

Power Connection Requirements

Power requirements for commercial coffee machines

Each machine will have its own power requirements.

- Single or 3 Phase
- 10amp to 40amp
- Voltage - 240v for Australia
- Plug or hardwired connection



The equipment supplier should be able to inform the customer on what the machine requires, there is also a data plate on the machine which will indicate the maximum draw in Watts that the machine might require, this is normally under the waste tray or on the machines side panels - Here is an example of a La Marzocco data plate

All commercial machines need to be on a Dedicated, RCD protected circuit, whether or not it's a plug in, hard wired or 3 phase machine. All new connections need to be done to this standard.

A dedicated circuit is one that only supplies the coffee machine and no other equipment, it will be on its own breaker on the power distribution board and might be a combo breaker (Breaker and RCD in one) or covered by another separate RCD.

The size of the breaker will determine the maximum power available to your machine.

Sometimes you might have a 25amp breaker and a 20amp power point, in this case an Electrician can come in and change the faceplate to a 25amp or install an Isolator, but if the breaker is 25amps and you require 32amps for the machine you might need an electrician to run new cable to upgrade the connection assuming your overall buildings power supply can support that.

The power connection point also needs to be within 1m from the location of the machine, if not there might be further costs to extend the machines power cord, or the installation might be delayed



Some examples of breaker boards, power supply boards, switch boards, old and new and a 25amp Combo Breaker

Combo breakers have the "Test" buttons, the C25 indicates it's a 25amp breaker

Here are some examples of 3 phase combo breakers and standard breakers, combo breaker is on the left.



Potential Power Connection Options

Standard Single phase power points larger than a normal 10 amp GPO



15amp Single Phase

Normal Active and Neutral,
Larger Earth pin



20amp Single Phase

Larger Active, Neutral, and
Earth pin



25amp Single Phase

Larger Active and Neutral,
Upside-down L shaped



32amp Single Phase

Large Active and Neutral,
Backward C Earth pin.

(Try and Avoid these Plugs)

Screw in "56 Series" Single Phase and Three Phase Points and switches



20amp Single Phase 3 pin



32amp Single Phase 3 pin



20amp Three Phase 5 pin



32amp Three Phase 5 pin

There will be a data label that will indicate what the plug is rated for, these are just four examples as all brands are a little different. Often the Single Phase 3 pin plugs are misidentified as "3 phase" power connections.

If in doubt take a photo and send it to me with the date plate in view.

Single and Three Phase Isolator Switches (Hardwired connection) - Requires a Licence to connect

You can only tell these apart by reading the data plate and checking what the breaker is at the switch board, sometimes these might be a single phase switch but with a 3 phase cable where the electrician has just taken 1 phase from an old 3 phase setup

Espresso Medic is Licenced to do Hardwired connections



Isolators come in all shapes and sizes, again there should be a data plate on the switch to indicate its capacity.

If in doubt take a photo and send it to me with the date plate in view.