

Generac Model #	Gen Rating		3 Phase Amperage @ 0.8 PF				1 Phase (Zig-Zag)		
	kVA	kW	208 V	240 V	480 V	600 V	120 V	240 V	kW
MLG8K Prime	8.1	8.1	-	-	-	-	66	33	8.1
MLG8K Standby	9	9	-	-	-	-	74	37	9
MLG15K Prime	13	13	-	-	-	-	108	54	13
MLG15K Standby	14	14	-	-	-	-	116	58	17
MLG20IF4 Prime	19	19	-	-	-	-	158	79	19
MLG20IF4 Standby	20	20	-	-	-	-	166	83	20
MDG25 Prime	25	20	69	60	30	24	167	83	20
MDG25 Stand By	31	25	86	75	37	30	208	104	25
MMG35 Prime	36	29	100	87	43	35	225	113	27
MMG35 Stand By	39	31	108	94	47	38	250	125	30
MMG45 Prime	45	36	125	108	54	43	250	125	30
MMG45 Stand By	50	40	139	120	60	48	275	138	33
MMG55 Prime	55	44	153	132	66	53	350	175	42
MMG55 Stand By	60	48	167	144	72	58	383	192	46
MDG75 Prime	75	60	208	180	90	72	458	229	55
MDG75 Stand By	85	68	236	204	102	82	500	250	60
MDG100 Prime	100	80	278	241	120	96	642	321	77
MDG100 Stand By	106	85	294	255	128	102	708	354	85
MDG150 Prime	150	120	416	361	180	144	900	450	108
MDG150 Stand By	180	144	500	433	217	173	950	475	114
MDG175 Prime	175	140	486	421	210	168	1150	575	138
MDG175 Stand By	217	174	602	522	261	209	1250	625	150
MDG250 Prime	250	200	694	601	301	241	1525	763	183
MDG250 Stand By	275	220	763	662	331	265	1617	808	194

Model	Starting kVA		
	Standard	SuperStart	V-Flex(600v)
MDG25	53	90	68
MMG35	n/a	122	n/a
MMG45	n/a	138	Contact Factory
MMG55	n/a	163	Contact Factory
MDG75	195	250	195
MDG100	250	n/a	250
MDG150	319	460	342
MDG175	300	635	460
MDG250	440	950	630

Common 3 Phase

Motor Starting Codes

Code Letter	Max Locked Rotor kVA per HP
F	5.00 - 5.60
G	5.60 - 6.30
H	6.30 - 7.10
J	7.10 - 8.00

For starting kVA (skVA) of 3Ø motors:
 Multiply Motor Horse Power (HP) by
 the NEMA 3Ø Starting Code.

Example: 20 hp 3Ø Motor, NEMA
 Code G would be $20 \times 6.3 = 126\text{skVA}$

Cable Ratings

AWG or kcmil	Not More Than 3 Current Carrying Conductors In Cord
12	020 amps
10	030 amps
8	040 amps
6	060 amps
4	070 amps
3	085 amps
2	095 amps
1	110 amps
1/O	125 amps
2/O	145 amps

AWG or kcmil	Single Current Carrying Conductor
2/O	300 amps
3/O	350 amps
4/O	400 amps
300	500 amps

Generac Model	MLG8	MLG15	MLG20	MDG25	MMG35	MMG45	MMG55	MDG75	MDG100	MDG150	MDG175	MDG250
Prime kW	8.1	13	19	20	29	36	44	60	80	120	140	200
Main Breaker Amps	40	70	100	125	125	225	225	300	400	600	700	900
dBA at 7 meters (23')	70	70	70	67	68	66	68	74	74	75	75	78
Max Ambient Operating Temp	120°F	120°F	120°F	111°F	120°F	120°F	120°F	120°F	120°F	120°F	120°F	108°F
Max HP Motor Starting Capability @ 480v, 20% Voltage Dip, w/ Standard Alternator												
Code F 5.6 skVA / hp	-	-	-	9	21	24	29	34	44	56	53	78
Code G 6.3 skVA / hp	-	-	-	8	19	21	25	30	39	50	47	69
Code H 7.1 skVA / hp	-	-	-	7	17	19	22	27	35	44	42	61
Code J 8.0 skVA / hp	-	-	-	6	15	17	20	24	31	39	37	55
Engine Manufacturer	Kubota	Mitsubishi	Isuzu	Isuzu	JD	Isuzu	JD	JD	JD	JD	JD	JD
Engine Model #	D1105-E3BG	S4L2-Y461ML	4LE2TAGV-03	4LE2T	3029HFG03	4LE2XAGV01	3029HFG03	4045HFG04	4045HFG04	6068HFG05	6068HFG05	6068HFG06
Engine HP (Prime)	13.5	22.3	36.2	33.5	44	57	67	97	122	196	235	295
After-treatment Type	n/a	n/a	n/a	DOC	DPF/DOC	DOC	DPF/DOC	SCR/DOC	SCR/DOC	SCR/DOC	SCR/DOC	SCR/DOC
Wet Stack Mitigation	n/a	n/a	n/a	n/a	ETM	n/a	ETM	ETM	ETM	ETM	ETM	ETM
Run Time @ 100% load	43	43	23.8	24	31	27	24	27	33.4	39	34	24
Fuel tank capacity - Gal.	56	56	50	48	100	100	100	165	165	358	358	358

This sheet has been provided as a guide only and is intended to be used as a rule-of-thumb reference sheet. Features, data, and specifications are subject to change without notice. Consult your Owner's Manual and the NEC Code book for verification.

