ECOGENICA
INNOVATION MEETS TECHNOLOGY

Installer's Manual

Model numbers

- **Eco-ZR02FC** (Ecogen290-5)
- **Eco-ZR03FC** (Ecogen290-8)
- **Eco-ZR04FC** (Ecogen290-11)
- **Eco-ZR04FC 3 Phase** (Ecogen290-16)

PLEASE NOTE :

- Installation, maintenance and any repairs must be undertaken by qualified persons.
- Always follow the safety instructions.
- Adhere to the maintenance schedule and only use genuine spare parts.
- Failure to comply with the instructions set out in this manual will invalidate the warranty.

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01. Safety


Flammable


Poisonous


Danger


Electricity


No Smoking

This product contains the combustible refrigerant R290. If the refrigerant circuit leaks, the escaping refrigerant may mix with air to form a flammable atmosphere. If this happens, there is a risk of death from fire and explosion.

A **SAFETY ZONE** is defined for the area around this product. The safety zone requires a 300 mm clearance at the back,1500 mm at the front and 300 mm on each side.

The designated **SAFETY ZONE** must be free of structural openings, such as windows, doors, light wells, skylights, and ventilation system air inlets or outlets.

R290 refrigerant, being denser than air, tends to sink and accumulate at ground level. Therefore, there must be no depressions or excavations within the **SAFETY ZONE**.

The **SAFETY ZONE** should not encroach upon intact buildings or public areas.

Once established, the **SAFETY ZONE** must not be altered in any way that contravenes established safety regulations.

Ensure that there are no ignition sources, electrical switches or other permanent ignition sources in the **SAFETY ZONE**.

Do not use any sprays or other combustible gases in the **SAFETY ZONE**. There is a risk of death if the product or the product environment is changed.

Do not make any changes to the:

- **Product itself**
- **Supply lines**
- **Drain pipework**
- **Expansion relief valve for the heat source circuit**
- **Constructional conditions that may affect the operational reliability of the product**

There is a risk of injury and material damage due to maintenance and repairs carried out incorrectly or not carried out at all. Never attempt to carry out maintenance work or repairs on this product unless you are qualified to do so. Faults and damage should be immediately addressed and eliminated by a qualified person.

Adhere to the maintenance intervals specified.

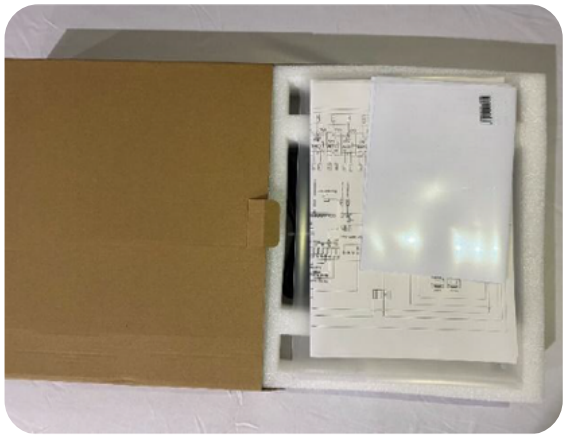
There is a risk of material damage caused by freezing. Ensure that the heating installation always remains in operation during freezing conditions and that all rooms are sufficiently heated. If you cannot guarantee this, have a qualified person drain the heating installation.

02. Unpacking and Positioning

The unit comes screwed to a pallet, and you will need a 10 mm spanner to unbolt it:

Note:

When moving the unit, there is a drainpipe at the back. It protrudes 40 mm, so be careful not to knock it:

