440	254

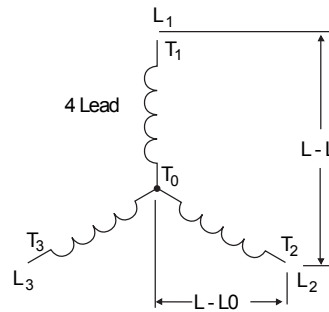
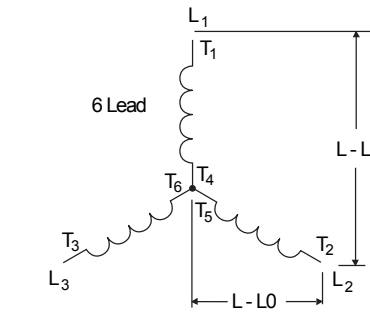
PARALLEL

LOW WYE



Voltage		
HZ	L-L	L-L0
60	190	110
	208	120
	220	127
	230	133
	240	139
	240	139
50	190	110
	200	115
	208	120
	220	127

WYE

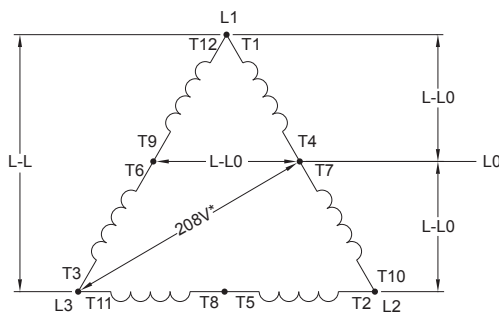


Voltage			
HZ	L-L	L-L0	
60	380	219	
	480	277	
	600	346	
	2400	1386	
	3300	1905	
	4160	2402	
	6600	3811	
	13800	7967	
	50	380	219
		400	231
415		240	
3300		1905	
6600		3811	
11000	6351		

SERIES

HIGH DELTA

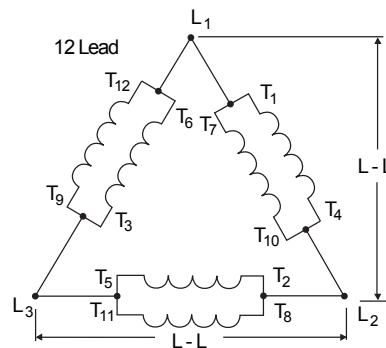
Voltage		
HZ	L-L	L-L0
60*	240	120
50	200	100
	220	110
	240	120



PARALLEL

LOW DELTA

Voltage	
HZ	L-L
60	110
	120
50	100
	110

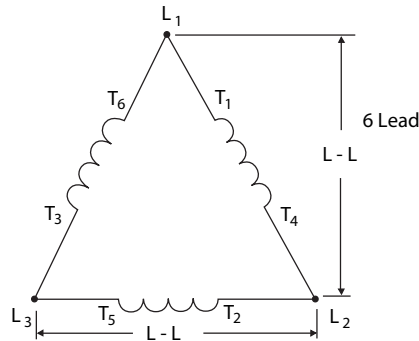


Technical Data

CONNECTION DIAGRAMS

DELTA

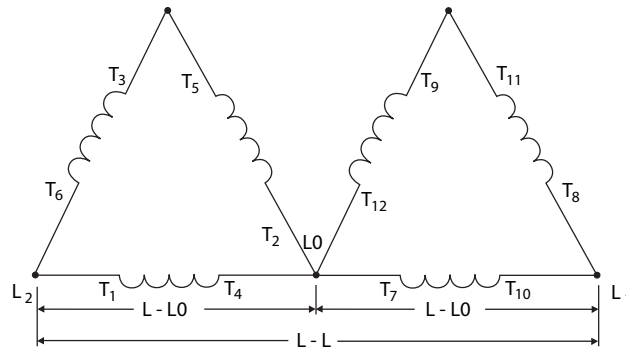
Voltage	
HZ	L-L
60	2402
	7967
50	1905
	6351



DOUBLE DELTA

Single Phase Connection ①

Voltage		
HZ	L-L	L-L0
60	200	100
	220	110
	240	120
50	220	110

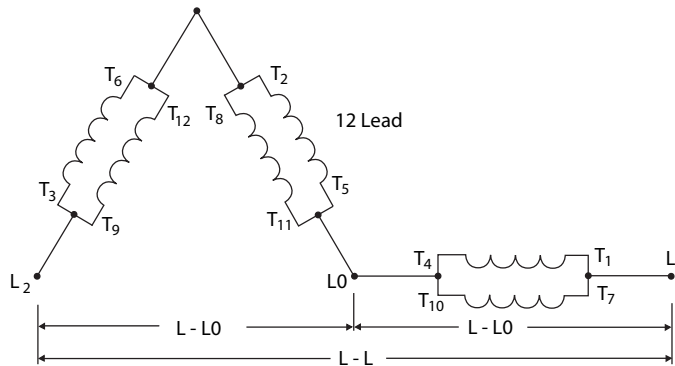


PARALLEL

LOW ZIGZAG

Single Phase Connection ①

Voltage		
HZ	L-L	L-L0
60	200	100
	220	110
	240	120
50	220	110

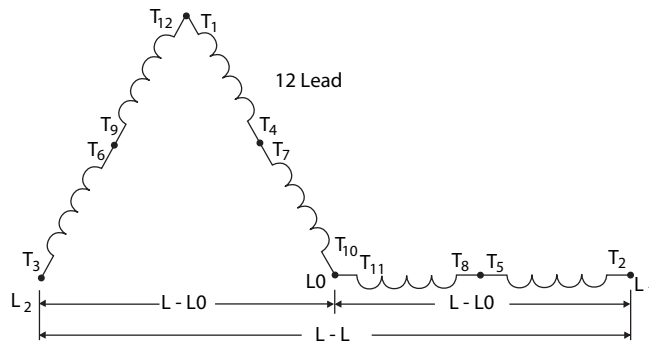


SERIES

HIGH ZIGZAG

Single Phase Connection ①

Voltage		
HZ	L-L	L-L0
60	480	240
50	440	220



① Single phase kW/kVA ratings are approximately equal to 50% of the generator's three phase ratings.

Technical Data

Automatic Voltage Regulator Features

Feature	STANDARD MODELS				SPECIAL (OPTIONAL) MODELS			
	SE350E	SE350EL	DVR®2000E+	AVC63-12	DVR®2000EC+	PM300E	PM500	APR125-5
Analog Input	No	No	Yes	Yes	Yes	No	Yes	No
Min. Exciter Field Resistance Ohms	15.0	15.0	18.0	5.25	18.0	21.0	15.0	25.0
Voltage Regulation No Load to Full Load	1.0%	1.0%	0.25%	0.5%	0.25%	1.0%	0.5%	0.25%
Underspeed Protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Overexcitation Protection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
EMI / RFI Filtering ①	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Unit Mounted Voltage Adjust	Std.	Std.	Std.	Std.	Std.	Std.	Std.	Std.
Overvoltage Protection	No	No	Std.	No	Std.	No	Std.	Opt.
Encapsulated	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Paralleling ③	Opt④	Opt④	Std.	Std.	Std.	Opt④	Std.	Opt④
Line Drop Compensation	No	No	No	Yes	No	No	No	No
VAR/PF Controller	No	No	No	Opt⑤	Yes	No	No	No
Input Power - VAC	240	120 or 240②	PMG	120	PMG	PMG	PMG	240
Cont. Output - ADC	3.5	3.5	3.0	12.0	3.0	3.0	5.0	5.0
Cont. Output - VDC	63	63	75	63	75	63	85	125
Sensing Input - VAC	190-240	85-120 190-240②	100-600	Option B: 180-264	100-600	190-240	175-280 330-515 420-660	190-277 380-480
Sensed Voltage	Average	Average	RMS	Average	RMS	Average	Average	Average
Sensing Frequency (Hz)	50/60	50/60	50/60	Option 1: 50/60 2: 400	50/60	50/60	50/60	50/60
Generator Current Limiting Protection	No	No	No	No	No	No	No	No
AVR Condition LEDs	No	No	Yes	No	Yes	No	No	No
3 Phase Sensing	No	No	Yes	Yes	Yes	No	Yes	No
1 Phase Sensing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Loss of Sensing Protection	Yes ⑥	Yes ⑥	Yes	No	Yes	No	No	No
300% Short Circuit Protection	No	No	Yes	No	Yes	No	Yes	No

① With regulator mounted in generator conduit box.

