Hotel Energy Management

Control Board TP4-Enersol

The new TP4-Enersol energy control board is a revolutionary combination of two generations

a) electromechanical handling by pushing buttons

b) electronic processing by motherboard control

This combination of two technologies results in highest possible energy economy efficiency with very simple and easy control handling on site.

Just push or release control buttons required.

Most common energy commitments on the market are the computer based software programs BMS for energy management control of hotel buildings.

That kind of software and hardware eaquipments are complex to use and often needs specialized personal to handle the every day control of rooms.

This operation difficulties often results in an fare of using the software program, perhaps something will go wrong and cause severe problems.

A typical layout of the control panel

Functions available on TP4-enersol Control Board

Heat Pump
Eco or **Full**
Cool or **Heat**
OFF or **ON**

DHW Boiler
Electricity
Or
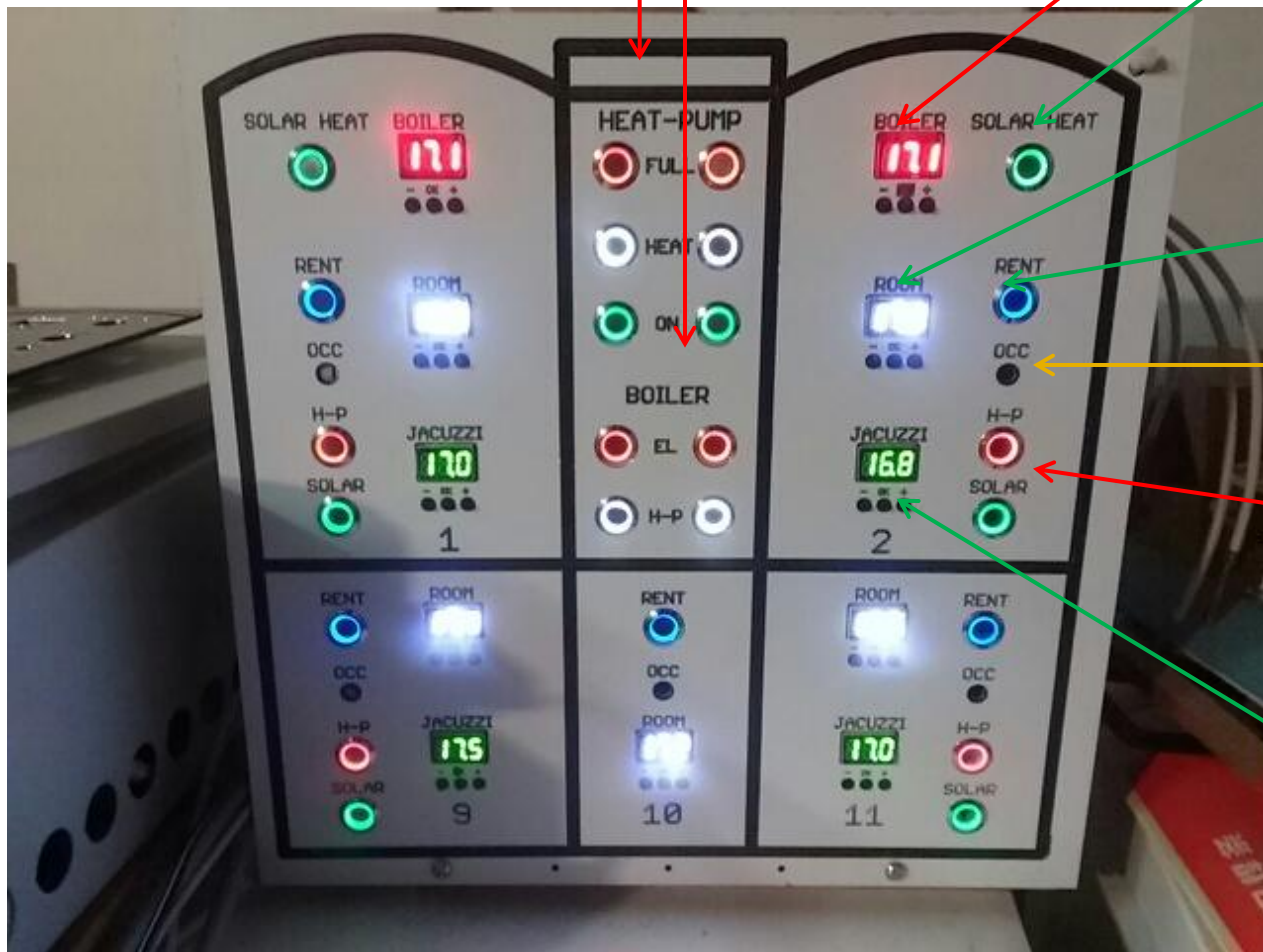**Heat-Pump**

DHW Boiler
Thermostat

Solar Heating

Room
Thermostat

Rent
Indication

Occupied
Indication

Jacuzzi
Heat-Pump
Or
Solar heating

Jacuzzi
Thermostat

A typical layout of the electronic hard-ware

A typical layout of the electronic hard-ware

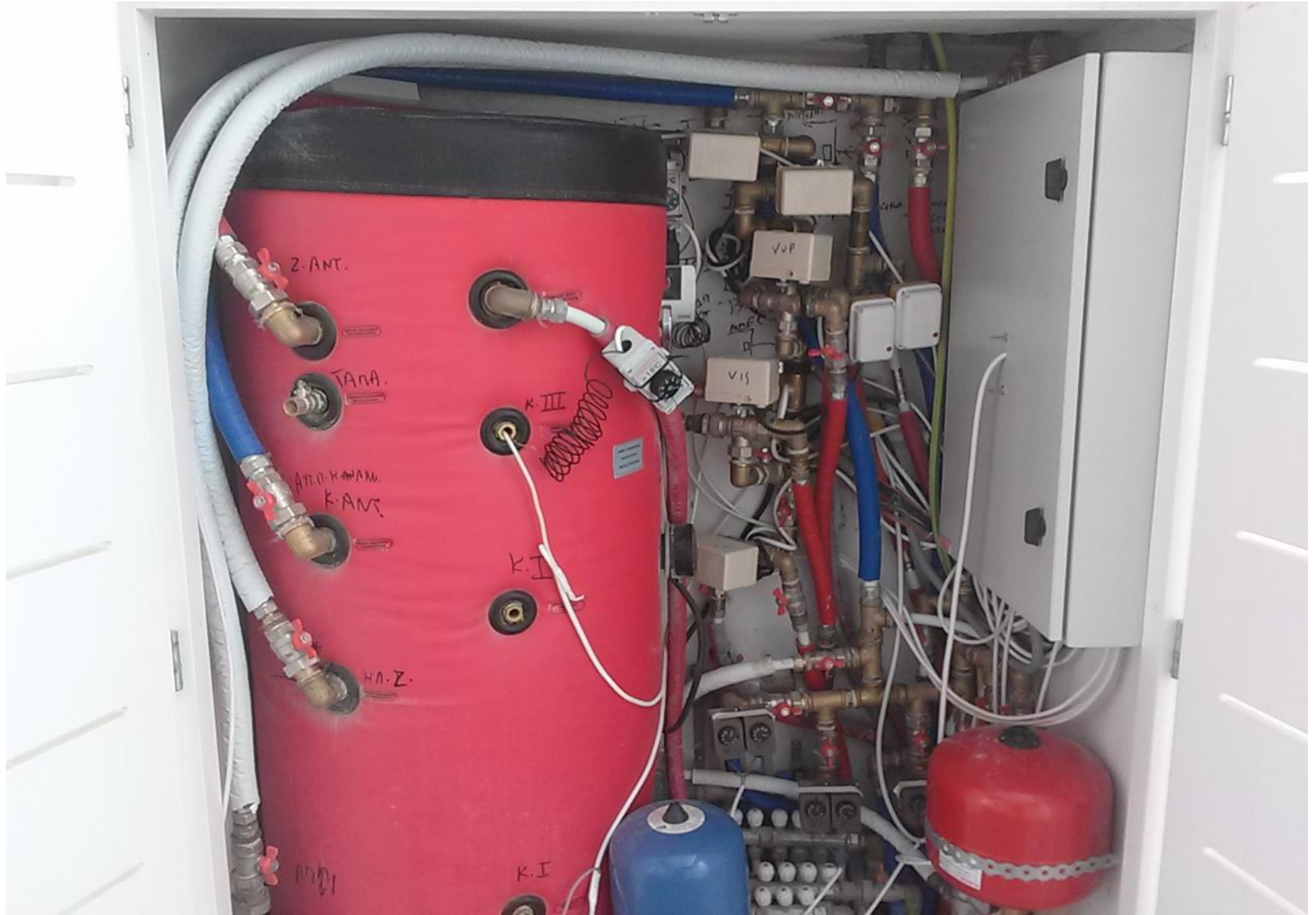4 motherboards managing up to 5-6 rooms each.

