ecoMain Quick Guide

⚠ Safety Instructions

- Disconnect power before installation.
- Installation must be performed by a qualified electrician.

⚠ Phase Matching

- Correct phase matching is essential.
- Step 3 is critical. Incorrect phase matching will cause system malfunction.

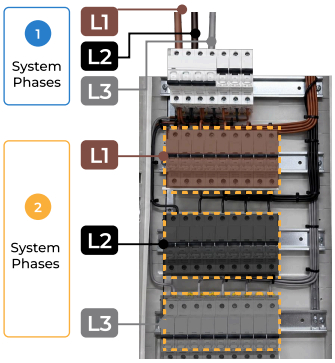
Step 1. Before Installation

❶ Confirm System Phases

Identify L1 / L2 / L3 of the main circuit

❷ Identify Circuit Phase

Identify each circuit as L1, L2, or L3.



*Distribution panel shown for reference only. Verify actual phase-circuit mapping on site.

Step 2. Device Installation

1. Mount ecoMain on the DIN rail.
2. Connect the Wi-Fi antenna or Ethernet cable.
3. If using ecoSub, mount it and connect it to ecoMain.

*Pay attention to the input and output ports to avoid reversing the connections.

Step 3. Connect Power & CTs

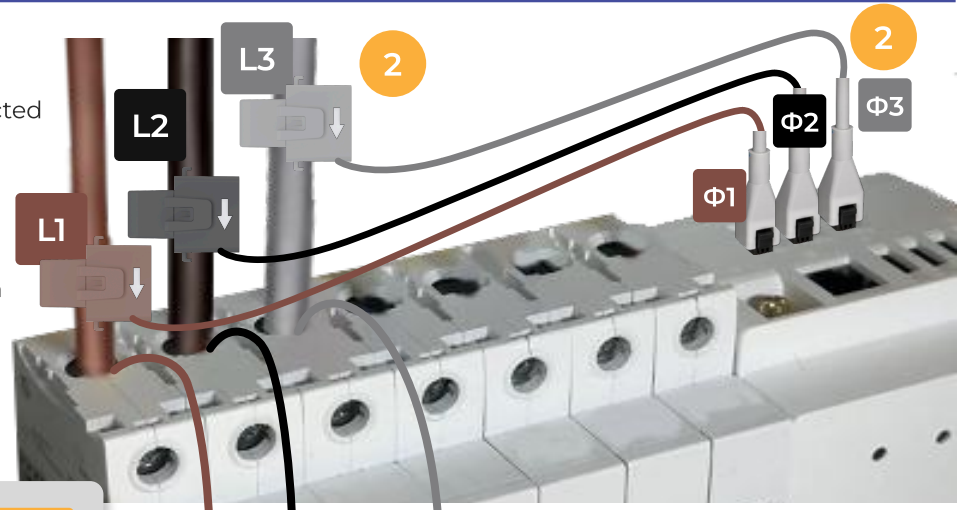
❶ Connect the power cables

The power cables must be connected to corresponding phases.

❷ Install the 100A ecoSensor

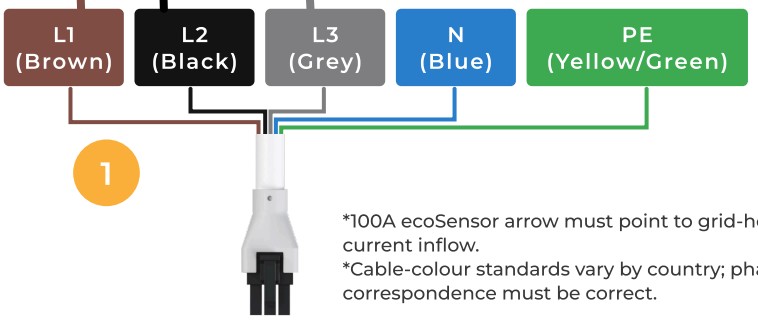
100A ecoSensor must be installed on corresponding phase as shown below.

L1 → Φ1 | L2 → Φ2 | L3 → Φ3



Phases must not be mismatched.

Phase	Power Cable		CT (Ports)
L1	Brown	→	Φ1
L2	Black	→	Φ2
L3	Grey	→	Φ3



*100A ecoSensor arrow must point to grid-house current inflow.
*Cable-colour standards vary by country; phase correspondence must be correct.

❸ Install the 30A ecoSensor

- Identify the phase (L1 / L2 / L3).
- Record the circuit name and phase.
- Check CT direction. PV/load branches have opposite orientations.

ecoMain	Circuit Branch	Phase
M-1	Heat Pump	L1

Step 4. Final Check

Before powering on, confirm:

- ☐ Power Phases — L1 / L2 / L3 correct
- ☐ ecoSensor (100A) — Φ1 / Φ2 / Φ3 matched
- ☐ ecoSensor (30A) — Name, phase & label correct
- ☐ Sensor Direction — Arrows correct
- ☐ Unused Wires — Insulated

Step 5. enecess App Setup

❶ Download the App

Scan the QR code to install the enecess App.

IOS Android

❷ Create a HOME

Sign up or log in, then create a HOME.

❸ Add ecoMain

Add ecoMain to your HOME.

❹ Set Up Network

Set up Wi-Fi in the App. Ethernet connects automatically.

Step 6. Branch Circuit Configuration

❶ Go to System

Tap System in the bottom navigation bar.

❷ Enter Edit Mode

Tap Edit to configure the channels.

❸ Set Circuit Link

Select Circuit Type and Circuit Name, then tap Binding.

Data is available only after binding.

❹ Set Channel Phase

Tap Edit, then select the correct L1 / L2 / L3 based on the actual ecoSensor installation channels.

❺ Check Current Direction

Check the current direction. If reversed, invert the corresponding channel in Channel.

❻ Start Monitoring

After configuration, run Reset Statistics to clear setup data and start monitoring.

Step 7. Help & Support

Installation Videos

Detailed Installation Manual

Common Installation Questions

If the issue persists, contact support@enecess.com with:

- Issue description
- Recheck Step 3 and provide clear photos showing the power cable connections and the correspondence between the main CT ports and the actual phases.