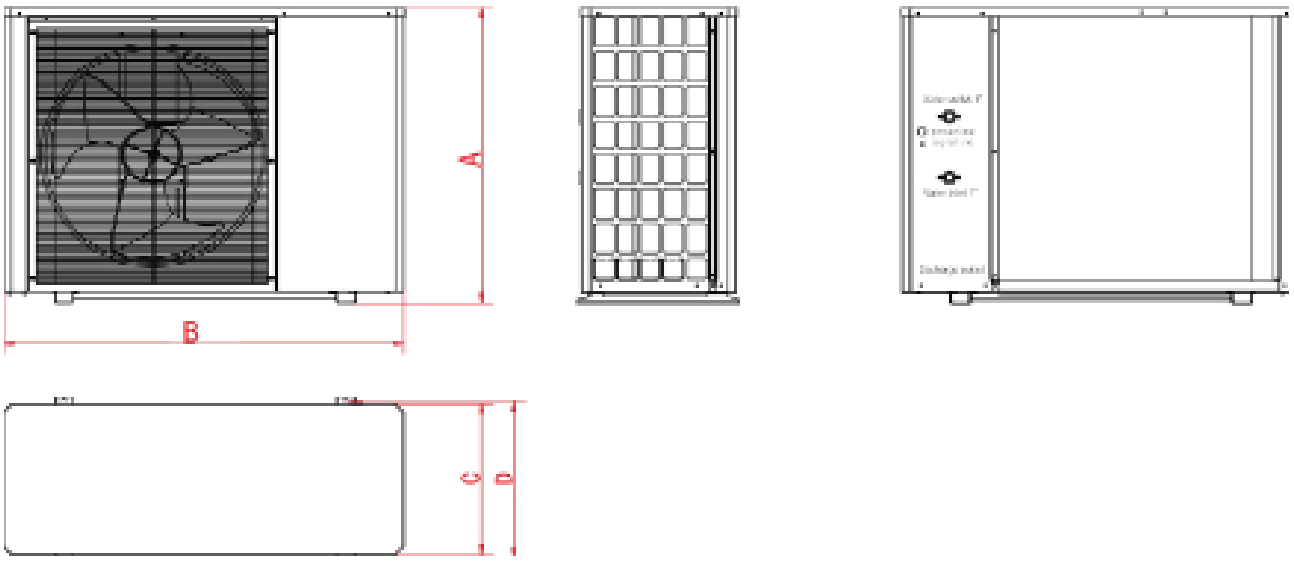


The manuals, controller, controller wire, hot water cylinder thermistor and a buffer thermistor are delivered in a separate box:

Note:

The unit is heavy, so you will need lifting equipment to move the unit safely. A heat pump mover or trolley is recommended.

Unit	Height A	Width B	Depth C	Depth D *(incl. unit feet)*	Weight
Ecogen290-5	805 mm	1045 mm	400 mm	415 mm	85 kg
Ecogen290-8	845 mm	1205 mm	475 mm	490 mm	119 kg
Ecogen290-11	1015 mm	1205 mm	475 mm	490 mm	137 kg
Ecogen290-16 (3 phase)	1435 mm	1205 mm	475 mm	490 mm	198 kg



Flammable	Poisonous	Danger	Electricity	No Smoking

All units need a **SAFETY ZONE**, consisting of a 300 mm clearance at the back, 1500 mm at the front and 300 mm on each side.

The minimum space required for adequate airflow is 2000 mm deep and 1800 mm wide. Placing a unit in a restricted space will reduce performance, increase running costs and void the warranty.

This unit must be installed away from hazards in a **SAFETY ZONE**.

This zone must be free from any structural openings such as windows, doors, light wells, skylights, and air inlets or outlets of ventilation systems.

R290 refrigerant, being denser than air, tends to sink and accumulate at ground level. Therefore, there must be no depressions or excavations within the **SAFETY ZONE**.

This zone should not encroach upon intact buildings or public areas. Once established, the **SAFETY ZONE** must not be altered in any way that contravenes established safety regulations.

All units need to be mounted 100 mm off the ground using flexi-feet supplied in the Heat Pump Accessory Kit:

The base and unit need to be level and allow for drainage. A concrete plinth at least 100 mm thick can be built if you require it, but any flat ground is suitable. Avoid areas where water will pool and freeze, causing trip hazards.

Drainage needs to be provided under the unit to capture condensation, up to 6 litres per hour. It drains out of the holes in the bottom of the unit.

The feet are bolted to the bottom of the unit using the bolts supplied (see above). Ensure the unit is level. The feet are not adjustable, so they need to go on flat ground.