44 pcs of digital flat thermostats and set buttons.

88 pcs of control buttons with led & visual position

8 x 40 lead cable to the machinery rooms & relays

A typical layout of a small sized machinery room

Functions available on TP4-enersol Control Board

Heat Pump
Eco or **Full**
Cool or **Heat**
OFF or **ON**

The heat pump control buttons allows you to fully manage all the functions of each unit in remote control mode from the reception desk

ECO or FULL
On heat-pumps with two setpoints for either full and 'eco' reduced temperature output.

COOL or HEAT
Depending on season space heating in winter and space cooling in summer period.

ON or OFF
Closing the Heat-Pump where rooms are not habited gives economy.

Functions available on TP4-enersol Control Board

DHW Boiler
Electricity
Or
Heat-Pump

The hot water boiler control buttons allows you to choose the energy mode electricity or heat-pump function from the reception desk

ELECTRICITY
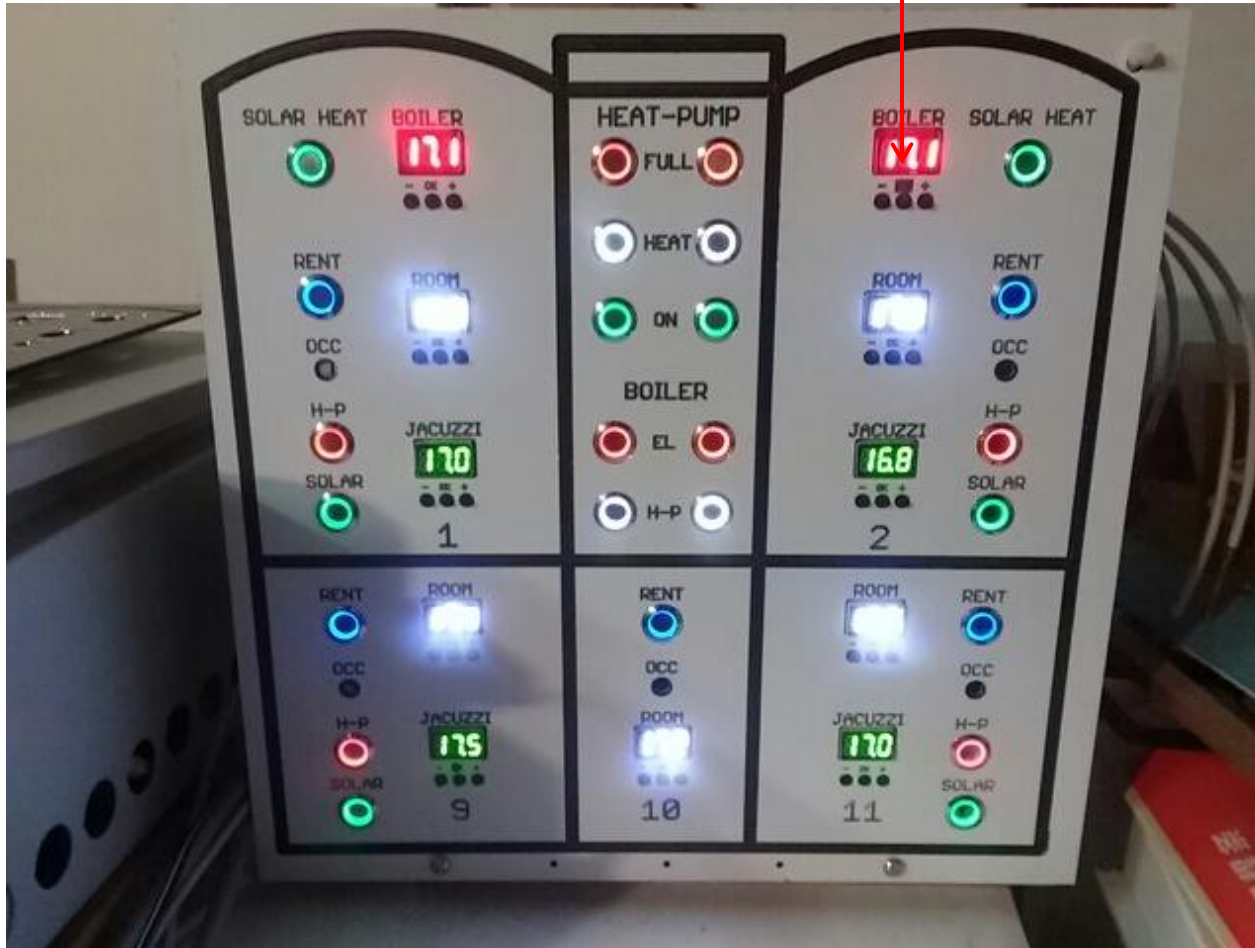Should be preferred in summer when heat-pump works intensively in cooling mode.