Generac Mobile Products

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Units of Measure:

Volt - unit of electric potential and electromotive force (similar to water pressure in psi)

Voltage - the difference in potential between 2 points in a circuit

Amperage - the (flow) of an electrical current measured in amperes (similar to gpm of water)

Volt-Ampere - A unit of electric power equal to the product of one volt and one ampere, equivalent to one watt. 1kVA = 1000 volt-amperes.

Kilovolt-ampere - Apparent Power rating of the generator end

Kilowatt - (1000 Watts) the level of Real Power capability of a machine and its prime mover

Power Factor (PF) - the ratio of real power (kW) to apparent power (kVA) (ie. kW/kVA = 0.8 PF)

Hertz - A unit of frequency equal to one cycle per second (Engine rpm controls Hz)

Formulas:

Key: I = Amps; V = Volts; PF = Power Factor; hp = Horse Power; kW = Kilowatt; kVA = Kilovolt Amps

Amps = Watts / Volts kW = 1.341 hp Watts = Volts x Amps Volts = Watts / Amps

To Obtain	Single Phase (PF=1.0)	Three Phase (PF=0.8)
kW	$\frac{V \times I \times PF}{1000}$	$\frac{1.732 \times V \times I \times PF}{1000}$
kVA	$\frac{V \times I}{1000}$	$\frac{1.732 \times V \times I}{1000}$
Amps when kW is known	$\frac{kW \times 1000}{V \times PF}$	$\frac{kW \times 1000}{1.732 \times V \times PF}$
Amps when kVA is known	$\frac{kVA \times 1000}{V}$	$\frac{kVA \times 1000}{1.732 \times V}$

Information to gather for proper sizing of generator.

- Is the application standby, prime or continuous duty
- Determine the type of load(s) that will be connected to the Generator (ie. resistive, motor, non-linear)
- Determine the total Wattage of each load
- Determine the system voltage and phases (ie: 120/240v single phase, 120/208v 3 phase, etc.)
- Determine the total motor starting kVA if any
- Select a generator that can supply enough wattage to Start and Run the load

Typical Code G Motor Running and Starting Data with Min. Generac Model Number (ss) = Super Start Alternator

HP	Run kW	Run kVA	start kVA	Gen #	HP	Run kW	Run kVA	start kVA	Gen #
1.0	1.1	1.3	13.0	MLG15	25	20.5	22.8	158	MMG55
2	1.9	2.2	19.0	MLG20IF4	30	25.2	28.0	189	MDG75
3.0	2.9	3.2	25.0	MDG25	40	33.3	37.0	252	MDG150
5.0	4.6	5.2	35.0	MDG25	50	43.5	48.0	315	MDG150
7.5	6.7	7.5	48.0	MDG25	60	49.5	55.0	378	MDG150(ss)
10.0	8.8	9.8	63	MDG25(ss)	75	64.0	71.0	473	MDG175(ss)
15.0	13.2	14.7	95	MMG35	100	85.0	94.0	630	MDG175(ss)
20.0	16.7	18.6	126	MMG45	125	108.0	119.0	788	MDG250(ss)

Average Running Load Requirements in Watts

Concrete Vibrator 3/4 hp	480	Impact Wrench 1/2"	600
Concrete Vibrator 1 hp	1080	Impact Wrench 3/4"	720
Concrete Vibrator 2 hp	1560	Impact Wrench 1"	1200
Concrete Vibrator 3 hp	2400	Sander (belt)	600-1500
Drill 1/4"	250-600	Sander (disc)	1200
Drill 3/8"	300-600	Sander (orbital)	250
Drill 1/2"	350-1200	Saw 6" circular	1000-2500
Drill 1"	1000	Saw (cutoff)	2500
Grinder (portable)	1000-2500	Saw (jig)	200-800
Hammer (demolition)	1260	Sub Pump 1/2 hp	400
Hammer (rotary)	1200	Sub Pump 1 hp	750

Extension Cord

Gauge Requirements

Amp Load	0-100 ft	0-200 ft
2	18	18
4	18	14
6	16	12
8	14	12
10	14	10
15	12	8
20	10	8
25	10	6
30	8	6