03. Connections for Electricians

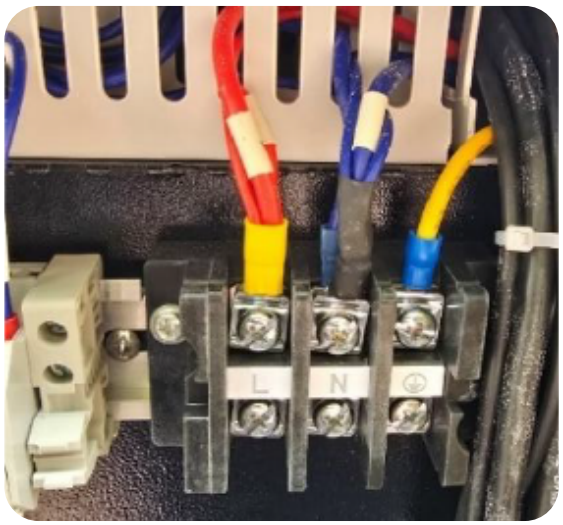
The power and wiring terminals are all inside the unit. You must remove the access panel to access the terminals. You need to take off the access panel on the side of the unit using a Phillips No. 2 screwdriver. There are 10 screws to remove. They all have a plastic washer to avoid scratching the unit.

A power supply is needed at the outdoor unit. A 32 Amp Isolator is provided in the Heat Pump Accessory Kit. It must be within 1 m of the unit.

Do not secure the Isolator to the unit itself and avoid any drilling into the casing of the unit - there are glands on the back of the unit for cable entry/exit.

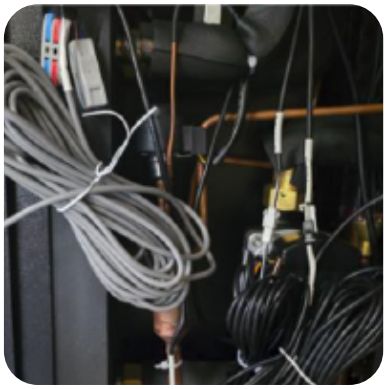
The power connection to the unit needs to be made using the power terminals as follows:

Unit	Power Supply
Ecogen290-5	16 Amp
Ecogen290-8	25 Amp
Ecogen290-11	32 Amp
Ecogen290-16 (3 Phase)	16 Amp



The controller, its 10 m long cable, and the buffer and cylinder thermistors come in a separate box from the unit:

When the side cover of the unit is removed you can see 3 leads hanging down, these are for the controller and two sensors:



The controller plugs into the unit using a black plug on a grey cable. It has a 10 m grey extension cable. The controller needs to be installed inside the property in a heated space.

Note:

the plug on the controller wire is 16 mm across so you will need to drill 16 mm holes to get this into the house.

The hot water cylinder sensor plugs into a lead, which is black and labelled T8. It is 10 m long.

The buffer sensor is not normally used so you don't need to plug it in. It can be stored in the bottom of the unit. If you want to use the buffer sensor, it plugs into another black flying lead labelled T5.

For wiring in additional components, please see the wiring diagrams in sections 7 and 8. We include a Wiring Center/Junction Box in the Heat Pump Accessory Kit to allow connections to be made safely in the house between the heat pump and the valves, pumps, controller, etc.

The 3-way Valve needs to wire into Terminal 6 Live and Terminal 8 Neutral. Note if the 3-Way Valve is installed backwards, you can reverse its operation by moving the Live to Terminal 7.

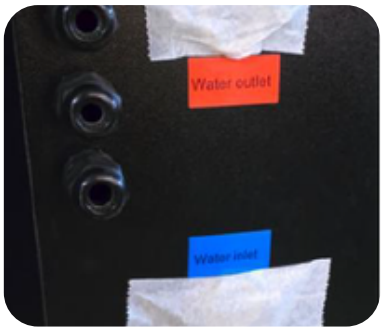
The room thermostats need to wire across Terminals 3 and 4 and are 240V.

If using secondary heating zone pumps installed after the buffer, they need to be wired to Terminal 18 Live and Terminal 19 Neutral.

The immersion heater can be wired Live to Terminal 20 and Neutral to Terminal 21 if it is less than 2000 Watts. If the immersion heater is more than 2000 Watts, you cannot use these terminals as it will destroy the PCB and void the warranty.

