

Troubleshooting: Electrical

Understanding Power Usage

First thing to understand while booking your vessel into marina is knowing the power requirements of your vessel – how much power do you use?

There 4 different power sockets available at Coral Sea Marina:



15amp (Single Phase)



32Amp (3 Phase)



63Amp (3 Phase)



125Amp (3 Phase)

This gives you the ability to use as much or as little power as needed for your requirements. Your vessel manufacturer or marine electrician will be able to give you a good understanding of what power requirement you should use and what limits your own setup will have. Please be aware that underpowering the electrical feed into your vessel will limit the functionality of your vessel.

When NOT to plug into shore power

- If the lead is not test tagged within 6 months. Have the lead tested by a licenced contractor
- If the lead does not have a minimum rating of 15amp with a 15-amp plug (you will notice that the bottom pin (earth) is longer than the other pins). **Not suitable for marine use in this marina.**
- Power pedestal plug socket burnt out. **Do not use the outlet and contact Coral Sea Marina staff to have the unit repaired by our electrician before use.**
- The residual current device, or RCD, will not set in the ON position, when your plug is not connected. This requires a new RCD installed. **Do not use the outlet and contact Coral Sea Marina staff to have the unit repaired by our electrician before use.**
- When your plug has fallen in the water. **Have the lead tested and tagged again as it now may be faulty.**

Comsen Unit



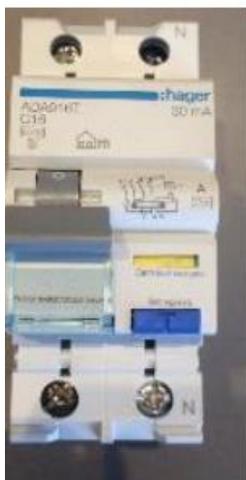
Patron Unit



Both are able to supply all your power needs safely. As per Australian Electrical Safety Standards, all power supplied by the pedestals have 2 separate safety switches installed which can pick up different possible faults. BOTH must be on for your power to be active. These devices are:



1) **Electrical Circuit Breaker**- This device trips out when the device detects an overdraw of power(heat) being pulled through the circuit. i.e. Using a 15amp lead to run a – AC, a toaster, a kettle and using the hot water system on board. As you can understand you wouldn't plug all these all into a single power board without something tripping a home, same here. These breakers will then trip once it detects too much load going through your cord. This is where melted cords/plugs occur.



2) **RCD (Residual Current Device)** - This is the device that detects earth leakage. THIS IS THE DEVICE THAT TRIPS IF YOU ARE GETTING ELECTROCUTED. It shows that there is faulty wiring onboard and can be potentially life threatening - Must be investigated by a marine 240v electrician.

i.e. A child puts a knife in a toaster and get electrocuted, this device will trip in under 30ms reducing serious injury. This can also be the case of your plug being wet and the active pin earthing across using the water as a conduit.

NOTE - be aware that some of our power pedestals either have a circuit breaker and a RCD in the one device (this can be seen by the presence of a test button), or can be two separate devices under separate flaps on the case of our Comsen units.