② Depends on switch position.

③ Requires the addition of a paralleling current transformer.

④ Requires the addition of a paralleling module along with a paralleling current transformer.

⑤ Requires the addition of VAR/PF Module.

⑥ Protection is inherent. Sensing and power input share the same two leads.

A loss of sensing (open in the sensing circuit) results in an open in the input power circuit, and the regulator will shut down.

General Formulas

Generator Formulas ①

Desired Data	Single Phase	Three Phase
Kilo Volt Amperes (kVA)	$\frac{\text{Volts} \times \text{Amps}}{1000}$ or $\frac{\text{kW}}{\text{P.F.}}$	$\frac{\sqrt{3} \times \text{Volts} \times \text{Amps}}{1000}$ or $\frac{\text{kW}}{\text{P.F.}}$
Kilowatts (kW)	$\frac{\text{Volts} \times \text{Amps} \times \text{P.F.}}{1000}$ or $\text{kVA} \times \text{P.F.}$	$\frac{\sqrt{3} \times \text{Volts} \times \text{Amps} \times \text{P.F.}}{1000}$ or $\text{kVA} \times \text{P.F.}$
Power Factor (P.F.)	$\frac{\text{kW}}{\text{kVA}}$	$\frac{\text{kW}}{\text{kVA}}$
Amperes When kW is Known	$\frac{\text{kW} \times 1000}{\text{Volts} \times \text{P.F.}}$	$\frac{\text{kW} \times 1000}{\sqrt{3} \times \text{Volts} \times \text{P.F.}}$
Amperes When kVA is Known	$\frac{\text{kVA} \times 1000}{\text{Volts}}$	$\frac{\text{kVA} \times 1000}{\sqrt{3} \times \text{Volts}}$
Minimum HP Required for Prime Mover	$\frac{\text{kW}}{\text{Alternator Efficiency} \times 0.746}$	
Frequency (Hz)	$\frac{\text{Number of Poles} \times \text{RPM}}{120}$	
Revolutions Per Minute (RPM)	$\frac{\text{Hz} \times 120}{\text{Number of Poles}}$	
Number of Poles	$\frac{\text{Hz} \times 120}{\text{RPM}}$	

① P.F. = Power Factor

Agency Information

Matrix of Generator and AVR Approvals & Markings

MAGNAPLUS® Generator	CE	CSA	UL
281-287	Y	Y	Y
361-363	Y	Y	Y
431-433	Y	Y	Y

MAGNAMAX® Generator	CE	CSA	UL
431-433 LV	Y	Y	Y
572-575 LV	Y	Y	Y
740-764 LV	Y	Y	Y

MAGNAMAX® Generator	CE	CSA	UL
431-433 MV	N	Y	N
572-575 MV	N	Y	N
741-764 MV	N	Y	N

Pancake	CE	CSA	UL
AVR 332-337	N	Y	N
Capacitor 332-337	N	Y	N

MAGNAPOWER® Generator	CE	CSA	UL
1020 - 1030 LV	Y	Y	Y
1020 - 1040 MV	N	Y	N
1020 - 1040 HV	N	Y	N

LIMA®MAC Generator	CE	CSA	UL
250-440	Y	Y	N

AVR	CE	CSA	UL Certified for Canada Component	UL Recognized
SE350E Regulator	N	Y	N	Y
SE350EL Regulator	Y	N	Y	Y
SE350P Regulator	Y	N	Y	Y
PM300E Regulator	Y	N	Y	Y
PM500 Regulator	Y	N	Y	Y
DVR®2000E+ Regulator	Y	Y	N	Y
DVR®2000EC+ Regulator	Y	Y	N	Y
APR125-5 Regulator	N	Y	N	Y
AVC63-12 B1 & B2 Regulator	Y	Y	N	Y
DVR®2400 Regulator	Y	Y	N	Y
DVR®2500 Regulator	Y	Y	N	Y



UL Listing Mark - MAGNAMAX® and MAGNAPLUS® units complete with regulator and conduit box and rated 40KW or larger and 600 volts max. Our UL Certification file number is E218422. Go to www.ul.com and select the link to their online certifications directory and enter E218422 in the file number search box and click on JZGZ.E218422 for a complete product listing.



UL Recognized Component Mark - 1) MAGNAMAX® and MAGNAPLUS® units complete with regulator and conduit box and rated less than 40 KW. 2) MAGNAMAX® and MAGNAPLUS® units rated 40 KW or larger but without conduit box and/or regulator. 3) MAGNAPOWER® units with or without regulator This applies to units rated 600 V or less. Our UL Certification File number is E218422. Go to www.ul.com and select the link to their online certifications directory and enter E218422 in the file number search box and click on JZGZ.E218422 for a complete product listing. 4) Voltage regulators - search the UL online certifications directory using file number E222903.



CSA Certification Mark - Applies to majority of MAGNAPOWER®, MAGNAMAX® and MAGNAPLUS® units. Our CSA Certification File number is LR2025 for MAGNAMAX® and MAGNAPOWER® units and LR9401 for MagnaPlus units. Go to www.csagroup.org and select the Certified Product Listing link and enter either 002025 or 009401 in the file number search box, Class 4211-01 covers generators, Class 3211-06 covers voltage regulators.



CSA Certification Mark for Canada and the US - Applies to certain MAGNAMAX®, MAGNAPLUS®, and MAGNAPOWER® units that are specifically Certified for Class 1, Division 2 hazardous locations. Our CSA Certification File number is LR21839. Go to www.csagroup.org and select the Certified Product Listing link and enter 021839 in the file number search box and select the link under CSA Class No. 4228-81.



ATEX symbol - Signifies compliance to the European ATEX Directive which applies to equipment for use in potentially explosive atmospheres. Special construction; available for Zone 2 only. Applies to 282-287 MAGNAPLUS® and 431-744 MAGNAMAX® generators. Third party certification is through SIRA/CSA Group Testing UK Ltd., generators are nameplated "ExnA" (non-sparking protection method) and IIC (covers Gas Groups IIA, IIB, IIC) and "T3" (Operating Temperature Code (T3= surface temperatures less than 200°C).



CE Marking - An acronym for the French "Conformite Europeene"; this marking is required on certain equipment imported to European Union countries based on individual Directives (Laws). MAGNAMAX®, MAGNAPLUS®, and LIMA®MAC units complete in every aspect of construction, and rated 1000 volts or less, carry the CE marking, based on the Low Voltage Directive.



TERMS AND CONDITIONS OF SALE

For the full version of the Terms and Conditions of Sales with Supplements A and B -
Visit <http://www.regalbeloit.com/what-we-do/products-brands/>

Regal STCS Rev 5-14

ALL QUOTATIONS ARE OFFERED AND ALL PURCHASE ORDERS ARE ACCEPTED BY SELLER SUBJECT ONLY TO THESE TERMS AND CONDITIONS.

