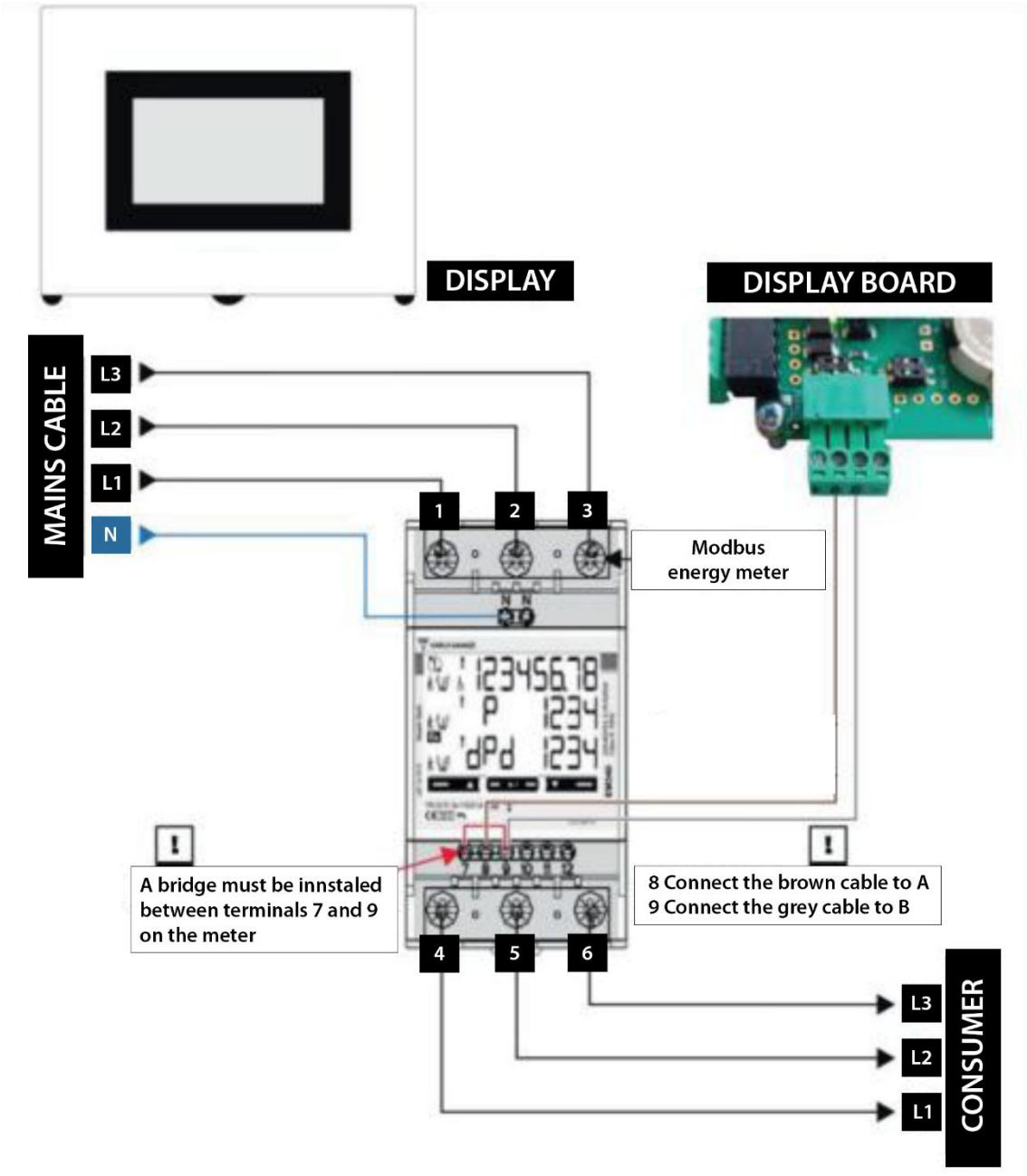
Description of modbus electricity meter



Description of modbus electricity meter

E-manager communication start

For a Modbus electricity meter, ModBus EM300 must be selected. If the electricity surplus is transmitted via an external energy management system (Modbus TCP or RTU), "Modbus Client" must be selected.