04. Connections for Heating Engineers

The water pipe connections are on the rear of the unit. The top connection is the flow (outlet), and the bottom is the return (inlet):



On the Ecogen290-5 and 8 units, the connection is 1” BSP female. You will need a 1” BSP male-to-male connector to connect the flexi-hoses. This is included in the Heat Pump Accessory Kit with fibre washers:

On the Ecogen290-11 and 16 unit, the connection is 1¼” BSP female. You will need a 1¼” to 1” BSP male-to-female connector to connect the flexi-hoses. This will be included in the Heat Pump Accessory Kit for these 2 units, together with fibre washers.

On the Ecogen290-16 unit, all pipework will need to be 35 mm copper - there are no flexi-hoses for this unit.

The Ecogen290-5, 8 and 11 units must have flexi-hoses fitted before connecting to 28 mm copper or plastic pipes. The flexi-hoses fit on the back of the unit using the fibre washers and have a compression fitting to 28 mm copper/plastic. Do not kink the flexi-hoses - they need to be installed with sweeping curves.

All external pipework must be insulated with no bare metal visible - bare pipework violates the MCS rules and the warranty on this unit.

This unit will protect itself from freezing in cold weather, but ONLY if the power is switched on. In a power cut, the unit cannot protect itself. Freeze up is the installers responsibility and is not covered by the warranty. There are 3 options:

- Use food-grade propylene glycol/anti-freeze in the water at 15% concentration.
- Use the Anti-Freeze Valve (see below) supplied in the Heat Pump Accessory Kit, installed outside on the inlet pipe of the unit so it can drain the water from the lowest point in the unit.
- Use neither of the above and rely on the electrical backup system in the house, assuming the property has a battery providing backup power.

Once the pipework has entered the property, we recommend using 28 mm Ball Valves, supplied in the Heat Pump Accessory Kit, for isolating the heat pump for flushing and repair purposes:

We insist on a Magnetic Filter being installed on the return to the unit. One is included in the Heat Pump Accessory Kit. We recommend it is installed inside the property on the return pipework. It comes with 28 mm compression connections, fibre washers and a spanner to open the filter.

There is no expansion vessel in the monobloc outdoor unit, so you will need to use a Robokit, which is also included in the Heat Pump Accessory Kit:

05. Accessory Kits

There are 3 Accessory Kits available:

1. Heat Pump Accessory Kit

his comes with every heat pump as it will provide you with everything you need to install the heat pump. It includes:

- Feet x 2
- Flexi-Hoses x 2 with insulation
- Heat Pump Adapters x 2
- Magnetic Filter
- Robokit 18L
- Anti-Freeze Valve
- 32A Isolator
- Auto Air Vent x 2
- Ball Valve x 2
- Drain Valve
- Wiring Centre

All connection adapters are supplied and include fibre washers. Kits for the Ecogen290-11 and 16 will also include the 1¼”-1” adapter.

2. Cylinder Accessory Kit

this comes with every Ecogenica hot water cylinder so you can connect it to the heat pump. It includes:

- Expansion Vessel 12L
- G3 Combination Valve
- 3-Way Valve
- Switch13 Amp

All connection adapters are supplied and include fibre washers.

3. Buffer Accessory Kit

if you are using our buffer or integrated cylinder with buffer, you will receive these accessories:

- Water Pump
- Pump Valves x 2

All connection adapters are supplied and include fibre washers.

06. System Types Open Zone and Multi-Zone

This Manual covers 2 standard heating and hot water installation types – **Open Zone and Multi-Zone**.

- It is important you install the system as it was designed.
- Only use the schematics and instructions for the system you are installing.
- Check this with your system designer before starting.

Open Zone

In this system, all radiators come on together when the heating is running and you will be removing any thermostatic radiator valves (TRVs) from the radiators (although a TRV on 1 out of every 5 radiators is permitted). An open system is simpler to connect and can offer significant savings.

In an Open Zone system, we rely on the water in the system to make up our minimum system volume.

Multi-Zone

If the homeowner wants to zone the house or heat one floor or area at a time, they will need more than one thermostat, in which case you must use a buffer and a Multi-Zone system.

