

MAGNAPLUS[®]

*Generator Ratings:
kW 5 to 430 (60 Hertz)
kVA 5 to 420 (50 Hertz)*



MARATHON ELECTRIC
GENERATORS
A REGAL-BELOIT COMPANY

ISO 9001:2000 Certified

Innovation Performance Reliability



MAGNAPLUS® offers a field-adaptable, permanent magnet generator, coupled with the PM300 or DVR®2000E voltage regulator, for installations requiring fault current support or for applications involving non-linear loads. These regulators enhance generator performance and offer additional features, meeting the needs of the most difficult applications.

What makes the Marathon Electric approach unique?

Proven top performers in every respect, **MAGNAPLUS®** generators offer powerful performance, reliable power generation, and easy installation. With a full range of voltage regulator configurations, **MAGNAPLUS®** provides application flexibility to meet unique installation requirements. Ruggedly constructed with solid state technology, Marathon's SE350 voltage regulator, included with all standard equipment, is a solid performer.

Marathon Electric: The experts in your field

As an independent manufacturer with more than fifty years of experience as a leading supplier to the generator market, Marathon Electric is dedicated to designing and manufacturing the highest quality electrical products.

These unique design features make **MAGNAPLUS®** the ideal general purpose generator for standby and prime power markets such as:

- Agricultural
- Commercial
- Telecommunications
- Marine
- Construction
- Rental Markets

Marathon's commitment to long term customer support and an intensive product development program means you get more:

- Design & Application Experience
- Advanced Testing Facilities
- Technical Support Staff
- Broad Product Line



50 Hertz
Three Phase,
12 Leads

1500 RPM
0.8 Power Factor
40°C Ambient

MAGNAPLUS Standard Models

Base Model	Bolt-On PMG Option Avail.	kVA Continuous Duty				kVA Standby Duty			
		Class F 105°C		Class H 125°C		Class F 130°C		Class H 150°C	
		415/240 V	380/220 V	415/240 V	380/220 V	415/240 V	380/220 V	415/240 V	380/220 V
281PSL1500	No	5.6	6.3	6.3	6.6	6.3	6.9	6.6	7.3
281PSL1501	No	6.8	7.5	7.5	8	7.5	8.3	8	8.8
281CSL1502	No	12	11.3	12.5	12	12.5	12	13.1	12.5
282PSL1703	Ⓢ	12	13.1	13.1	13.8	13.8	14.4	14.4	15
282CSL1504	No	16.3	16.3	17.5	17.5	17.5	17.5	18.8	18.8
282CSL1505	No	21.3	22.5	23.1	25	23.1	25	25	26.3
283CSL1506	No	23	25	25	26	25	26	28	29
283CSL1507	No	28	29	30	31	30	31	33	34
284CSL1508	No	31	36	35	40	35	40	38	43
284CSL1542	No	36	38	40	41	40	41	43	44
361CSL1600Ⓢ	Yes	45	44	50	45	50	45	53	50
361CSL1601Ⓢ	Yes	50	54	56	58	56	58	60	63
361CSL1602Ⓢ	Yes	60	65	65	70	65	70	73	75
362CSL1604Ⓢ	Yes	81	80	90	85	90	85	96	91
362CSL1606Ⓢ	Yes	90	94	100	100	100	100	110	110
363CSL1607Ⓢ	Yes	113	113	130	130	130	130	133	133
431CSL6202Ⓢ	Yes	140	143	150	151	150	155	155	160
431CSL6204Ⓢ	Yes	165	166	175	176	176	180	183	185
431CSL6206Ⓢ	Yes	185	200	200	211	205	215	211	225
431CSL6208Ⓢ	Yes	206	210	225	225	225	230	235	235
432CSL6210Ⓢ	Yes	240	256	260	275	265	280	275	290
432CSL6212Ⓢ	Yes	270	270	300	300	300	300	310	303
433CSL6216Ⓢ	Yes	320	345	350	370	360	376	375	390
433CSL6220	Yes	355	375	400	400	400	410	410	423