1. DEFINITIONS: "Buyer" means the entity to which Seller is selling Products or Services under a Contract. "Contract" means the agreement between Buyer and Seller governing the sale of Products and/or Services by Seller to Buyer. These Terms and Conditions, the Quotation (if one is issued by Seller), any purchase order acknowledgement (if one is issued by Seller), and Buyer's purchase order (except to the extent that it conflicts with these Terms and Conditions, the Quotation, and/or the order acknowledgement) constitute the Contract. "Products" means the equipment, parts, materials, supplies, and other goods that Seller has agreed to supply under the Contract. References in these Terms and Conditions to the purchase and sale of Products may mean, where applicable, the licensing of Software loaded on or provided with the Products. "Quotation" means Seller's statement identifying the Products and Services, together with any quantity, price, delivery schedule, and/or other terms and conditions (in addition to or different from these Terms and Conditions), offered by Seller for sale to Buyer. A Quotation that incorporates these Terms and Conditions by reference shall be deemed to include these Terms and Conditions, whether or not Seller provides a complete copy of these Terms and Conditions to Buyer with the Quotation, with a purchase order acknowledgement, or with an invoice. Where there is a conflict between these Terms and Conditions and other provisions of the Quotation, the latter shall control. "Services" means the services that Seller has agreed to provide under the Contract. "Software" means software loaded on or provided with the Products. "Seller" means the Regal entity - whether Regal Beloit Corporation ("RBC") or an RBC subsidiary - supplying Products and/or providing Services under the Contract. "Terms and Conditions" means these "Terms and Conditions of Sale."

2. CONTRACT FORMATION: No agreement or understanding, oral or written, purporting to modify these Terms and Conditions shall be binding on Seller unless it is made in writing, specifically stating that it is a modification of these Terms and Conditions and it is signed by Seller's authorized representative. No course of dealing, usage of trade, or course of performance shall be relevant to explain or supplement any of these Terms and Conditions. If these Terms and Conditions are deemed an offer, Buyer's acceptance of Seller's offer is expressly limited to acceptance of these Terms and Conditions. Fulfillment of Buyer's order does not constitute acceptance of any of Buyer's terms and conditions and does not modify or amend these Terms and Conditions. Buyer's purchase order for the purchase of Products and/or for the performance of Services shall constitute Buyer's assent to these Terms and Conditions. Any terms and conditions contained in Buyer's purchase order or other form of communication from Buyer that are additional to or different from these Terms and Conditions, shall be deemed rejected by Seller, unless expressly accepted in writing by Seller's authorized representative. Alternatively, if these Terms and Conditions are deemed to be a response to, an acceptance of, or a written confirmation of, Buyer's offer, whether provided in the form of a purchase order or otherwise, Seller's acceptance is expressly conditioned upon Buyer's assent to these Terms and Conditions. Buyer's acceptance of Products tendered to Buyer by Seller shall constitute Buyer's express assent to all of the terms and conditions contained in these Terms and Conditions. All proposals, negotiations and representations, if any, made prior to or with reference hereto are hereby superseded by these Terms and Conditions. References in this Section to "these Terms and Conditions" shall be deemed to mean these Terms and Conditions and Seller's Quotation, if Seller has issued a Quotation.

3. ACCEPTANCE OF PURCHASE ORDERS: No Buyer purchase order shall be binding on Seller until accepted in writing by Seller, and Seller shall have no liability to Buyer with respect to purchase orders that are not accepted. Shipment against a purchase order shall be deemed to constitute Seller's acceptance thereof, subject to these Terms and Conditions. All purchase orders shall be subject to these Terms and Conditions, whether or not the purchase orders so state. Purchase orders accepted by Seller may not be cancelled or modified by Buyer without the prior written consent of Seller.

4. QUOTATIONS: Quotations shall expire and shall be void thirty (30) days from date of the Quotation, unless otherwise specified in the Quotation. The Quotation may be modified or withdrawn by Seller at any time before Seller's receipt of Buyer's conforming acceptance.

5. PRICES; PRICE CHANGES: (a) Products. The price of the Products sold pursuant to the Contract shall be as set forth in the Quotation. If price is not specified in the Quotation, price shall be based upon Seller's prices in effect at the time of shipment. Published prices are for Products of Seller's current standard design and constructed of standard materials. Variation from the standard design and/or materials requires special pricing. Seller reserves the right at any time, and without incurring any obligation, to discontinue the manufacture of any model, to withdraw products from sale, to make changes in design, and/or to add improvements to products. Price also shall be based on freight rates in effect at the time of shipment. Where applicable, in the event of an increase in the applicable freight rates before the shipment of Products, such changes will be for the account of Buyer. Price advances, discounts, extras and other terms and conditions are subject to change without notice. Unless otherwise provided in the Quotation, price is based on delivery in accordance with the "Delivery" section below. Prices include Seller's standard packing. (b) Services. Services prices are based on normal business hours (8 AM to 5 PM Monday through Friday). Overtime and Saturday hours will be billed at one and one half (1.5) times the normal business hours hourly rate. Sunday hours will be billed at two (2) times the normal business hours hourly rate; holiday hours will be billed at three (3) times the normal business hours hourly rate.

6. TAXES, DUTIES AND FEES: Seller shall be responsible for taxes measured on Seller's net income based upon performance of, or payment for, work under the Contract ("Seller Taxes"). Buyer shall be responsible for all other taxes, duties, fees or other charges of any kind (including, but not limited to any manufacturer's tax, retailers' occupation tax, use tax, sales tax, excise tax, duty, custom, inspection or testing fee, value added tax, or any other tax, fee or charge of any nature whatsoever) imposed by any governmental authority against Buyer, Seller or Seller's suppliers and/or contractors, based upon the Contract between Seller and Buyer. In the event Seller is required to pay any such tax, fee or charge, regardless whether such tax, fee or charge is imposed before or after Seller's delivery of the Products and/or Buyer's payment under the Contract, Buyer shall reimburse Seller therefor. In lieu of such reimbursement, Buyer shall provide Seller, at the time the order is submitted, with an exemption certificate or other document acceptable

to the authority imposing such tax, fee or charge. If Seller's prices include any taxes, duties or fees (other than Seller Taxes), any change in such taxes, duties and/or fees shall be the basis for a price adjustment.

7. TERMS OF PAYMENT: (a) Terms. Terms of payment are cash in full, without set-off or discount, in U.S. dollars, and by wire transfer, no later than thirty (30) days from date of invoice. (b) Payment Default. If Buyer defaults in any payment when due, or in the event that any voluntary or involuntary bankruptcy or insolvency proceedings involving Buyer are initiated by or against Buyer, then the whole Contract price shall immediately become due and payable upon demand, or Seller, at its option and without prejudice to its other lawful remedies, may defer delivery or cancel the Contract. Where delivery is deferred and Seller does not demand immediate payment of the full Contract price, pro-rata payments shall become due as shipments are made. (c) Buyer Financial Condition. If, during the period of performance of the Contract, the financial condition of Buyer is determined by Seller not to justify the terms of payment specified, Seller may demand full or partial payment in advance before proceeding with the work, or satisfactory security or guarantees that invoices will be promptly paid when due, or, at its option, without prejudice to other lawful remedies, may defer delivery or cancel the Contract. (d) Delay. If delivery is delayed by Buyer, which delay must be consented to by Seller, Seller may store the Products in accordance with subsection 8(e) "Storage" below and Seller may submit a new estimate of cost for completion based on prevailing conditions. Payments shall become due from the date on which Seller is prepared to deliver the Products and storage shall be the Buyer's risk and expense as provided in subsection 8(g) "Storage" below. If manufacture is delayed by Buyer for any cause, a partial payment based upon the proportion of the order completed shall become due from the date on which Seller is notified of the delay. (e) Late Payment Charge. Buyer shall pay a late payment charge on all amounts not paid in full when due at the rate of one and one half percent (1.5%) per month or at the maximum legally permissible rate, whichever is lower. (f) Exceptions. Supplement A to these Terms and Conditions lists Seller business units for which payment terms vary from payment terms set forth in this Section 7.

