

Single Phase vs Three Phase Power



Single Phase vs **Thre**

Homes and business connected to the grid in Australia will predominately use either single phase or three phase power.

Single Phase

Used in most new homes and small businesses, single-phase electricity is transported via two wires: active and neutral.

Electricity from the grid (or your solar PV system) will only flow through the one active wire, while the neutral wire is connected to the earth at the switchboard.

The purpose of your home or business's neutral wire is to provide a path back to your switchboard, the source of the electrical current, in the event of a fault.

This will trip the breaker or blow the fuse, cutting your electricity, and preventing you from getting electrocuted.

Three Phase

In contrast, three-phase power has four wires, three of which are active, in addition to one neutral wire, which is once again earthed at the switchboard.

Three phase electricity is common in both larger homes and businesses, and allows for smaller, less expensive wiring, and lower voltages.

How do I Find Out if I'm Single or Three Phase?

The easiest way to find out if your house or business is single phase or three phase is to check your meter box.

Single Phase



Single phase meter boxes only contain one fuse cartridge. (Black rectangle on the bottom right)

Three Phase



Three phase meter boxes on the other hand consist of three fuse cartridges. (Three black rectangles on the bottom left)