

3.5 Connection of the AC cabling

This is a Safety Class I product (supplied with a protective grounding terminal). **Uninterruptible protective grounding must be provided at the AC input and/or output terminals and/or chassis grounding point located externally on the product. See the following instructions:**

a) The Phoenix Inverter Compact has a free floating AC output. The grounding point located externally on the product **must** be used to ground the chassis. The neutral output wire must be connected to ground to ensure proper functioning of a GFCI (Ground Fault Circuit Interrupter).



b) Phoenix Multi / MultiPlus Compact : **the output neutral wire will automatically be bonded to the chassis** (with the output ground relay, see appendix 2) **when no external AC source is available** (backfeed / safety relay open and product running in inverter mode, see appendix 2). When an external AC source is provided, the ground relay opens before closure of the backfeed / safety relay. Once closed, the backfeed / safety relay ensures that the neutral to ground bond is provided by the external AC source. This is to ensure proper functioning of a GFCI to be installed in the AC output of the Multi/MultiPlus.

- In a fixed (for example terrestrial) installation an uninterrupted chassis ground may be provided by the AC input ground wire.
- In case of a mobile installation (connection to input AC with a shore power cord), the ground connection is lost when the shore power cord is unplugged. In this case the chassis of the product or the on - board section of the input ground wire must be connected to the frame (of the vehicle) or the ground plate or hull (of a boat).
- Marine applications: due to the potential for galvanic corrosion it is in general not acceptable to connect the shore side ground to the ground plate or hull of the boat. The proper and safe solution is to install an isolation transformer.

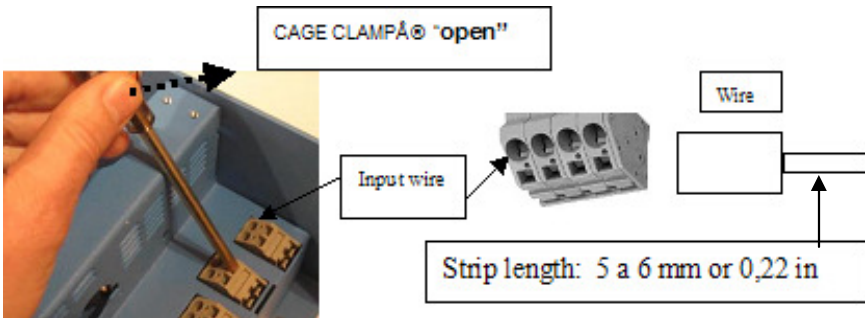
The mains -input & output terminal connector can be found on the bottom of the Multi Compact, see appendix 1. The shore or mains cable must be connected to the connector with a three-wire cable. Use a three-wire cable with a flexible core and a cross section of 2.5 mm².

Procedure

Proceed as follows to connect the AC cables:

The AC input cable can be connected directly to the CAGE CLAMP® Wago connector. The terminal points are indicated clearly. From left to right: "L1" (phase), "N" (neutral) and earth.

The AC output cable can be connected directly to the CAGE CLAMP® Wago connector. The terminal points are indicated clearly. From left to right: earth, "L1" (phase), and "N" (neutral).



3.6 Optional Connections

A number of optional connections are possible:

Undo the four screws at the front of the enclosure and remove the front panel.

3.6.1 Second Battery

The Phoenix Multi Compact / MultiPlus Compact has a connection (+) for charging a starter battery. For connection see appendix 1