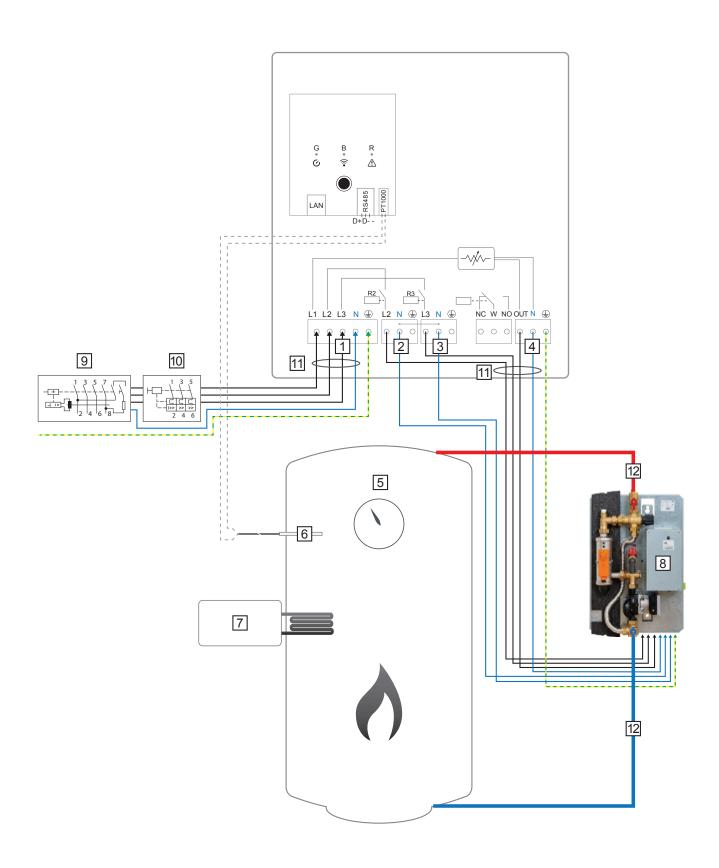
Tubra –eTherm in Combination with the Ohmpilot



1 INPUT - grid supply 1x 230 V Spring balancer 1.5 - 2.5 mm2	7 External source (e.g. gas-fired heating)
NOTE! Phase and neutral conductors must not be mixed up. Residual current-operated circuit breaker is triggered.	8 Tubra-eTherm (9 kW)
2 OUTPUT - L2 Heating Element	9 Residual-current circuit breaker
3 OUTPUT - L3 Heating Element	10 Circuit breaker max. B16A
OUTPUT up to 3 kW variable max. 13 A resistive load Spring balancer 1.5 - 2.5 mm ²	11 Ferrite (included in delivery)
5 Hot water boiler	Water supply to the boiler for stratification
6 PT1000 temperature sensor	

Functional Description

The Fronius Smart Meter records the current power at the feed-in point and transfers the data to the Datamanager. By controlling the Ohmpilot, the Datamanager adjusts any surplus energy that is available to zero. In detail, this takes place by continuously adjusting the heating circuit tubra® - eTherm connected to the Ohmpilot.

That means that surplus energy is continuously consumed by the installed tubra®-eTherm heating element. Depending on the excess power, the individual phases are switched on or off and L1 consumes the remaining power.

Tubra®-eTherm heats the water in a pipe system by circulating it, so that the water can flow into the boiler at the target temperature. Thus, straightforward stratification is achieved. Even when a low amount of energy is available, the water temperature can be managed. Further details can be found in the Tubra®-eTherm data sheet.

If no temperature sensor is installed, an external source (e.g. a gas boiler) must provide the minimum temperature.

As an alternative, the Ohmpilot can also control the minimum temperature. To do this, a temperature sensor must be connected so that the Ohmpilot can measure the temperature. This may result in electricity being sourced from the grid.