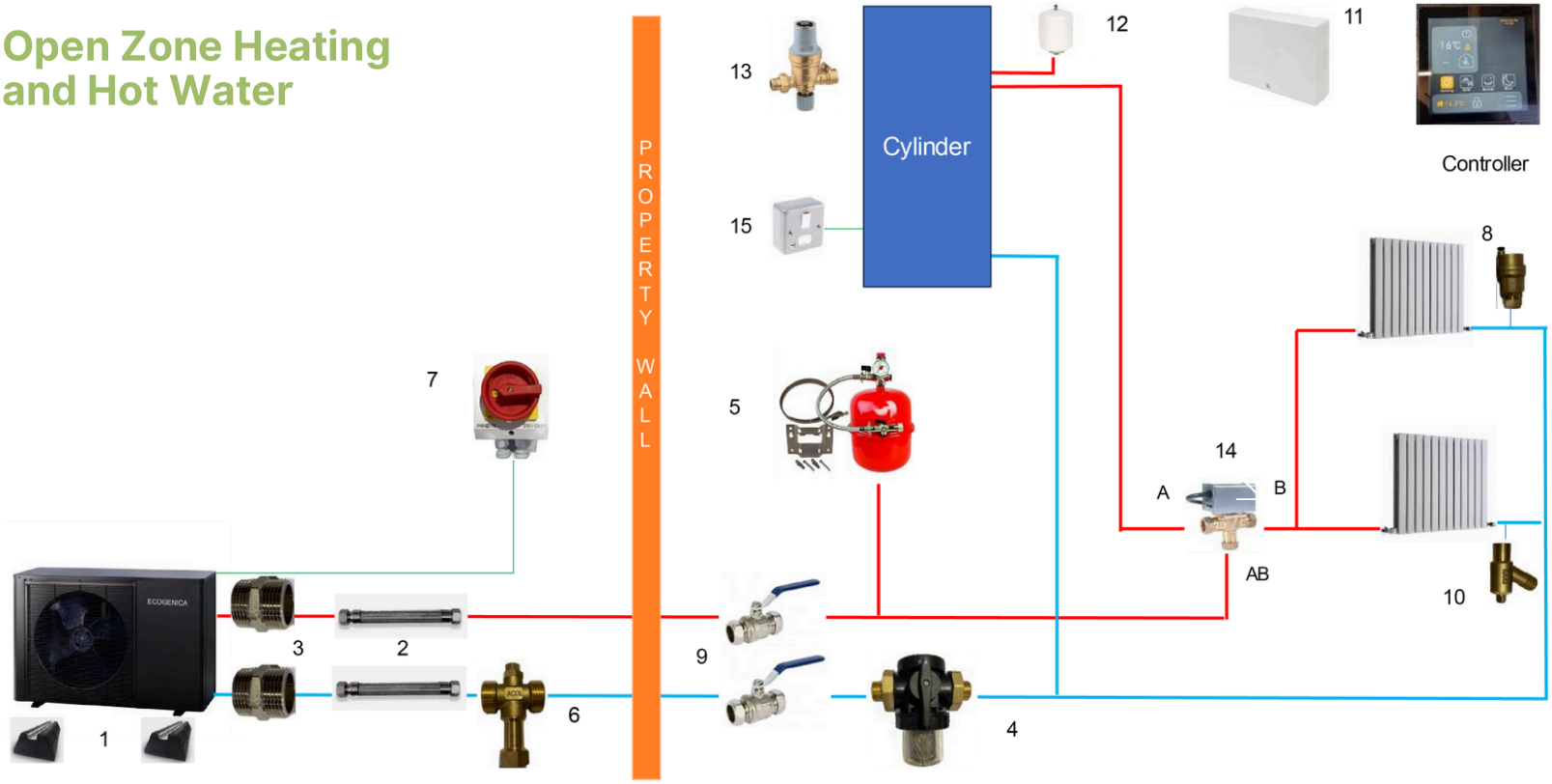
In a Multi-Zone system you can zone the house and run just a few radiators or some underfloor heating as the buffer will provide the system volume required.

Note:

Ecogenica offers the buffer as a stand-alone item (50 L) or as an “all-in-one” unit combined at the bottom of the hot water cylinder. The pipe work, wiring and set up are the same for all units with buffers.

