

Domestic portable generators – a safety guide

A portable generator can be useful during a power interruption, but your life and the lives of others may depend on its safe operation.

Ausgrid strives to provide customers with an electricity supply that is as safe and reliable as possible. However, despite our best efforts, interruptions sometimes occur, often for reasons beyond our control.

When a power interruption occurs a portable generator can allow some normal activities to continue, but they should always be used with extreme caution. Here is a practical guide to avoid the potential dangers of using a generator.

Read the instructions

Make sure you thoroughly read and understand the manufacturer's instructions before use.

Connect the generator correctly

Do not connect generators directly to your home's wiring system, unless a licensed electrical contractor has installed special facilities, including a "changeover" switch.

If a generator is connected incorrectly electricity can 'back-feed' along the power lines supplying your premises. This has the potential to injure or even kill people in neighbouring homes or staff working to restore your normal electricity supply. It can also severely damage your generator.

Unless changeover switch facilities are available appliances should be plugged directly to the generator via a heavy duty extension cord. Sensitive equipment such as computers, televisions, and other communication devices should have surge protection installed to protect the equipment.

Customers using portable generators on construction sites should also ensure safety switches are installed. The NSW WorkCover website has additional information on the safe use of portable generators (www.workcover.nsw.gov.au).

Follow the manufacturer's instructions to make sure the generator is properly earthed to minimise any risk of electric shock.

Use a generator that complies with Australian Standard AS 2790 *Electricity generating sets – Transportable (Up to 25 kW)*. You can identify a complying generator via the Standards Australia "StandardsMark" on the packaging.



Example of a portable generator



Australian Standard

Standards mark

Quick tips

- Do not connect a generator directly to your home's wiring system. An incorrectly connected generator has the potential to injure or kill.
- Read the manufacturer's instructions before use.
- Make sure the generator is properly earthed.
- Operate the generator outdoors away from windows.
- Do not overload the generator.
- Switch the generator off when refuelling or not in use.

Locating a generator

Petrol or diesel powered generators produce toxic fumes so must only be operated in a well ventilated outdoor area away from open windows.

Operating a generator

Turn off the generator when re-fuelling or when there are no operating appliances connected.

To prevent the generator from overloading it is important to consider the generator's rating (wattage). The total rating of appliances operated at the same time must be less than the rating of the generator.

The appliance rating can be reduced by switching off some appliances while others are being used and using battery or gas operated appliances.

The table below shows the typical rating of some common household appliances. The actual rating of appliances may vary depending on model type.

Appliance	Rating (Watts)
Air conditioner – Large wall	3750
Air conditioner – Ducted	7500
Computer and monitor	100
Stove	4800
Dishwasher	2400
Fan – ceiling	90
Fridge	240
Heater	2400
Kettle	2400
Lights – Compact fluorescent	15
Lights – Incandescent	75
Microwave oven	1000
Oven	2400
Pool – pump	500
Radio	70
Toaster	1000
TV – standard	70

More information

To find out more about the connection and operation of generators contact Ausgrid on 13 13 65.