8. DELIVERY; TITLE TRANSFER; RISK OF LOSS/DAMAGE:

(a) Delivery - U.S. Buyer. For sales in the U.S. that do not involve export from the U.S., Seller shall deliver Products to Buyer EXW Seller's U.S. point of shipment (Incoterms® 2010). The point of shipment shall be the shipping dock of Seller's factory, warehouse or other facility that Seller designates as its discretion as point of shipment from time to time. (b) Sales Involving Exports from U.S. (1) Delivery - U.S. Buyer; Subsequent Drop Shipment to Location Outside U.S. For sales, in the U.S. to a U.S. Buyer, which involve drop shipment at Buyer's request and/or on Buyer's behalf, to a location outside the U.S., Seller shall deliver the Products to Buyer EXW Seller's U.S. point of shipment (Incoterms® 2010). The point of shipment shall be the shipping dock of Seller's factory, warehouse or other facility that Seller designates at its discretion as its point of shipment from time to time. Buyer is responsible for all transportation charges incurred after delivery of the Products to the carrier or Buyer at the point of shipment and shall reimburse Seller for any transit insurance or freight pre-paid for the Products by Seller. Buyer shall bear the risk of loss and/or damage in transportation. Buyer is responsible for filing any export documents required for export from the U.S. (2) Delivery - Non-U.S. Buyer; Routed Export Transactions. For sales in the U.S. to a non-U.S. Buyer, Seller shall deliver Products to Buyer's freight forwarder EXW Seller's U.S. point of shipment (Incoterms® 2010). The point of shipment shall be the shipping dock of Seller's factory, warehouse or other facility that Seller designates at its discretion as its point of shipment from time to time. In a "Routed Export Transaction," as defined in the U.S. Census regulations, 15 CFR Section 30.3, where Buyer is a non-U.S. entity, Buyer shall authorize Buyer's designated freight forwarder or Seller to facilitate the export of the Products from the U.S. and to prepare and file export documentation with respect to such export transaction (hereafter, to "Facilitate the Export"). If Buyer authorizes its designated freight forwarder to Facilitate the Export, Buyer's freight forwarder shall provide Seller with a copy of the final export documentation and proof of filing. If Buyer authorizes Seller to Facilitate the Export, Buyer shall cause Buyer's freight forwarder to provide Seller the information needed by Seller to Facilitate the Export. Buyer shall give timely notice to Seller identifying whom it has designated to Facilitate the Export. (c) Delivery Dates. Delivery dates are approximate, are not guaranteed and are based upon prompt receipt by Seller from Buyer of all necessary shipping and other information. Seller may deliver in advance of the delivery schedule. Seller reserves the right to make delivery in installments, with all installments to be separately invoiced and paid for by Buyer when due per invoice, without regard to subsequent deliveries. Delivery of the Products to a commercial carrier at the shipping point shall constitute delivery to Buyer. (d) Title Transfer. Title to Products shall pass to Buyer upon the earlier of delivery of the Products to the carrier or Buyer at the point of shipment in accordance with subsection (a) above, except that, for Routed Export Transactions, title shall transfer to Buyer upon delivery to Buyer's designated freight forwarder. Subject to applicable law, Seller, upon notice to Buyer, may retain title to the Products until such time as Seller receives payment in full from Buyer. Title to Software shall not pass to Buyer and is subject to the applicable license. (e) Risk of Loss/Damage. Risk of loss and/or damage shall pass to Buyer upon delivery in accordance with subsection (a) above, except that, for Routed Export Transactions, risk of loss and/or damage shall pass upon delivery of the Products to Buyer's designated freight forwarder. (f) Delivery by Seller's Carrier. Where the parties agree that delivery shall be made at a location other than Seller's point of shipment, where Seller will deliver using its carrier or Seller's privately owned or leased trucks, unloading at the agreed location shall constitute delivery to Buyer. Freight and handling charges by Seller may not reflect actual freight charges prepaid to the carrier by Seller due to incentive discounts earned by Seller based upon Seller's aggregate volume of freight tendered to a carrier or when a carrier must be used which charges a rate which is different than the rate upon which Seller's freight and handling charges were based. When shipments are delivered in Seller's privately owned or leased trucks, Buyer will be charged an amount approximating the prevailing common carrier rate. (g) Storage. In the event that Buyer is unable to accept delivery of the Products at time of shipment, Seller shall invoice Buyer for the full purchase price as if shipment had been made and: (i) if Seller is able to store such Products in its own facilities, Buyer will pay Seller the reasonable handling and storage charges for the period of such storage, or (ii) if Seller is unable to store such goods at its own facility, Seller reserves the right to arrange handling and storage in a suitable bonded warehouse for Buyer at

Buyer's expense. In cases where handling and storage become necessary, it shall be Buyer's responsibility to notify Seller when shipment is to be made. Seller will make necessary arrangements for shipment at Buyer's expense.

9. EXCUSABLE DELAYS; FORCE MAJEURE: (a) Excuse of Performance. Seller shall not be liable for any ordinary, incidental, or consequential loss or damage as a result of Seller's delay in or failure of delivery, or installation of Products or performance of Services due to (i) any cause beyond Seller's reasonable control, (ii) an act of God, act of Buyer, embargo or other government act, authority, regulation or request, fire, theft, accident, strike, slowdown or other labor disturbance, war, armed conflict, act or threat of terrorism, riot, epidemic, delay in transportation, or (iii) inability to obtain necessary labor, materials, components, or facilities. Should any of the aforementioned events occur, Seller, at its option, may cancel Buyer's order with respect to any undelivered Products or incomplete Services or extend the delivery date for a period equal to the time lost because of delay. Notice of such election shall be given promptly to Buyer. In the event Seller elects to so cancel the Contract, Seller shall be released of and from all liability for failure to deliver the Products or to perform the Services, including, but not limited to, any and all claims on behalf of Buyer for lost profits, or any other claim of any nature which Buyer might have. If shipping or progress of the work is delayed or interrupted by Buyer, directly or indirectly, Buyer shall pay Seller for all additional charges resulting therefrom. (b) Allocation. If Seller determines that its ability to meet the demand for products, including the Products, or to obtain labor, materials, components or facilities is hindered, limited or made impracticable due to causes set forth in subsection (a) above, Seller may allocate its available supply of products, including the Products, among itself and its purchasers on such basis as Seller determines to be equitable without liability for any failure of performance which may result therefrom.

