



Alternative Power Sales and Rental
 512 OLD APEX ROAD
 CARY, NC 27511
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 www.alternativepower.com

Sizing Report

Rated Nominal Voltage 240
 Generator Fuel Choice Propane
 Sizing Method (NEC 220) Part IV
 (Part III required for selected circuit implementation, Both valid for whole house)

General Lighting & Receptacles		Load (kW)
Square Footage Being Covered (ft ²)	2052	6.156
Small Appliance Circuits (20 amps)		
Kitchen Circuits	2	3
Laundry Circuits	1	1.5

Fixed-In-Place Appliances & Motors	Managed Loads	Estimated (kW)	Nameplate (amps)	240 V	Load (kW)
Dryer		5.5		X	5.5
Microwave		1.3			1.3
Range - Oven w/ Top		8.5		X	8.5
Water Heater	X	5.0		X	0.0
Dishwasher		1.5			1.5
Freezer		0.8			0.8
Refrigerator		0.8			0.8

Air Conditioning & Cooling	Managed Loads	Estimated (kW)	Nameplate (amps)	240 V	Load (kW)

Heating & Heat Pumps	Managed Loads	Estimated (kW)	Nameplate (amps)	240 V	Load (kW)
Heat Pump (4 Ton)	X	4.0		X	0.0
Heat Pump Electric Element	X	5.0		X	0.0

Transient Requirement	Estimated (LRA)	Actual (LRA)	Utilized (LRA)
Largest Motor's Starting Amps (LRA)	115	104	104

	Load (kW)	NEC Required
Summary NEC Load		
General Lighting & Receptacles	10.7	
Fixed-in-Place Appliances & Motors	18.4	
Sum of all General Loads	29	17.6
Cooling	0	0
Heating (w/demand factors)	0	0
Larger of Heating & Cooling	0	0
Sizing based on requirements of NEC Article 220, Part IV		17.6
Elevation		0 ft
Minimum size generator for motor starting requirements		16
BTU load required		324000

20 kW Generac Model Generator Recommended