Open Zone Schematics, Set-Up and Testing

Open Zone Heating and Hot Water



Heat Pump Accessory Kit

01	Feet x 2
02	Flexi -Hoses x 2
03	Heat Pump Adapters x 2
04	Magnetic Filter
05	Robokit 18L
06	Anti-Freeze Valve
07	32A Isolator
08	Auto Air Vent x 2
09	Ball Valve x 2
10	Drain Valve
11	Wiring Centre

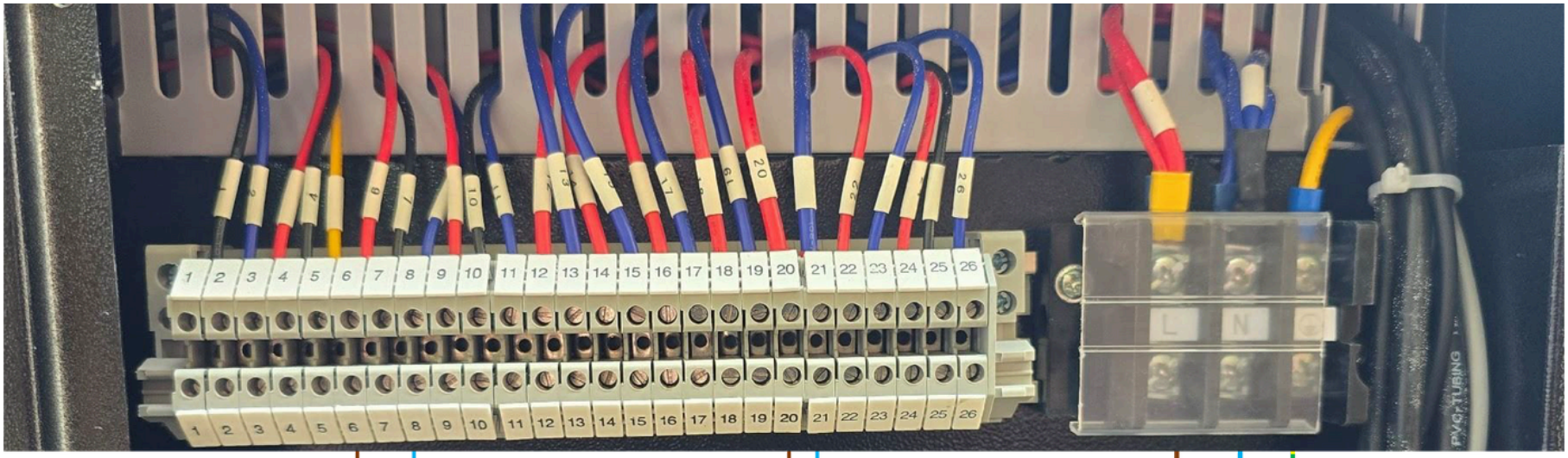
Cylinder Accessory Kit

12	Expansion Vessel 12L
13	G3 Combination Valve
14	3-Way Valve
15	Switch 13 Amp

Note:

1. In Open Zone systems (no buffer) the controller is the room thermostat
2. TRVs cannot be used on the radiators.

Open Zone Heating and Hot Water



Hot water cylinder sensor plugs into T8. The sensor is 10 m long. It must go in the cylinder above the immersion heater.

If 3-Way Valve port A is connected to the cylinder, wire 6 to live and 8 to neutral. If 3-Way Valve port B is connected to the Cylinder wire 7 to live and 8 to neutral. 7 is live, 8 is neutral in Heating. 6 is L and 8 is N in DHW mode.

Immersion heater L to 20 and N to 21 in cylinder, but ONLY if under 2000 Watts.

Unit	Power Supply
Ecogen290 -2	16 Amp
Ecogen290 -3	25 Amp
Ecogen290 -4	32 Amp
Ecogen290 -6	16 Amp 3 Phase)

Controller (10 m)

Note:

1. In Open Zone systems (no buffer) the controller is the room thermostat
2. TRVs cannot be used on the radiators.

Set-Up

The table below shows the minimum system water content recommended for each unit. To ensure proper operation of the heat pump, this minimum content must be met.

Unit	Ecogen290 -5	Ecogen290 -8	Ecogen290 -11	Ecogen290 -16 *(3 phase)*
Water Volume	65	100	150	200
Radiators	6	10	12	15

Before you start heating, fill the system with water to 1-2 Bar. Ensure you get all the air out - there is an Auto Air Vent in the heat pump, which will help.

- Make sure you also bleed all the air out of the radiators.
- The heat pump comes configured for Open Zone heating with a hot water cylinder.
- Power it up and you will see a screen like the beside:

You have to make a few settings to the unit before you can start heating.