HEAT-PUMP
Could be preferred when cooling loads are not so intensive.

ON or OFF
Closing both buttons using only solar energy gives you economy.

Functions available on TP4-enersol Control Board

DHW Boiler
Thermostat

The hot water boiler thermostat has three buttons, allowing you to set the temperature of the hot water from the reception desk

Display shows default temperature of boiler

Pressing OK button it shows the set point.

You can then alter the set-point by pressing the (-) of (+) buttons repeatedly.

Then press OK to fix new selected set-point into the memory.

Not effected by solar.

Functions available on TP4-enersol Control Board

Solar Heating

The solar heating button activates solar floor heating at periods when facilities are not used in order to protect from humidity damages.

The solar heating is a separate function for protection of facilities from humidity damages when the facilities are closed in off-season.

Solar floor heating is not controlled by the room thermostat.

During solar floor heating function no solar hot water is produced.

Functions available on TP4-enersol Control Board

Room Thermostat

The room thermostat is controlling the floor heating and floor cooling output when the customer is out of the facilities. (key-control)

Display shows default temperature of boiler

Pressing OK button it shows the set point.

You can then alter the set-point by pressing the (-) of (+) buttons repeatedly.
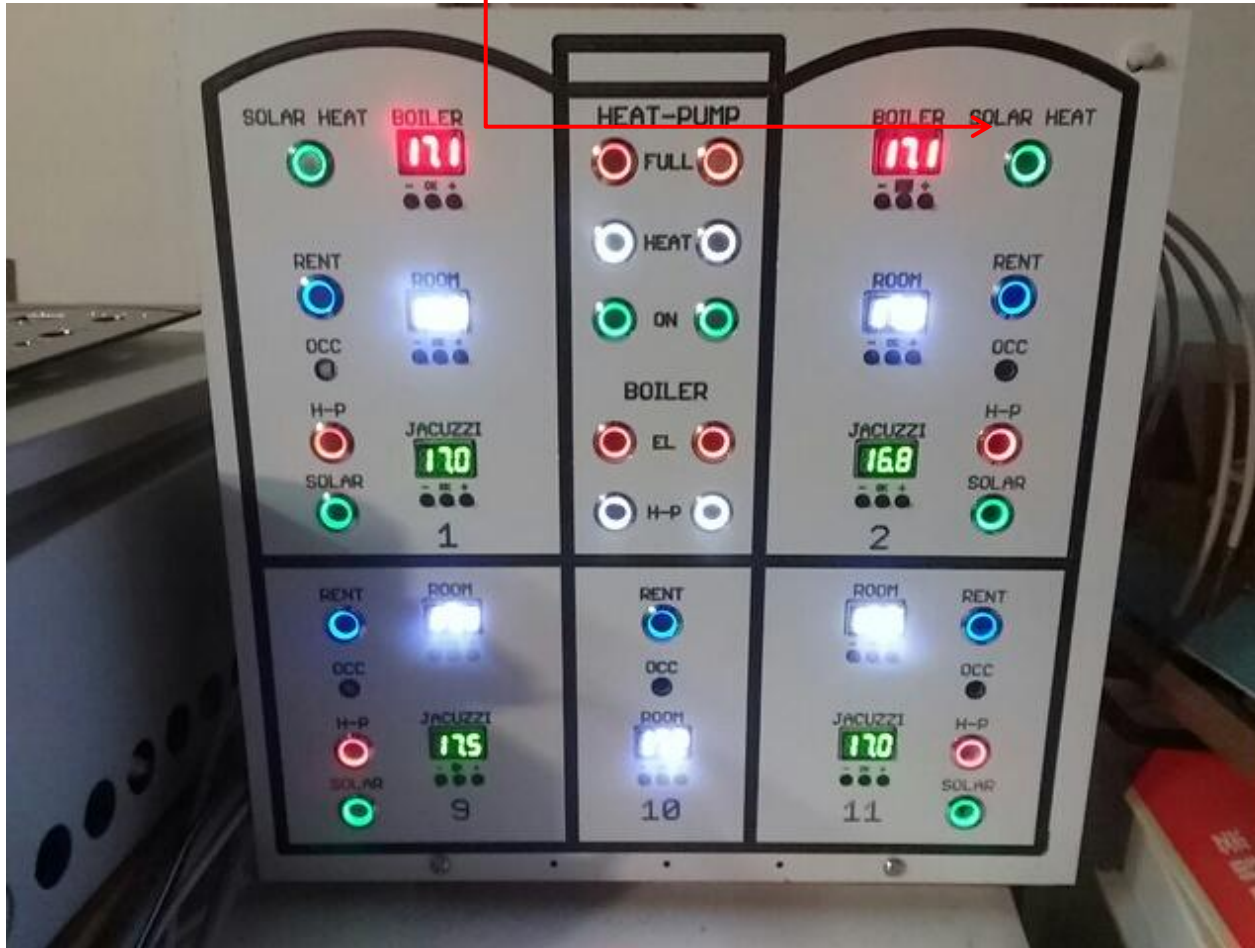
Then press OK to fix new selected set-point into the memory.

Not effected by solar.

Functions available on TP4-enersol Control Board

Rent
Indication

The rent indication button is pushed by the receptionist whenever a customer enter the facilities and is released whenever he leaves.