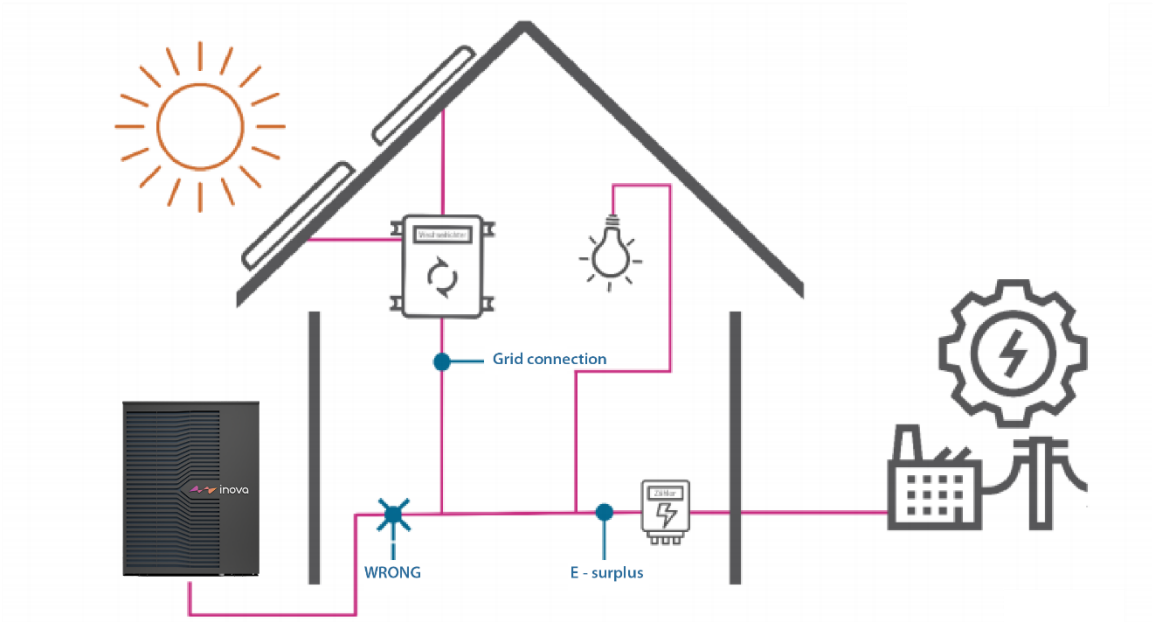
Communication Types in Emanager:

- **Case 1: Energy Input Measurement:**
  The energy meter is used to measure the input of an energy generator (e.g., PV system). The meter is installed directly in front of the PV system inverter. The heat pump attempts to consume the generated energy through speed control.

- **Case 2: Negative Energy Surplus Measurement:**
  The energy meter measures the amount of energy in the building's grid connection. The heat pump attempts to use the surplus energy (PV production minus all electrical consumers in the building) that would otherwise have to be fed into the grid. Negative here means that when a surplus is measured (electricity fed into the grid), a negative value is displayed. This represents the standard scenario.

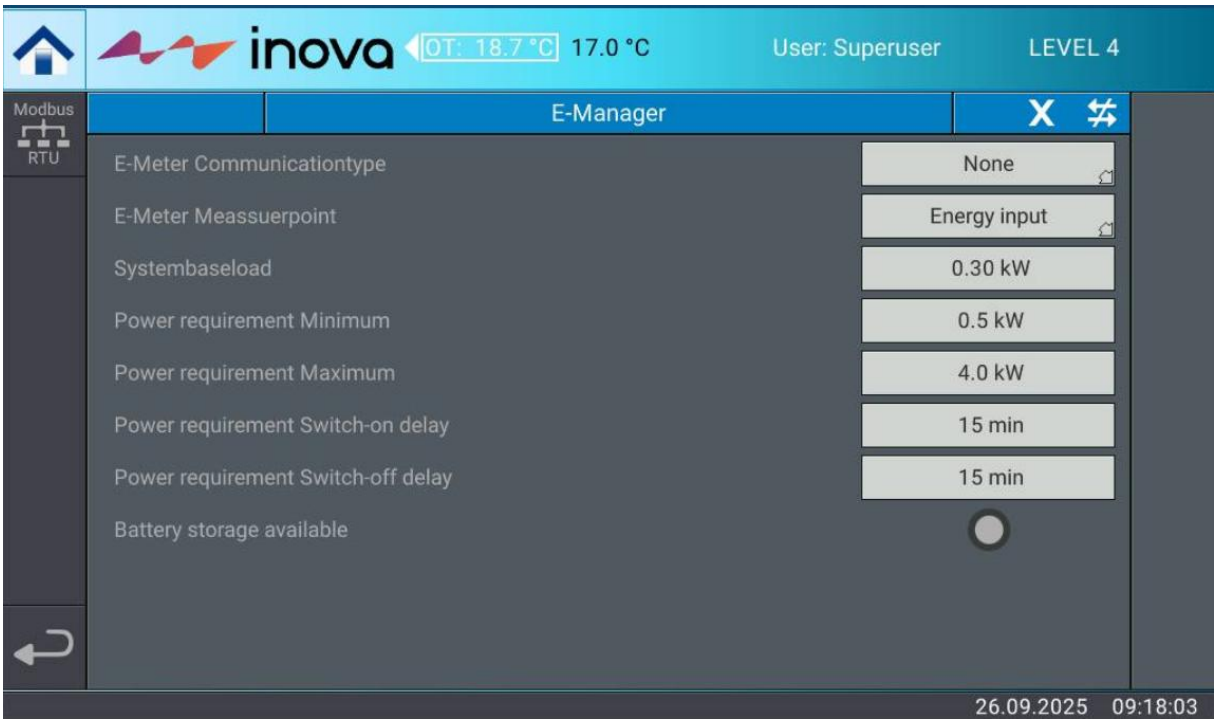
- **Case 3: Positive Energy Surplus Measurement:**
  The energy meter measures the amount of energy in the building's grid connection. The heat pump attempts to use the surplus energy (PV production minus all electrical consumers in the building) that must be fed into the grid. Positive here means that when a surplus is measured (electricity fed into the grid), a positive value is displayed.