MAGNAPLUS Alternate Models^③

281PSL1502	No	10	10.6	10.8	11.3	10.9	11.4	11.4	12
282PSL1704	Ⓢ	12.5	14.4	13.8	16.3	13.8	16.3	15	17.5
282PSL1705	Ⓢ	16.3	18.8	18.8	21.3	18.8	21.25	20	22.5
283PSL1706	Ⓢ	23	25	25	28	25	28	26	29
283PSL1707	Ⓢ	26	26	30	30	30	30	33	33
284PSL1708	Yes	29	33	33	35	33	35	35	39
284PSL1742	Yes	34	35	38	40	38	40	40	43
285PSL1700	Yes	38	41	43	46	43	46	45	50
286PSL1701	Yes	50	50	55	55	55	55	58	58
287PSL1702	Yes	53	54	60	60	60	60	62	62

① 361 to 433 PSL 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.

Product Features

Choice . . . abounds with more than 34 stock models ranging from 5–430 kW (60 Hz) and 5–425 kVA (50 Hz). All three-phase generators are 12-lead reconnectable, providing voltage and phase flexibility. For applications requiring price-sensible, dedicated single-phase generators, Marathon Electric stocks 26 models. Standard and optional conduit box designs are available to meet all customer requirements and to ease installation of accessories.

Easy Mount SAE Adapters . . . provided with every generator, are designed with easy drive disc access to simplify the mounting to all popular engines. Generator foot mounting location is unaffected by adapter changes. Special adaptations for automotive engines are available.

Class H Insulation System . . . utilizes an unsaturated polyester varnish for optimal insulation life and superior moisture protection. An epoxy overcoat is added for increased environmental protection. Field windings are wet wound with epoxy and designed to withstand overspeeds of 125%. All windings are 100% copper with class H insulation.

Linkboards . . . are standard to simplify voltage reconnection and support lead termination.

SE350 Voltage Regulator . . . is encapsulated for reliable performance in all environments. The SE350 regulator provides 1% regulation, underspeed protection, stability adjustment to optimize transient performance, and EMI filtering to commercial standards.

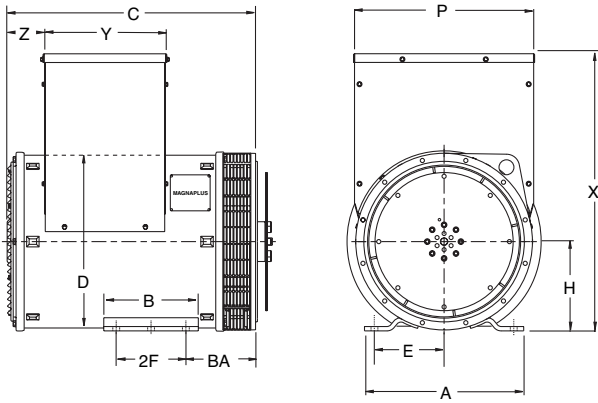
Optimized Electrical Design . . . with four-pole, brushless features, utilizes a 2/3 pitch winding to minimize harmonic distortion. The main rotor, utilizing Marathon Electric's unirotor construction, provides exceptional waveshape and voltage balance. The unirotor construction method incorporates full amortisseur windings facilitating parallel operation and non-linear loads.

Enhanced Ventilation . . . created by a high efficiency cast aluminum fan and optimized internal air flow patterns, maximizes heat transfer and minimizes hot spot differentials for extended winding life. Durable aluminum alloy fans avoid breakage problems associated with steel weldments or plastic fans.

Fully Guarded . . . for operator safety and generator protection. No rotating or electrically energized parts are exposed. All openings are covered by louvers or screens.

Heavy Duty Bearings . . . are double shielded and pre-lubricated for the life of the bearing. This helps resist contamination and ensures a maximum bearing life.