01 Press the menu symbol ☰

02 Press Setting ⚙, then **Modify parameters**. It asks you to input a password, it is **2345**, then Press **OK**.

03 Go to **01 DHW parameters setting**.

04 If you have wired the immersion heater from the heat pump, set **002 Disinfection** to 1, if not set to 0.

note : The cylinder needs to get to 60C once a week, so you will need to set the immersion heater to do this.

05 Go to **011 T8S-d1** and set the legionella temperature to 60C.

06 Return to the **Modify parameter** screen, press **03 Heating parameter** setting, scroll to **003 H_ModeTAo Max**, press and set this to 20C. This tells the heat pump to stop heating the house in warm weather.

07 Return to the **Modify parameter** screen, press **05 Temperature parameter** setting, scroll to **02 Ta Enable,** press and set this to 1. This tells the heat pump to use the Ecogenica controller as the room thermostat.

08 Press the **house** symbol to ⌂ return to the main screen.

Weather Compensation

You should tell the unit to operate in “weather compensation” as this saves the home owner 20-30% on the run cost by running the radiators at lower temperatures on warm days and higher temperatures on cold days.

01 Press the menu symbol

02 Press **Service** and then **Climate curve**.

03 Move the slider to switch on heating, it goes orange when it is on.

04 Now press **Zone 1**, **High Temperature** Heating and then **Customisation**.

05 In the **customised curve** screen, slide the switch right so it goes orange.

06 Press **T5SetH1**, type in 50, press **OK**.

07 Press **T5SetH2**, type in 35, press **OK**.

08 Press **TaoH1**, type in -2, press **OK**.

09 Press **TaoH2**, type in 15, press **OK**.

10 Press the symbol of a floppy disk , then press to return to the home screen. Now turn off the power for 30 seconds - the unit will reboot with your new settings.

Testing Heating Mode

01 First we will start the unit in heating mode.

02 Press the power button on the left to switch the heating on/off.

03 Note the picture of the house and the temperature, this is the temperature in the room.

04 When the unit is off, it shows the current room temperature, when it is running it shows the temperature it is trying to get to. The unit takes 3 minutes to start.

05 Once it is running the home symbol will go orange to tell you it is in heating mode.

06 At the bottom of the controller in orange is the current room temperature. To increase the room temperature press **+**, to reduce it press **–**.

07 At the top of the controller screen a circle with a triangle will appear , this tells you the water pump is on.

08 After 3 minutes the compressor will appear top left in orange , now the heating is running.

09 Leave the system on for 15 minutes then check that every radiator is warm and all of them are the same temperature.

10 Make sure the radiators are balanced properly and make sure there are no TRV heads on any of the radiators (a maximum of 1 TRV for every 5 radiators is however allowed).

If the Date/Time needs changing or the beeping from the controller/brightness needs adjusting, see Section 9.

If the system is set up or wired up incorrectly a fault code will appear at the bottom of the screen (see Section 11).

Testing Hot Water Mode

01 Press the power button on the right to switch the hot water on/off.

02 On screen it tells you the current water tank temperature.

03 When the unit is off it shows the current cylinder temperature.,The unit takes 2 minutes to start.Once its running the tap symbol will go orange to tell you it is in hot water mode.