10. LIMITED WARRANTY. (a) Scope and Period. (1) Products. Seller warrants that the Products shall be delivered free from defects in material, workmanship and title and shall conform to Seller's specification agreed upon in a written and signed agreement by Buyer and Seller, if applicable, for the Products. This warranty shall expire twelve (12) months from first use of the Product or eighteen (18) months from date of manufacture of the Product, whichever occurs first. (2) Repaired and/or Replaced Products and/or Parts of Products. Seller warrants that the repaired or replaced Products or parts of Products shall be delivered free from defects in material, workmanship and title. In the case of repaired or replaced Products or parts of Products comprising warranty remedies for Products, this warranty shall expire upon expiration of the warranty period applicable to the Products originally supplied by Seller. In the case of other repaired or replaced Products or parts of Products, this warranty shall expire twelve (12) months from the date of repair or manufacture of the Products or parts of the Products. (3) Services. Seller warrants that the Services shall be performed in a competent and diligent manner in accordance with any mutually agreed specification. This warranty shall expire ninety (90) days from the date of completion of such Services. (4) Software. Seller warrants that the Software shall execute, at time of delivery, in accordance with the specification agreed upon in a written and signed agreement by Buyer (as licensee) and Seller (as licensor) when properly installed in the Products. The warranty shall expire six (6) months from date of manufacture of the first Product in which the Software is loaded. (5) Applicability. This warranty shall apply to any Products and/or Software bought, acquired, and/or used by an entity that, or person who, acquires the Products and/or Software from Buyer (a "Transferee"), except that any claim made against Seller pursuant to this warranty shall be made by Buyer only. Seller shall not be bound by this Section 10 to satisfy a claim under this Section made against Seller by a Transferee, whether such Transferee is a direct or indirect Transferee of Buyer. Buyer shall provide any Transferee of a Product or Software written conspicuous notice of Sections 10 and 11 hereof. (6) Exceptions. Supplement B to these Terms and Conditions lists Seller Products, parts, Services and Software for which Seller's warranties vary from the warranties set forth in this subsection 10(a). (b) Remedies. (1) Products. If, prior to expiration of the warranty period set forth in subsection 10(a)(1), above, any Products shall be proved to Seller's satisfaction to be defective or nonconforming with the warranty set forth therein, Seller will repair or replace such defective Products or components thereof, FCA Seller's factory, warehouse or other facility that Seller designates at its discretion as point of shipment from time to time (Incoterms® 2010), or will refund or provide Buyer with a credit in the amount of the purchase price paid therefor by Buyer, at Seller's sole option. Buyer's exclusive remedy and Seller's sole obligation under this warranty shall be limited to such repair or replacement, FCA factory, warehouse or other facility that Seller designates at its discretion as point of shipment from time to time (Incoterms® 2010), or refund or credit by Seller, and shall be conditioned upon Seller's receiving written notice of any defect and/or nonconformance within a reasonable period of time, but in no event more than thirty (30) days, after it was discovered or by reasonable care should have been discovered. All claims not made in writing and received by Seller within such thirty (30) day period shall be deemed waived. In no event shall Seller's liability for such defective or nonconforming Products exceed the purchase price paid by Buyer for such Products. With prior approval from Seller, Buyer shall return the alleged defective Product or part, freight prepaid, for Seller's inspection, and no other Products shall be returned to any Seller office, factory, warehouse, authorized service center or other facility, without Seller's written consent. (2) Repaired and/or Replacement Products and/or Parts of Products. If prior to the expiration of the applicable warranty period set forth in subsection 10(a)(2) above, any replacement Products and/or parts of Products shall be proved to Seller's satisfaction to be defective or nonconforming with the warranty set forth therein, the remedy set forth in subsection 10(b)(1) above shall apply to such replacement Products and/or parts of Products. (3) Services. If, prior to expiration of the warranty period set forth in subsection 10(a)(3), above, any Services shall be proved to Seller's satisfaction to be nonconforming with the warranty set forth therein, Seller will re-perform such nonconforming Services. If the Services cannot be re-performed, Seller, at its option, shall refund or credit monies paid by Buyer for such nonconforming Services. (4) Software. If, prior to expiration of the warranty period set forth in subsection 10(a)(4) above, (i) Buyer provides, in writing, a complete description of the claimed nonconformance in the Software, and (ii) the Software is proven to Seller's satisfaction to be so nonconforming with the warranty set forth therein, Seller will correct the nonconformance by, at its option: (i) modifying or making available to Buyer instructions for modifying the program causing such nonconformance, or (ii) making available a corrected or replacement program FCA Seller's factory, warehouse or other facility that Seller designates at its discretion as point of shipment from time to time (Incoterms® 2010). (c) Exclusions - The warranties set forth in this Section 10 do not cover: (1) shipping expenses to and from Seller's office, factory, warehouse, authorized service center or other destination designated by Seller for repair or replacement of defective Products or any tax, duty, custom, inspection or testing fee, or any other charge of any nature related thereto; (2) costs of removing defective Products from, and/or disassembling,

equipment in which Products are assembled or reinstalling Products and/or reassembling such equipment, or testing repaired or replaced Products and/or the equipment; (3) field service travel and living costs and expenses; (4) Products subjected to abuse, neglect, negligence, misuse, misapplication, accident, damages by circumstances beyond Seller's control, improper installation (if by anyone other than Seller), improper operation (including, but not limited to, operation in excess of rated capacity or otherwise not in accordance with installation, maintenance, or operating instructions or requirements) improper maintenance, improper storage, and/or any other than normal use or service; (5) Products maintained, serviced, repaired or altered by anyone other than Seller or Seller's authorized service agencies; (6) Products and/or parts not manufactured by Seller; for Products furnished by Seller, but manufactured by others, Seller will assign to Buyer the written warranty, if any, of the manufacturer, if assignment is reasonably practicable; however, Seller does not adopt or guarantee or represent that the manufacturer will comply with any of the terms of the warranty of such manufacturer; but, in no event shall Seller's obligations be greater than those provided under Seller's warranty set forth in this Section 10; and/or (7) failures of the Software to be interruption-free or error-free or to meet Buyer's or any other party's requirements; and, problems caused by use of the Software in conjunction with third-party software, hardware, or products. (d) **DISCLAIMER: THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES, ARISING BY OPERATION OF LAW OR OTHERWISE, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WHETHER OR NOT THE PURPOSE OR USE HAS BEEN DISCLOSED TO SELLER IN SPECIFICATIONS, DRAWINGS, OR OTHERWISE AND WHETHER OR NOT SELLER'S PRODUCTS ARE SPECIFICALLY DESIGNED AND/OR MANUFACTURED BY SELLER FOR BUYER'S USE OR PURPOSE. NO EMPLOYEE, REPRESENTATIVE, OR AGENT OF SELLER OTHER THAN AN OFFICER OF SELLER IS AUTHORIZED TO ALTER OR MODIFY ANY PROVISION OF THIS SECTION 10 OR TO MAKE ANY GUARANTEE, WARRANTY, OR REPRESENTATION, EXPRESS OR IMPLIED, ORALLY OR IN WRITING, WHICH IS CONTRARY TO THE FOREGOING.** Except where Buyer and Seller agree in a written and signed agreement upon the specifications applicable to the Products, Software, and/or Services, any description of the Products, Software, and/or Services, whether in writing or made orally by Seller or Seller's agents, specifications, samples, models, bulletins, drawings, diagrams, engineering sheets or similar materials used in connection with Buyer's order are for the sole purpose of identifying the Products and shall not be construed as an express or implied warranty. Any suggestions by Seller or Seller's agents regarding use, application or suitability of the Products shall not be construed as an express or implied warranty unless confirmed to be such in writing by Seller's authorized officer.

11. LIMITATIONS OF REMEDY AND LIABILITY: (a) Breach of Warranty Claims. Buyer's only remedy for breach of any warranty under the Contract, other than the warranty provided under Section 13 "Intellectual Property Indemnity," shall be the applicable remedy set forth in Section 10 "Limited Warranty" above. Seller's total liability for any and all breach of warranty claims under the Contract shall not exceed the purchase price allocable to the Product, Software or Service or part thereof which gives rise to the claim. (b) Other Claims. Seller's liability for any claim other than a breach of warranty claim under Section 10 "Limited Warranty," whether in contract, negligence, tort, strict liability, indemnity or otherwise for any loss or damage arising out of, connected with, or resulting from the Contract or the performance or breach thereof, or from the design, manufacture, sale, delivery, resale, repair, replacement, installation, technical direction of installation, inspection, operation or use of any Products covered by or furnished under the Contract or from Services rendered under the Contract, shall in no case (except as provided in Section 13 "Intellectual Property Indemnity") exceed five percent (5%) of the purchase price allocable to the Products or part thereof or Services giving rise to the claim. (c) Consequential Damage Disclaimer. SELLER SHALL NOT BE LIABLE FOR AND DISCLAIMS ALL CONSEQUENTIAL, INCIDENTAL, CONTINGENT, SPECIAL OR PUNITIVE DAMAGES WHATSOEVER. Seller shall not be liable for lost profits or revenues, loss of use of the Products, Software or any related equipment or systems, cost of capital, cost of substitute products, cost of facilities or services, business interruption, downtime, shutdown, or slowdown costs, any other types of economic loss, penalties, special or punitive damages, and claims of Buyer's customers for any such damages. (d) Expiration of Claims. All claims against Seller arising out of or related to the Contract or the performance or breach thereof shall expire unless made and presented to Seller in writing by Buyer before expiration of the applicable warranty period. (e) Precedence. The limitations of this Section shall apply regardless of whether a claim is based in contract, tort (including negligence), warranty, strict liability, intellectual property, or otherwise, and shall take precedence over any conflicting terms and conditions, except where the limitations of liability of such conflicting terms limit Seller's liability further.

