

In A nutshell! A quick guide : What do I need? Why do I need it?

When you connect your boat to a marina electrical supply you also connect your boat to all the other boats in the marina via the earth connection in your shore power mains lead. This creates a pathway for small electrical currents to flow from one boat to another. Unfortunately this pathway leads to increased corrosion of the underwater metals and results in rapid loss of anodes and increased pitting and deterioration of hulls, propellers, shafts, outdrives etc. We can protect against this problem by installing a galvanic isolator.

So how does it work? A galvanic isolator is inserted into the earth line of the shore power lead. This can be done internally in the boat or by using our plug in waterproof units you simply unplug the shore power lead from your boat, plug the lead into the isolator and re-insert the isolator flying lead back into the shore power inlet. Job done! The isolator now creates a block for damaging galvanic currents minimising the risk of corrosion. In the event of an electrical fault onboard the isolator senses the fault condition and ensures your trips and rcd protection operate as normal ensuring safety onboard.

If the earth cable causes the problem why not just remove it? : The earth cable is essential for safety. In the event of an electrical fault onboard the earth wire ensures the rcd / fuses/ breakers operate correctly and disconnect the mains electrical supply until the fault is rectified.

Isolator models, ratings and installation. A quick question an answer guide taken from our customer base.
Taken from customer enquiries we hope they help you .

How easy is it to fit an isolator? Internally fitted units are inserted into the incoming earth line between the shore power inlet socket on the boat and the consumer/distribution unit onboard. This is done by locating the incoming shore power lead, cutting the earth cable at a convenient point and inserting the isolator using terminal connectors provided. The live and neutral cables of the shore power lead remain untouched. We supply excellent instructions and diagrams but if you do not feel competent to proceed we would recommend our “Plug and play” units. These units plug into the shore power leads either at the boat or the shore power pedestal of the marina. No electrical knowledge needed...Just 30 seconds to install!

15 amps, 30amps, 70 amps, 100 amps? What does it mean? A question we are asked all the time. Basically the amperage rating of the isolator is the amount of current the isolator can handle under severe fault conditions. The isolator must be able to handle more than the *available* current supplied to the boat. Usually UK marina supplies are either 16 or 32 amps so the isolator must be able safely handle at least 20% more than the maximum current available to comply with legislation. Realistically the higher the rating the more reliable the isolator .

What is the purpose of status monitoring? Units with status monitoring measure the current flowing through the isolator. If the current flow increases beyond a preset threshold led's will illuminate to indicate a fault condition. Safeshore models with monitoring also offer increased galvanic protection and easy testing of the installation.

How reliable are your isolators? Safeshore have now been supplying the marine industry for over 10 years. Our reliability record is superb reflected by our **3 years** warranty on all products.

What is the difference between galvanic and stray current corrosion? Galvanic corrosion is caused by the interaction of differing metals whilst connected together and in contact with the water. Stray current corrosion is caused by poor electrical connections, poor wiring in contact with bilge water and “leaky” power supplies. These currents are often transmitted down the shore power earth wire. A galvanic isolator will help to block both galvanic and stray current corrosion

Which isolator do you recommend? If you intend DIY installation model GI 70sm or GI 70smi both offer maximum protection, easy testing and fault monitoring. Model GI 70sm has remote monitoring so if you plan to fit under the floor this allows the monitor to be installed remotely on the dashboard. Model GI 70smi has internal monitoring so if fitting the isolator in an easily viewable position this is the one to use. For “Belt and braces” reliability models GI 100sm or GI 100smi are the upgraded versions.

Plug and play isolators : 30 seconds to install!...We supply two plug and play easyfit units.

GI 70 inline is a standard protection isolator for use with blue type shore power plugs utilised by UK/EU marinas.

GI 70smi inline offers advanced protection, easy testing and fault monitoring.

Need more help or advice? ... Our helpline does just that!...Try us!.....01977 513607

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