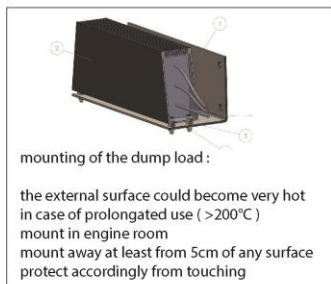
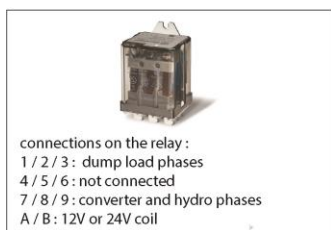
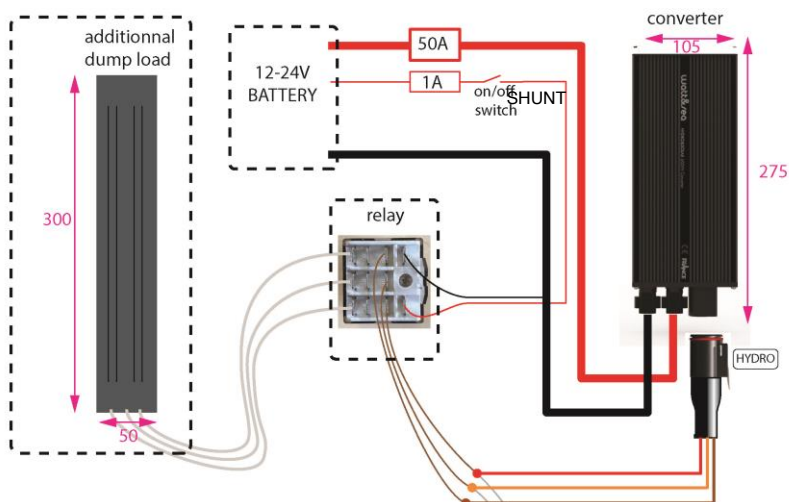


## 5. ELECTRICAL INSTALLATION



mounting of the converter :

mount vertically to help heat dissipation  
 mount in proper ventilated cabinet



*Wiring principle*

### Recommendations regarding electric connections:

**Please consult local/national safety rules before installation.**

**All electric cables must be carefully insulated. For maximum protection, cover the cables with electrical cable sheaths.**

## 5.1. Three-phase wiring of the hydrogenerator

The hydrogenerator is fitted with a small diameter electrical cable of sufficient length to pass through the boat. This is a three-phase cable. If you need to extend it, it must be at least 3x1.5 mm<sup>2</sup>.

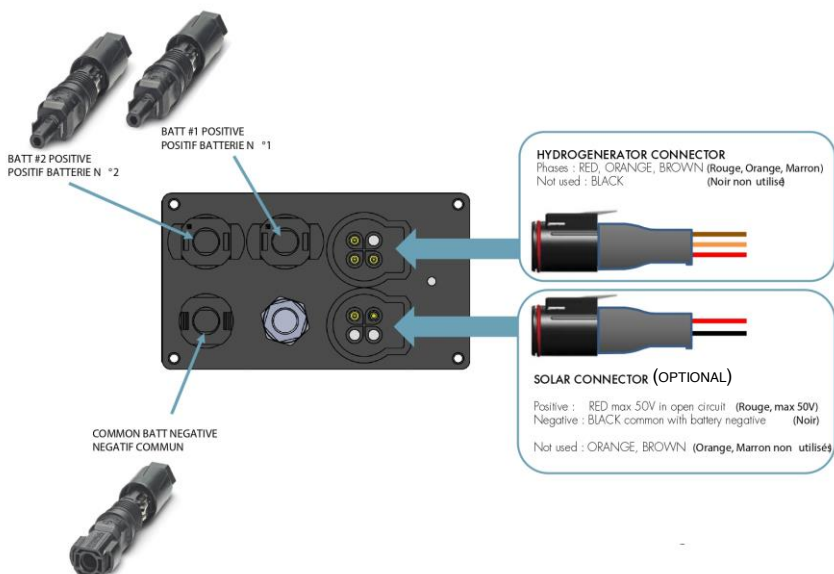
Then connect the 3 phases to the socket supplied, ensuring you do not use the black conductor.

There is no order to follow when connecting the other conductors (brown, orange, red). You could use *WAGO 222* connectors, for example.



Connect this socket to the input labelled "HYDRO"

**N.B.: The phase sequence is irrelevant. There is thus no need to take into account the colour or numbering of the cables.**



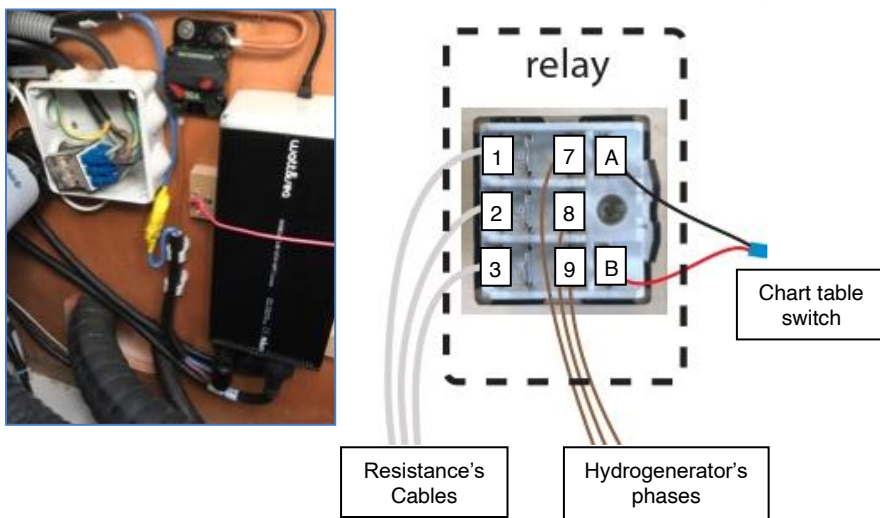
*Connectique du convertisseur*

## 5.2. Cabling for the on/off relay

To stop energy production and slow the device down, an on/off relay of 12 V or 24 V is available.

Cable this relay using *fast-on 6.35 mm* lugs as follows:

- A-B: 12 V or 24 V relay supply via the chart table switch (not supplied), protected by a fuse.
- 1-2-3: connect to resistance's cable delivered with the POD
- 4-5-6: not connected
- 7-8-9: connect to each of the hydrogenerator's phases



## 5.3. Using a solar panel

The converter has a second input for a solar panel. The solar panel's maximum voltage must not exceed 50 VCC and the intensity must not exceed 14 amps. The minimum voltage at which the converter can start charging is 7.5 VCC.

When the hydrogenerator and the solar panel generate power at the same time, priority is given to the hydrogenerator. As soon as it stops generating power (stopped, the boat is moored, etc.) the converter automatically takes into account the solar panel's charge.

Connect the solar panel to the second moulded socket (in option), while observing the following polarity:

- **NEGATIVE SOLAR: BLACK**
- **POSITIVE SOLAR (50 V max): RED**

Connect this socket to the input labelled "SOLAR".

**WARNING: OBSERVE THE POLARITY OF THE SOLAR PANEL**