12. INDEMNITY: (a) Third party claims. Each of Buyer and Seller (each an "Indemnified Party" and an "Indemnifying Party") shall indemnify the other party from and against claims brought by a third party, for bodily injury or damage to the third party's tangible property, to the extent such injury and/or damage is caused by the negligence of the Indemnifying Party, provided that the Indemnified Party gives the Indemnifying Party prompt notice of any such claim and all necessary information and assistance so that the Indemnifying Party, at its option, may defend or settle such claim and the Indemnified Party does not take any adverse position in connection with such claim. In the event that the injury or damage is caused by joint or concurrent negligence of Buyer and Seller, the loss or expense shall be borne by each party in proportion to its degree of negligence. For purposes of Seller's indemnity obligations hereunder, Products shall not be considered third party property and the facility in which a Product or Software is used and/or the Services are performed shall not be considered third party property. (b) Indemnity by Buyer for Third Party Warranty Claims. If Buyer supplies Products or Services to a third party, uses Products or Services at a facility owned by a third party, and/or transfers Products and/or Software to a third party, Buyer shall indemnify and defend Seller from and against any and all claims by, and liability to, any such third party in excess of the limitations set forth in Sections 10 "Limited Warranty" and 11 "Limitations of Remedy and Liabilities." For purposes of this subsection (b), "Seller" means Seller, its affiliates, suppliers, contractors, licensors and their employees.

13. INTELLECTUAL PROPERTY INDEMNITY: Seller warrants that, to the best of its knowledge, Products, Services and/or Software furnished hereunder, and any part thereof, (each a "Delivered Item") shall be delivered free of any rightful claim of any third party not affiliated with Buyer for infringement of any U.S. patent, any trademark

registered in the U.S. Patent and Trademark Office and/or any copyright registered in the U.S. Copyright Office. Seller will, at its own expense, defend or settle any suits that may be instituted against Buyer for alleged infringement by the Delivered Item of any U.S. patent, any trademark registered in the U.S. Patent and Trademark Office and/or any copyright registered in the U.S. Copyright Office provided that: (a) such alleged infringement consists of the use of the Delivered Item for (i) any of the purposes for which Buyer informed Seller such Delivered Items would be used, or (ii) if Buyer did not so inform Seller, any of the purposes for which Buyer reasonably believed such Delivered Items would be used; (b) Buyer shall have made all payments for such Delivered Items then due hereunder; (c) Buyer shall give Seller immediate notice in writing of any such suit and transmit to Seller immediately upon receipt of all processes and papers served upon Buyer; (d) Buyer does not take any position adverse to Seller in connection with such claim; and (e) Buyer shall permit Seller through Seller's counsel, either in the name of Buyer or in the name of Seller, to defend such suit(s) and give all needed information, assistance and authority to enable Seller to do so.

In case of a final award of damages in any such suit, Seller will pay such award but will not be responsible for any compromise or settlement made without its written consent. In case the Delivered Item itself is in such suit held to infringe any valid patent issued in the United States and/or a trademark and/or copyright registered in the United States, and its use is enjoined, or in the event of a settlement or compromise approved by Seller which shall preclude future use of the Delivered Item, Seller shall, at its own expense and at its sole option, either: (a) procure rights to continue using such Delivered Item; (b) modify the Delivered Item to render it non-infringing; (c) replace the Delivered Item with a non-infringing Product and/or Software; or (d) refund the purchase price paid by Buyer for the Delivered Item after return of the Delivered Item to Seller (less reasonable depreciation for any period of use). Notwithstanding the foregoing, Seller shall not be held responsible for claims of infringement of any patents covering the use of the Delivered Item in combination with other goods or materials not furnished by Seller.

The foregoing states the entire liability of Seller for intellectual property infringement, and IN NO EVENT SHALL SELLER BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES ATTRIBUTABLE TO AN INTELLECTUAL PROPERTY INFRINGEMENT. Buyer, at its own expense, shall defend Seller against, and/or settle, (a) any patent, trademark, copyright or other intellectual property infringement claim pertaining to a Delivered Item furnished by Seller to Buyer manufactured in accordance with designs, drawings or other descriptions proposed or furnished by Buyer; and (b) any claim against Seller of contributory infringement resulting from the use or resale by Buyer of a Delivered Item sold hereunder. Buyer shall indemnify Seller for any award against Seller or settlement by Seller regarding any such claims and attorneys' fees and defense costs incurred in defense of such claims.

14. SOFTWARE LICENSE: (a) License Grant: Seller grants Buyer a nonexclusive, royalty-free, perpetual, limited license to use the Software in the U.S. and solely in conjunction with (a) the operation of the Products purchased and sold under the Contract and/or other product meeting Seller's specifications; and (b) any other purpose agreed upon in a written and signed agreement between Buyer and Seller. (b) Scope of License: Upon Seller's prior written approval, Buyer may make a reasonable number of copies of Software as necessary for backup, configuration, installation, and restoration of the Products. Also upon Seller's prior written approval, Buyer may authorize a third-party contractor or service provider to exercise these rights on Buyer's behalf and for Buyer's benefit. Buyer may transfer possession of Software and its media to another party only in conjunction with the transfer of the Products on which the Software is loaded and only upon agreement of the other party to the terms and conditions of the Contract. Upon such transfer, Buyer shall destroy all Buyer's copies of Software and related documentation. All licenses and grants pursuant to the Contract shall immediately terminate once Buyer no longer rightfully owns or possesses the Products. No other rights under this license are granted. Upon Seller's request, Buyer shall provide Seller with written notice of any such transfer providing the name, address, and contact information of the subsequent Buyer within 15 days of such transfer. (c) Use Restrictions: Buyer shall not (a) copy, display, transfer, adapt, modify, or distribute in any form the Software except as set forth in the Contract or in Seller documentation provided by Seller to Buyer with the Software; (b) reverse engineer, disassemble, decompile, or otherwise translate the Software's object code, unless expressly permitted by applicable law without the possibility of contractual waiver; or (c) sublicense or lease the Software or any copy thereof except with the transfer of the Products on which the Software is loaded. Except as provided under the terms of Seller's standard escrow agreement between Seller and Buyer, if applicable, Buyer shall not make available to any party, without prior written consent from Seller or its authorized agent, source code for the Software. Buyer shall not, directly or indirectly, export or re-export, or knowingly permit the export or re-export of, the Products, or any technical information about the Products, to any country for which the United States Export Administration Act, any regulation thereunder, or any similar United States law or regulation, requires an export license or other United States Government approval, unless Buyer obtains the appropriate export license and obtains written approval from Seller. (d) Maintenance and Support: Seller may offer to Buyer the option to purchase from Seller annual Software maintenance and support services under the terms and conditions of Seller's then-standard maintenance and support agreement. Buyer may renew this maintenance term at Seller's then-current maintenance rates. In the event Buyer purchases additional Software licenses, maintenance fees for such licenses shall be prorated to be coterminous with Buyer's existing maintenance period. In no event shall Seller be responsible for providing maintenance services for a period during which maintenance coverage is lapsed.