Design Specs and Agency Approvals . . . are important at Marathon. All MAGNAPLUS® units meet NEMA MG1-32, BS5000, and IEC 34-1 requirements. MAGNAPLUS® generators are also CE Certified, CSA Certified and fully UL Listed. Marine versions are available to meet American Bureau of Shipping, Lloyds, Det Norske Veritas, or Nippon Kaiji Kyokai requirements.



Dimensions in inches and (millimeters)

All dimensions are approximate.

Refer to dimension section of the Generator Catalog for full dimensional data.

Frame Size	A	B	BA	C	C with PMG	D	E	2F	H	P	X	Y	Z
281PSL	14.00 (356)	7.00 (178)	6.56 (167)	15.95 (405)	N/A	13.75 (349)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	6.86 (174)	3.50 (89)
281CSL	14.00 (356)	7.00 (178)	6.56 (167)	16.34 (415)	N/A	13.75 (349)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	6.86 (174)	3.50 (89)
282PSL	14.00 (356)	7.00 (178)	6.56 (167)	18.50 (470)	23.10 (587)	13.64 (346)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
282CSL	14.00 (356)	7.00 (178)	6.56 (167)	18.35 (466)	N/A	13.75 (349)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
283PSL	14.00 (356)	7.00 (178)	6.56 (167)	20.50 (521)	25.10 (638)	13.64 (346)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
283CSL	14.00 (356)	7.00 (178)	6.56 (167)	20.83 (529)	N/A	13.75 (349)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
284PSL	14.00 (356)	7.00 (178)	6.56 (167)	22.75 (578)	27.40 (696)	13.64 (346)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
284CSL	14.00 (356)	7.00 (178)	6.56 (167)	22.83 (580)	N/A	13.75 (349)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
285PSL	14.00 (356)	7.00 (178)	11.56 (294)	25.00 (635)	29.60 (752)	13.64 (346)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
286PSL	14.00 (356)	7.00 (178)	11.56 (294)	27.00 (686)	31.60 (803)	13.64 (346)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
287PSL	14.00 (356)	7.00 (178)	11.56 (294)	29.00 (737)	33.60 (853)	13.64 (346)	6.25 (159)	5.00 (127)	8.00 (203)	13.55 (344)	18.56 (471)	8.93 (227)	3.42 (87)
361	16.00 (406)	9.50 (241)	7.00 (178)	24.96 (634)	30.06 (764)	17.35 (441)	7.00 (178)	7.00 (178)	9.00 (229)	18.19 (462)	27.85 (707)	12.44 (316)	3.52 (89)
362	16.00 (406)	9.50 (241)	7.00 (178)	28.59 (726)	33.69 (856)	17.35 (441)	7.00 (178)	7.00 (178)	9.00 (229)	18.19 (462)	27.85 (707)	12.44 (316)	3.52 (89)
363	16.00 (406)	9.50 (241)	10.50 (267)	31.72 (806)	36.81 (935)	17.35 (441)	7.00 (178)	7.00 (178)	9.00 (229)	18.19 (462)	27.85 (707)	12.44 (316)	3.52 (89)
431	21.46 (545)	15.00 (381)	10.00 (254)	33.89 (861)	38.27 (972)	22.64 (575)	9.00 (229)	11.00 (279)	13.00 (330)	24.97 (634)	36.10 (917)	16.00 (406)	2.66 (68)
432	21.46 (545)	15.00 (381)	10.00 (254)	37.39 (950)	41.77 (1061)	22.64 (575)	9.00 (229)	11.00 (279)	13.00 (330)	24.97 (634)	36.10 (917)	16.00 (406)	2.66 (68)
433	21.46 (545)	15.00 (381)	10.00 (254)	42.39 (1077)	46.77 (1188)	22.64 (575)	9.00 (229)	11.00 (279)	13.00 (330)	24.97 (634)	36.10 (917)	16.00 (406)	2.66 (68)



**Your Independent Power Source
for the 21st Century!**

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