Sizing Your Generator

Fill in the appliance description and other data in the appropriate boxes. Appliances loads include lights (individual bulbs), television, radios, microwave, electronics, etc. If you have the wattage information available simply fill in the "Running watts" box with that figure. The calculation for motors is on the second chart. Both charts must be added together to correctly find the answer for the size of the generator needed.

Description of Appliance	Volts		Amps		Running Watts		Starting Watts
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
		Х		equals		x1=	
Total appliance running and starting watts							

Next, you need to look at all the motors that run in your house. These motors are used in air conditioners, heat pumps, furnaces, freezers, refrigerators, washers, dryers, water pumps, etc.

Description of Motor	Volts		Amps		Running Watts		Starting Watts
		Х		equals		x3=	
		Х		equals		x3=	
		Х		equals		x3=	
		Х		equals		x3=	
		Х		equals		x3=	
		Х		equals		x3=	
		Х		equals		x3=	
		Х		equals		x3=	
Total motor running and starting watts							

Now, you need to combine the results from both charts for total running and starting watts

	Running Watts	Starting Watts
Total Appliance Watts		
Total Motor Watts		
Total		

Total motor and appliance RUNNING watts—should not exceed 90% of the generator rating

Total motor and appliance STARTING watts—should not exceed 150% of the generator rating

Total motor and appliance RUNNING watts		Number of watts	_	Estimated KW
	x .90=		Divided by 1000	
Total motor and appliance STARTING watts		Number of watts		Estimated KW
	x 1.5=		Divided by 1000	
Estimated RUNN	ING KW		Estimated S	STARTING KW

Which number is the largest? This is the number you will need to use to get the correct size generator. Keep in mind that these calculations do not include any future additional capacity requirements.

Once you begin to look for a generator you may decide to purchase a smaller one to save some money. You will need to re-evaluate your basic needs during an outage and decide what you need to run and what you don't. Remember, an outage is a temporary situation.

Most importantly, keep you, your family, neighbors, and lineman safe. Please read and follow our safety instructions and follow your owner's manual.



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