15. SECURITY AGREEMENT AND FINANCING STATEMENTS: As security for payment of the purchase price under the Contract, Buyer hereby irrevocably grants Seller a security interest in the Products purchased by Buyer, together with all accessories, attachments and replacement parts and all substitutions, replacements and proceeds thereof to secure payment of the purchase price and of all monies which may be due under the Contract. Buyer hereby authorizes Seller to file all financing statements, any amendments and continuations thereof, or any other documents necessary or reasonably required, for the perfection and protection of a security interest under applicable law, and to deliver notice to prior holders of security interests, of Seller's security interest in the Products to protect its interest.

16. INSURANCE: Until payment in full of the purchase price, Buyer shall maintain insurance covering all Products sold by Seller to Buyer in such amounts and against such risks as is customary by companies engaged in the same or similar business and similarly located, and shall, upon Seller's request, furnish evidence of such insurance satisfactory to Seller.

17. DRAWINGS; OTHER DESIGN DATA: All specifications, drawings, designs, data, information, ideas, methods, product samples, tools, gages, dies, fixtures, patterns and/or inventions made, conceived, developed or acquired by Seller in connection with procuring and/or executing the Contract will vest in and inure to Seller's sole benefit notwithstanding any charges therefor which may have been or may be imposed by Seller on Buyer. Buyer shall not give, loan, exhibit, sell or transfer to any person who is not a Buyer employee and authorized to receive such information, or to any organization or entity, any drawing, photograph, specification or product sample furnished by Seller or reproduction thereof which may enable such person, organization or entity to furnish similar products or parts therefor.

18. RETURN OF PRODUCTS: No Product or part shall be returned to Seller without written authorization and shipping instructions first having been obtained from Seller.

19. ASSIGNMENT AND SUBCONTRACTING: None of Buyer's rights under the Contract shall be assigned by Buyer to any other person, whether by operation of law or otherwise, without Seller's prior written approval. Seller may, without the necessity of obtaining Buyer's prior written consent, assign the Contract or subcontract the production of all or any portion of the Products and/or performance of the Services.

20. CANCELLATION: No purchase order submitted to Seller may be cancelled by Buyer without the prior written consent of Seller, which consent will at all times be conditioned on Buyer's agreement to pay Seller's cancellation charge. For a finished Product that, in Seller's judgment, is readily resalable to others, the cancellation charge shall be 15% of the invoice price of the Product. For all other cancellations, the cancellation charge shall amount to all cost and expenses incurred by Seller and arising out of or in connection with Buyer's purchase order plus reasonable profit. In no event shall the cancellation charge be less than 10% of the invoice price of the Product or more than the invoice price.

21. HIGH RISK APPLICATION USE DISCLAIMER: PRODUCTS AND SERVICES SOLD BY SELLER ARE NOT INTENDED FOR USE IN CONNECTION WITH ANY NUCLEAR FACILITY OR ACTIVITY, CRITICAL SAFETY SYSTEM, MEDICAL DEVICE, MILITARY DEVICE, SATELLITE, AVIATION EQUIPMENT, AIR TRAFFIC CONTROL EQUIPMENT, OR OTHER HIGH RISK APPLICATIONS (COLLECTIVELY, "HIGH RISK APPLICATIONS"). SELLER SHALL NOT USE OR PERMIT OTHERS TO USE PRODUCTS OR SERVICES FOR SUCH HIGH RISK APPLICATIONS WITHOUT SELLER'S PRIOR WRITTEN CONSENT. IF SO USED WITHOUT SELLER'S PRIOR WRITTEN CONSENT, SELLER DISCLAIMS ALL LIABILITY FOR ANY DAMAGE, INJURY OR CONTAMINATION, AND BUYER SHALL INDEMNIFY AND HOLD SELLER, ITS OFFICERS, AGENTS, EMPLOYEES, SUCCESSORS, ASSIGNS AND CUSTOMERS HARMLESS FROM AND AGAINST ANY AND ALL SUCH LIABILITY. SELLER'S CONSENT, IF ANY, WILL BE CONDITIONED UPON ADDITIONAL TERMS AND CONDITIONS ACCEPTABLE TO SELLER.

22. GOVERNING LAW; VENUE: These Terms and Conditions and the Contract shall be governed by and construed in accordance with the laws of the State of Wisconsin. Seller and Buyer irrevocably submit to the exclusive jurisdiction of the state courts located in Rock County, State of Wisconsin and the federal courts located in the State of Wisconsin, and Seller and Buyer waive any objection to venue or forum non conveniens, for the resolution of any dispute relating to these Terms and Conditions or the Contract. The rights and obligations of Seller and Buyer shall not be governed by the provisions of the United Nations Convention on Contracts for the Internal Sale of Goods.

23. EXPORT/IMPORT: Buyer shall comply, in the receipt and use of the Products and the Software, with all applicable import and export control laws, regulations, orders and requirements of the jurisdictions in which the Seller and Buyer are established or from which Products and Software are provided. Buyer shall not transfer, release, import, or export Products and/or Software in violation of such applicable laws, regulations or other legal requirements. Buyer shall provide a completed end-user certification in a form satisfactory to Seller upon Seller's request.

24. ATTORNEYS' FEES: Buyer agrees to pay all of Seller's costs and expenses of collection and related litigation, including but not limited to attorneys' fees and costs.

25. SALVATORY CLAUSE: The invalidity, in whole or in part, of any of the provisions of these Terms and Conditions, shall not affect the enforceability of any of the other provisions thereof.

26. APPLICABILITY: These Terms and Conditions as stated herein are applicable as of the date of this printing and until such time as changed by Seller.

For the full version of the Terms and Conditions of Sales with Supplements A and B - Visit <http://www.regalbeloit.com/what-we-do/products-brands/>

Regal STCS Rev 5-14

LIMITED WARRANTY - EXCEPTION FOR STANDBY GENERATORS: TERMS & CONDITIONS OF SALE SUPPLEMENT B - Limited Warranty-Exceptions: The following table sets forth substitute language for Section 10(a) (1) "Products" applicable to certain Products of certain business units. If products are **standby generators**, substitute section 10(a)(1) with the following: Seller warrants that the Products shall be delivered free from defects in material, workmanship and title and shall conform to Seller's written specification agreed upon by Buyer and Seller in a written and signed agreement, if applicable, for the Products. This warranty shall expire twenty-four (24) months from first use of the Product, thirty (30) months from date of manufacture of the Product, or upon one thousand (1000) hours in use of the Product, whichever occurs first.

Freight Policy

All prices are quoted F.O.B. Regal's factory or warehouse in Monterrey, Mexico; McAllen, TX; Wausau, WI; or Indianapolis, IN, dependent upon plant of manufacture. Customers may use any one of the following methods for shipment:

- Pick up generators at our plant of manufacture on their own carrier
- Allow us to ship the generators freight collect
- Allow us to ship via our carriers

Regal will ship the generator on our approved corporate freight carriers at the following percentage (%) adders applied to the net generator and accessory price:

Alabama 6%	Indiana 6%	Nebraska 6%	South Carolina 6%
Alaska . . . refer to factory	Iowa 6%	Nevada 6%	South Dakota 6%
Arizona 6%	Kansas 6%	New Hampshire 6%	Tennessee 6%
Arkansas 6%	Kentucky 6%	New Jersey 6%	Texas 6%
California 6%	Louisiana 6%	New Mexico 6%	Utah 6%
Colorado 6%	Maine 6%	New York 6%	Vermont 6%
Connecticut 6%	Maryland 6%	North Carolina 6%	Virginia 6%
Delaware 6%	Massachusetts 6%	North Dakota 6%	Washington 6%
Florida 6%	Michigan 6%	Ohio 6%	West Virginia 6%
Georgia 6%	Minnesota 6%	Oklahoma 6%	Wisconsin 6%
Hawaii . . . refer to factory	Mississippi 6%	Oregon 6%	Wyoming 6%
Idaho 6%	Missouri 6%	Pennsylvania 6%	Eastern Canada 6%
Illinois 6%	Montana 6%	Rhode Island 6%	Western Canada 6%

Need a generator in a hurry?

