

The meter does not need any specific mechanical or electrical mounting arrangement.
 Before installing verify that data on the label (voltage, current, frequency) correspond to the actual installation values.

Programming

Access to programming is protected by a software key composed of a 4-digit numeric combination. When entering the programming mode, the meter prompts the operator to type the access combination, allowing or denying, according to the loaded code, modification of the parameters.

Programming is subdivided on two levels (with different access keys).

Level 1

Password **1000** is used for:
 Connection type
 Power demand
 Current demand
 RS485 communication or pulse output.

Level 2

Password **2001** is used for:
External C.T
V.T transformer ratio

To programme use the 3 keys on the front board:

DOWN + ENTER to enter the programming
ENTER to confirm the data
DOWN to shift the cursor
UP increases the loaded value

To quit during the programming without backing up the modifications
DOWN + ENTER

In the cases where the programming can be loaded by fixed steps (for instance connection type, value reset, etc.) **DOWN + UP** keys allow selection of the available values.

Programmable Parameters

**Password 1000
 Connection**

The meter can be connected with single-phase or 3-phase lines (3 or 4 wires).

Choose the desired connection taking care that the wiring is correct to the wiring diagram. Any error in connection leads to wrong measurements and damage to the meter. The input configuration must be for the chosen connection type as well as of any external current and voltage transformer ratios.

Possible connections:

- | | |
|-------------|--|
| 1n1E | Single-phase line |
| 3-2E | 3-phase line, 3 wires, unbalanced load, current transformers connected on L1 and L3 phases |
| 3-2E | 3-phase line, 3 wires, unbalanced load, current transformers connected on L1 and L3 phases |
| 3n3E | 3-phase line, 4 wires, unbalanced load |

Note: The wiring must match the programme configuration.

Phase Sequence Checking

By simultaneously pressing **UP** and **ENTER** keys (in any of the display pages) it is possible to check the correct phase sequence

If the connection is right, the display doesn't change.

If the connection is wrong, **Err 123 yes** is displayed. Modify the connections and repeat the checking until the correct sequence is reported.

Note: A wrong phase sequence may lead to measuring errors.

Power demand - Current demand

Integration time: 5 ,8 ,10 ,15, 20, 30, 60 minutes
Coupled power: active, reactive, apparent
Reset: Power max demand and current max demand

Run Hour Meter

Reset: working hours and minutes

Pulse Output

Pulse Frequency:

- 1 pulse/0.01 kWh
- 1 pulse/0.01 kWh
- 1 pulse/0.01 kWh
- 1 pulse/0.01 kWh
- 1 pulse/0.01 kWh

Pulse Duration:

- 50
- 100
- 200
- 300 ms

Password 2001

Transformer Ratio

C.T = current transformer primary/secondary ratio (eg. CT 800/5A CT=160)
V.T= voltage primary/secondary transformer ratio (eg. VT 600/100V VT=6)

Note: for voltage direct connection (without external voltage transformer), load VT=01,0

Display

Display menu is subdivided into different pages and it changes according to the selected connection type.

To scroll the display pages press **DOWN**.

To return to the previous pages press **UP**.

Hour Meter (working minutes and hours)

Run hour function, working minutes and hour counting, is operating when the device detects **L1** phase.

Display Contrast Control

1. Press **ENTER**
2. Display shows **8.8.8.8**.
3. Act on **UP/DOWN** keys to adjust display contrast
4. When you have the desired adjustment, press **ENTER**
5. The meter returns to display menu