Description of modbus electricity meter



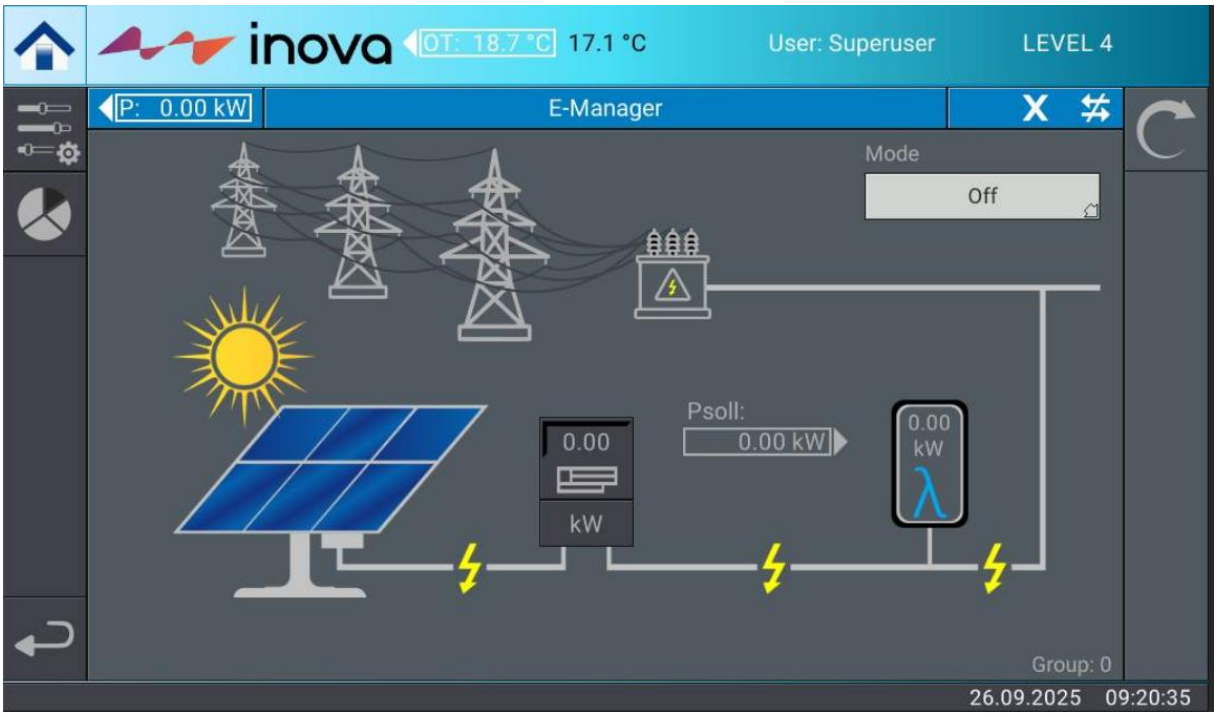
Description of modbus electricity meter

Depending on the case, the measuring point must be defined in the Emanager configuration menu on the display. If the smart meter is installed as suggested previously, the energy surplus measurement is negative → “Neg. E-Surplus.”



Description of modbus electricity meter

With correct wiring, no error messages appear when switching to automatic mode.



Description of modbus electricity meter

In the settings of the domestic hot water, buffer, and heating circuits, individual temperature increases can be set for surplus operation.