



Alternative Power Sales and Rental
 512 OLD APEX ROAD
 CARY, NC 27511
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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)	1400	4.2
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
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 (2.5 Ton)	X	2.5		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)	72	86	86

	Load (kW)	NEC Required
Summary NEC Load		
General Lighting & Receptacles	8.7	
Fixed-in-Place Appliances & Motors	19.2	
Sum of all General Loads	27.9	17.1
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		17.1
Elevation		0 ft
Minimum size generator for motor starting requirements		11
BTU load required		324000

20 kW Generac Model Generator Recommended