Ask for our ONE DAY SERVICE (\$210 Net Adder Per Generator)

- 1) Generator must be in stock and be ordered with standard adaption, standard voltage regulator, and standard primer paint overcoat.
- 2) Customer must have pre-approved credit with factory, or request C.O.D. shipment.
- 3) Orders must be phoned in to factory by 12:00 p.m. Central Time to allow the generator to ship the next business day.
- 4) Complete adaption, regulator, regulator nameplate data and shipping information must be received at the time of order entry.



IMPORTANT INFORMATION



Please Read Carefully

This catalog is not intended to provide operational instructions. Appropriate Marathon® generator instructions provided with the generator and precautions attached to the generator should be read carefully prior to installation, operations and/or maintenance of the equipment. Injury to personnel or generator failure may be caused by improper installation, maintenance or operation.

The following **WARNING** and **CAUTION** information is supplied for your protection and to provide you with many years of trouble free and safe operation of your Marathon generator.

"WARNING" indicates a hazardous situation that, if not avoided, could result in death or serious injury and "CAUTION" indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.



- Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which Buyer shall apply the product. The application by Buyer shall not be subject to any implied warranty of fitness for a particular purpose.
- For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.
- Hot oil can cause severe burns. Use extreme care when removing lubrication plugs.
- Disconnect power and lock out drive equipment before working on a generator.
- Always keep hands and clothing away from moving parts.
- The lifting eyes on the generator are not to be used to lift the entire generator set. Only the generator may be safely lifted by the lifting eyes. Do not use the conduit box for lifting or support of the generator.
- Install and ground the generator per local and national codes.
- Discharge all capacitors before servicing the generator.
- Misapplication of a generator in a hazardous environment can cause fire or an explosion and result in serious injury.
- Never attempt to measure the temperature rise of a generator by touch. Temperature rise must be measured by thermometer, resistance, imbedded detector or thermocouple.
- Operation of a generator at higher than its nameplate ratings may result in fire, damage to equipment or serious injury to personnel.
- Do not apply any force to the generator fan when rotating the generator rotor.



- Mounting bolts should be routinely checked to ensure that the unit is firmly anchored for proper operation.
- Consult qualified personnel with questions. All electrical repairs must be performed by trained and qualified personnel only.
- Generators should not be operated faster than their rated speed.
- For inverter applications, follow the inverter manufacturer's installation guidelines.
- Make sure the generator is properly secured and aligned before operation.
- When installing the generator, insure that loose parts or tools do not fall inside the generator.
- When connecting the generator, be sure to follow the correct wiring diagram for the desired voltage. Insure that the voltage regulator is connected per the wiring diagram.

RESALE OF GOODS

In the event of the resale of any of the goods, in whatever form, Resellers/Buyers will include the following language in a conspicuous place and in a conspicuous manner in a written agreement covering such sale:

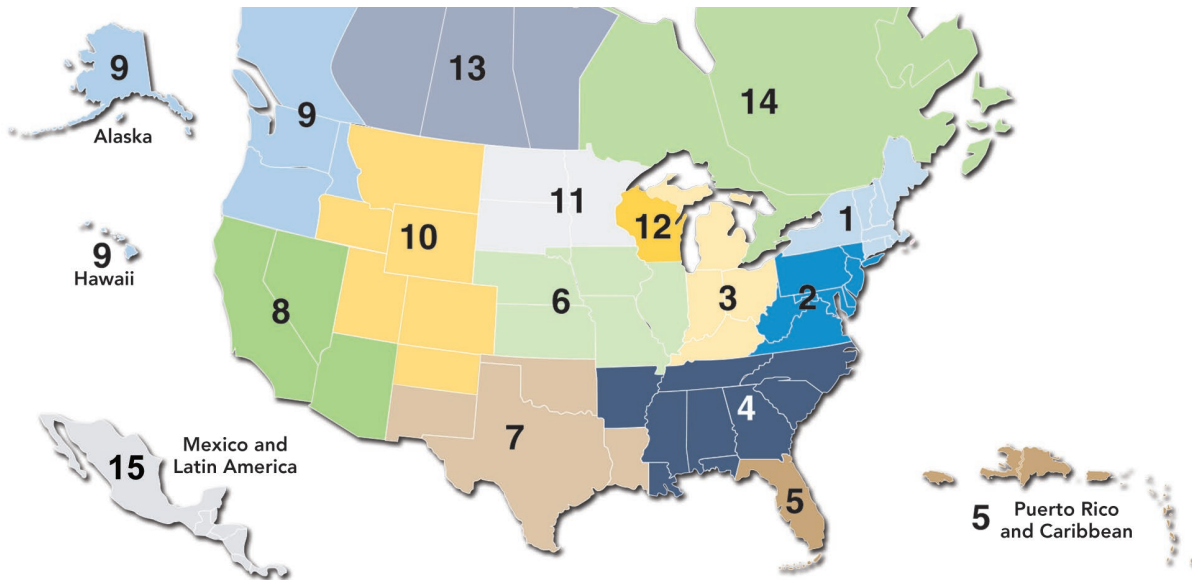
The manufacturer makes no warranty or representations, express or implied, by operation of law or otherwise, as to the merchantability or fitness for a particular purpose of the goods sold hereunder. Buyer acknowledges that it alone has determined that the goods purchased hereunder will suitably meet the requirements of their intended use. In no event will the manufacturer be liable for consequential, incidental or other damages. Even if the repair or replacement remedy shall be deemed to have failed of its essential purpose under Section 2-719 of the Uniform Commercial Code, the manufacturer shall have no liability to Buyer for consequential damages.

Resellers/Buyers agree to also include this entire document including the cautions and warnings above in a conspicuous place and in a conspicuous manner in writing to instruct users on the safe usage of the product.

This information should be read together with all other printed information supplied by Regal.

For more information contact: Regal, Regal Beloit America, Inc., 100 E. Randolph St., Wausau, WI 54401
Phone: 715-675-3359 or Fax: 715-675-8026

MARATHON® GENERATORS SALES TEAM AND REPRESENTATIVES



1 Goodall Industrial Equipment
 10 W Central St.
 Natick, MA 01760
 Phone: 508-651-2668
 E-mail: sales@goodallsales.com

2 FJ Toolan Inc.
 1 Revere Ct.
 Allentown, NJ 08501
 Phone: 609-259-0387
 E-mail: jeff@fjtoolan.com

3 Power Component Partners
 100 E. Campus View Blvd.
 Suite 250, Columbus, OH 43235
 Phone: 614-328-9679
 Email: marella@powercps.com

4 Underwood Sales Co.
 2783 Longate Drive
 Memphis, TN 38132
 Phone: 800-536-4701
 Email: sales@uscinc.net

5 Davidson Sales Company
 839 Bill France Blvd.
 Daytona Beach, FL 32117
 Phone: 386-274-2079
 E-mail: dsc@davidsonsales.com

6 Power Source Midwest, Inc.
 18 Hawk Ridge Blvd., Ste. 120
 Lake St. Louis, MO 63367-1829
 Phone: 636-625-4771
 E-mail: sales@powersourcemidwest.com

7 EPAC Sales & Service
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 Hurst, TX 76054
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 E-mail: info@epacsales.com

8 Koller-Nielsen & Assoc., Inc.
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 Fountain Valley, CA 92708
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9 S.F. Griggs & Associates, Inc.
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