EATON | Cutler-Hammer

Standby Generators — FAQs

Training Materials TR00407002E

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About the Products

What is the Difference Between Portable and Automatic Standby Generator Systems?

The differences really have to do with the steps needed to have emergency power flowing into your house in the event of a power outage. Portable systems are wheeled units that require you to roll the generator outside, start it up and hook it up to a power inlet box. From there, you must go to the transfer switch panel installed near your circuit breakers and switch the power coming into your house from the main line to the generator running outside. After the power from your local utility is restored, you are required to reverse the setup process.

One of the clear advantages with an automatic Standby Generator System is that the unit turns itself on and off automatically without you ever having to leave the safety of your home. Our automatic Standby Generator Systems also exercise themselves once a week. You can even set the time when the unit will perform this diagnostics check. The generator will then be ready to run whenever needed. See our Web site for more information about the options available.

What Size Standby Generator Do I Need to Run Electric Items in My House During a Power Outage?

Most average homes of 1200 to 3000 sq. ft. can run critical items in the home by using a 12,000 watt generator or less. The most common items that need emergency power during a blackout are the furnace blower motor, refrigerator, freezer, lights, TV, sump pump and water pumps. Larger Liquid Cooled Standby Generator Systems will supply as much as 75,000 watts of starting power to your home automatically, giving your family the power, freedom and comfort of their usual lifestyle, uninterrupted by power failure.

Does Motor Starting Require Different Wattage?

Induction motors require larger amounts of electricity for initial start-up than when they are running. Some appliances and tools, such as your refrigerator/freezer, furnace fan, air conditioner, electric chain saw, weed trimmer, etc. may require more watts than normal running wattage for motor starting. This must be considered when sizing a generator to meet your needs.

What Does a Standby Generator System Typically Cost?

When you choose the safety, reliability and automatic operation of a Standby Generator System, there are several items that contribute to the total cost. The cost of the system includes the generator itself, a power transfer switch and installation charges. Optional maintenance contracts can also add to cost if you choose one.

Installation costs may vary, depending on customer requirements. A professional estimate, per the customer's request will help to ensure an accurate estimate of installation costs.

What Happens in a Typical Installation?

A basic installation includes:

1. Delivery of the system.
2. The transfer switch is then hardwired by the electrical contractor into the home or business.
3. The transfer switch should be installed within 2 feet of the main distribution panel and 30 feet of the generator inlet box.
4. Final startup inspection of system and completion of startup form should be completed by the electrical contractor or startup service provider.
5. Cleanup of installation debris after installation is completed.
6. Consumer is responsible for making arrangements to provide all necessary gas service and connections.

Should you ever need service, you can count on Eaton's electrical business.

Is Financing Available?

Yes! In most cases, our customers choose to finance a part of, or all of the cost. Financing is available to our customers for our standby generator program.

Can I Run a Computer or Other Sensitive Electronic Equipment Off the Generator During a Power Outage?

Yes, the power coming from your generator is just as safe as what you normally have coming out of the wall socket. The spikes or surges that accompany power generation (also known as "harmonic distortion") are just a normal aspect of electricity. However, when considering sensitive or expensive electronic equipment running off a wall outlet, you should use a good surge protector to guard against small influxes in power.

Can I Install the Unit Myself or Does Someone Else Need to?

It is recommended that you have your Standby Generator System (generator and transfer switch) installed by a licensed electrical contractor. Failure to do so could be dangerous for both family members, as well as outside repair workers trying to fix downed power lines. In addition, professional installation is required to maintain the warranty. Most Cutler-Hammer® dealers are capable of not only performing the necessary installation, but can also offer maintenance agreements that ensure that the generator is being serviced on a regular basis.

What Does Automatic Voltage Regulation (AVR) Do for Me?

AVR maintains steady voltage. This is important for running sensitive electronics such as computers, microwaves and televisions.

Who Makes Your Transfer Switches?

Eaton's electrical business has created a family of custom-made Automatic Transfer Switches designed exclusively for the Standby Generator Systems program. All Cutler-Hammer brand switches are light-weight, easy to install, and feature built-in, advanced control boards for residential and small business applications.

What is the Warranty?

Eaton's electrical business offers a one (1) year warranty for Residential Standby Generator Systems and Transfer Switches.

What's the Difference Between Running and Starting Watts?

The running watts of a generator equals the amount of power the unit can produce continuously, while the starting wattage is the additional power that the generator can produce for short periods of time to start items in your home that require larger amounts of electricity for initial startup than when they are running.

About Maintenance & Use

Do I Need to Start the Generator Frequently When it is Not Being Used?

One of the advantages of Eaton's Residential Standby Generator Systems is that they are designed to run once a week for 20 minutes. All you have to do is program when you want this task to be performed and it will start up automatically. During this time, it will not only lubricate the engine and charge up the included battery, but it will also run a diagnostics check. If there are any problems with this process, an LED display located inside the front access panel will alert you.

How Long Will a Unit Run Before I Have to Let it Cool Down or Refill it with Fuel?

One of the clear advantages of the Standby Generator Systems are that they do not need to be refueled as often, if at all, because they run off LP (Propane) or NG (Natural Gas). Additionally, rest periods to allow cooling are not necessary. All Cutler-Hammer Residential Standby Generator Systems generators are air-cooled or liquid-cooled and do not require you to turn them off after extended run times. However, you will need to turn off the unit before refueling (if applicable) or when checking the oil levels, which should be done on a regular basis after extended use. (Refer to your owner's guide for instructions.)

Do I Have to Worry About Back-Feed if the Generator is Running When the Power Comes Back On?

No. All of our transfer switches are designed to keep generator backfeed from occurring. When the contractor installs the transfer system into a house or small business, they will also hard wire the switch directly into the circuit breaker. When the home is running off of the generator, it automatically separates the power coming in from the utilities and the generator, preventing damage to your house. Only when the system switches back to power will the appliances assigned to the generator then receive power from the homeowner's utility. With the Automatic Standby Generator System, the unit senses when the power has been restored and automatically switches back to utility power before shutting down. Eaton's electrical business has taken great care in the design of each system to ensure maximum safety.

How Often Do I Have to Change the Oil?

Synthetic oil is required when an oil change is needed. An oil change is recommended every 50 hours and the oil filter every 100 hours. Note: Engines on all of Eaton's Residential Standby Generators are shipped with a pre-filled crankcase and a pre-run engine, effectively eliminating the need for you to break-in the system. There is an hour meter located inside the front access door that will help you gauge when maintenance is needed.

Who Do I Call if I Have Any Questions or Maintenance Issues?

We recommend that you first contact the person or contractor who performed the original installation. Firsthand knowledge of your original system installation qualifies them as the best equipped to field questions and perform any needed maintenance. Oftentimes installers will also offer you special maintenance agreements once the original system is installed, making any potential mechanical problems less worrisome to the consumer. You can also call Eaton's TRC (Technical Resource Center) directly at (800) 356-1243, Option 3, Monday through Friday, 8 a.m. – 5 p.m. Central Standard Time if a problem requires additional assistance. We are always here to help.

Can I Vent Exhaust Out of an Enclosed Area?

No. Carbon monoxide gases produced by the engine can be deadly. Portable Generators are designed to run outside where there is plenty of ventilation. Never run these units inside a home or enclosed area. Fortunately, all Cutler-Hammer Standby Generator Systems are permanently installed outside your home.

Can I Run the Generator Inside My Home?

No. A generator has an internal combustion engine and uses gas and oil. The exhaust from running the generator contains lethal carbon monoxide. Therefore, this unit should always be placed in a well-ventilated area.

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