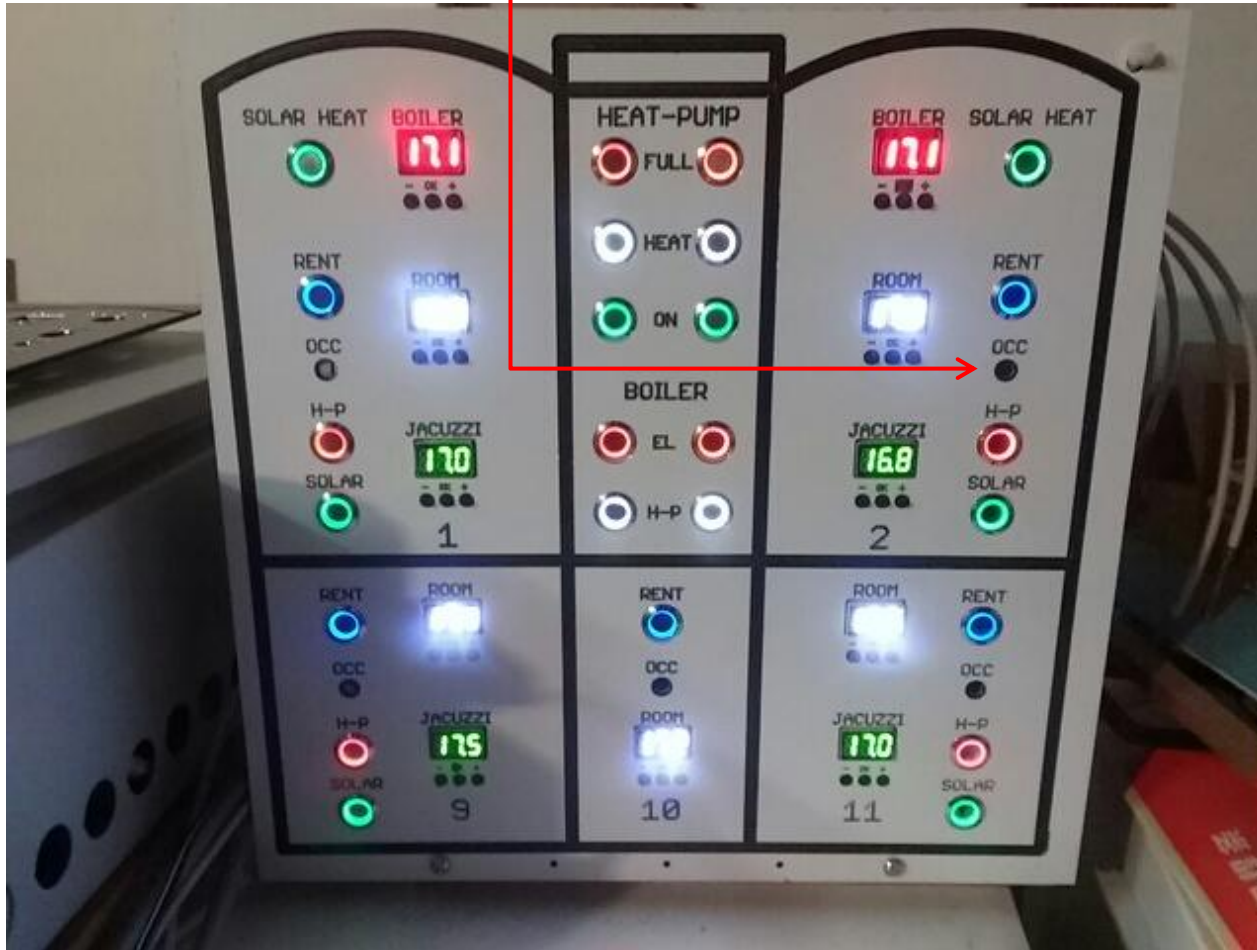The rent indication is useful for the cleaning personal to know if the rooms are rented or not

It can also be used for control of not rented rooms being occupied.

Statistics of rented and occupied rooms can be displayed on internet for invoicing control.

Functions available on TP4-enersol Control Board

Occupied
Indication

The occupy indication Led is activated when the customer enters the room facilities and is released whenever he leaves the room.

The occupy indication is useful for the cleaning personal to know if the customer is out or not

It can also be used for control of not rented rooms being occupied.

Statistics of rented and occupied rooms can be displayed on internet for invoicing control.

Functions available on TP4-enersol Control Board

Jacuzzi
Heat-Pump
Or
Solar heating

The Jacuzzi pools can be heated either by solar energy or by the local Heat-Pump or by both simultaneously, controlled by the thermostat

The solar heating of the Jacuzzi is controlled by a thermostat > 35'C in the solar water tanks which automatically starts the activated solar pumps.

If solar energy is not sufficient then pressing the H-P button allows auxillary Jacuzzi heating from the Heat-Pump

The solar tanks are also equipped with auxillary emergency heat-pump.

Functions available on TP4-enersol Control Board

Jacuzzi
Thermostat

The Jacuzzi pool thermostat has three buttons, allowing you to set the temperature of the hot water from the reception desk

Display shows default temperature of boiler

Pressing OK button it shows the set point.

You can then alter the set-point by pressing the (-) of (+) buttons repeatedly.

Then press OK to fix new selected set-point into the memory.

Effected also by solar.

Functions available on TP4-enersol Control Board

All settings, functions and statistics can be monitored on internet.

Developed and manufactured by
TP4-enersol and Electronicrepairs

TP4-enersol Energy Management Control Board
We design and construct anything according to your requirements

TP4-enersol engineering team Lars & John
Call us for further information 6932-231959