04 To increase the cylinder temperature, press **+**, to reduce it press **–**. We recommend setting this to 50C.

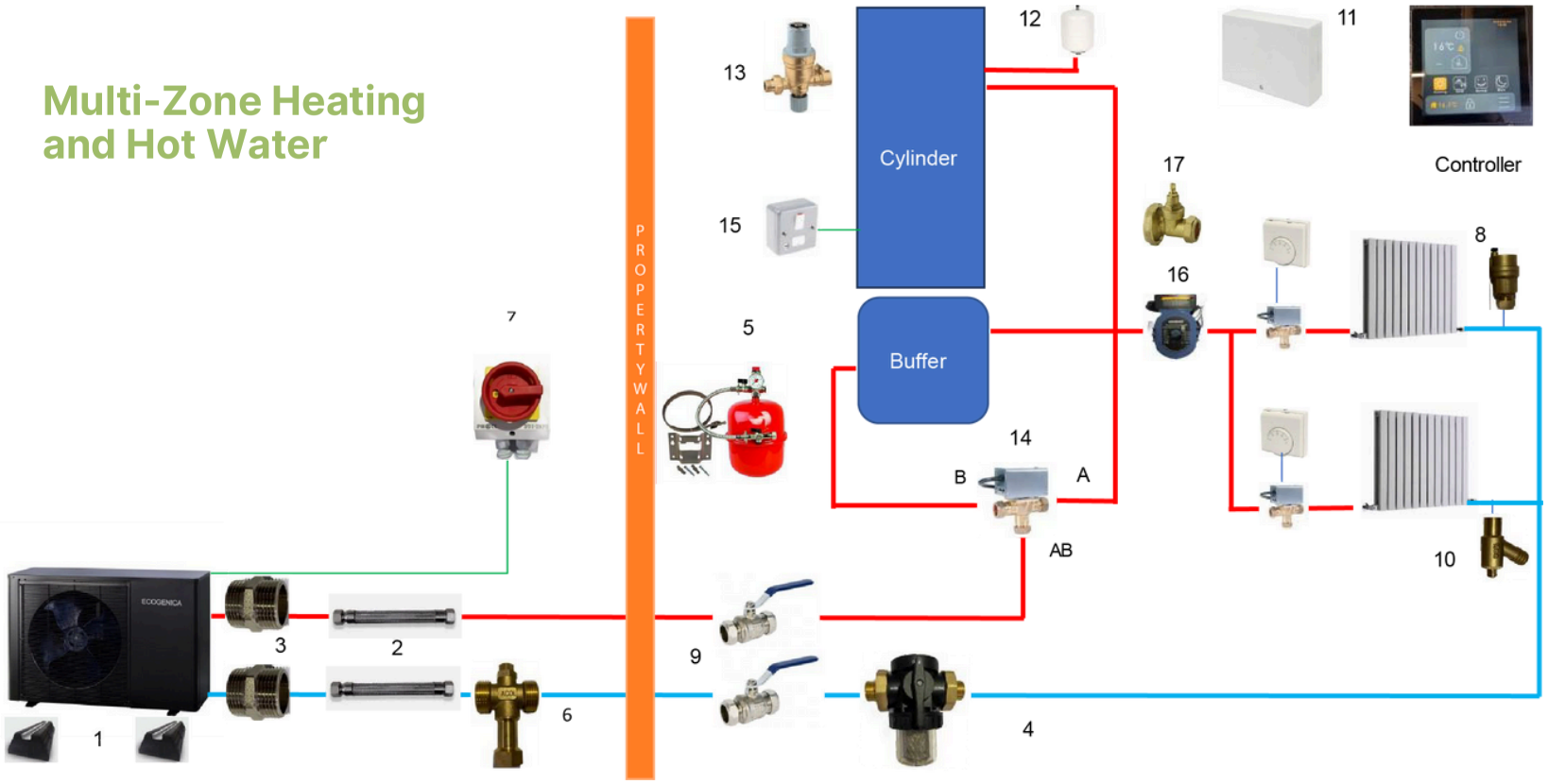
05 Note the unit's priority is hot water - if the cylinder falls 5 degrees C in temperature it will automatically reheat. It cannot do heating and hot water at the same time so in hot water mode, the heating is stopped.

06 Note in hot water mode the 3-Way Valve points towards the cylinder. Check that when it is in hot water mode, the cylinder temperature rises. It's a good idea to do a 30-minute hot water cycle to prove it is working.

07 To set cylinder timers, see Section 9.

08 Once you are happy the unit operates well in both modes, you can hand over to the customer and complete the warranty registration (Section 12).

Multi-Zone Heating and Hot Water



Heat Pump Accessory Kit

- 01 Feet x 2
- 02 Flexi -Hoses x 2
- 03 Heat Pump Adapters x 2
- 04 Magnetic Filter
- 05 Robokit 18L
- 06 Anti-Freeze Valve
- 07 32A Isolator
- 08 Auto Air Vent x 2
- 09 Ball Valve x 2
- 10 Drain Valve
- 11 Wiring Centre

Cylinder Accessory Kit

- 12 Expansion Vessel 12L
- 13 G3 Combination Valve
- 14 3-Way Valve
- 15 Switch 13 Amp

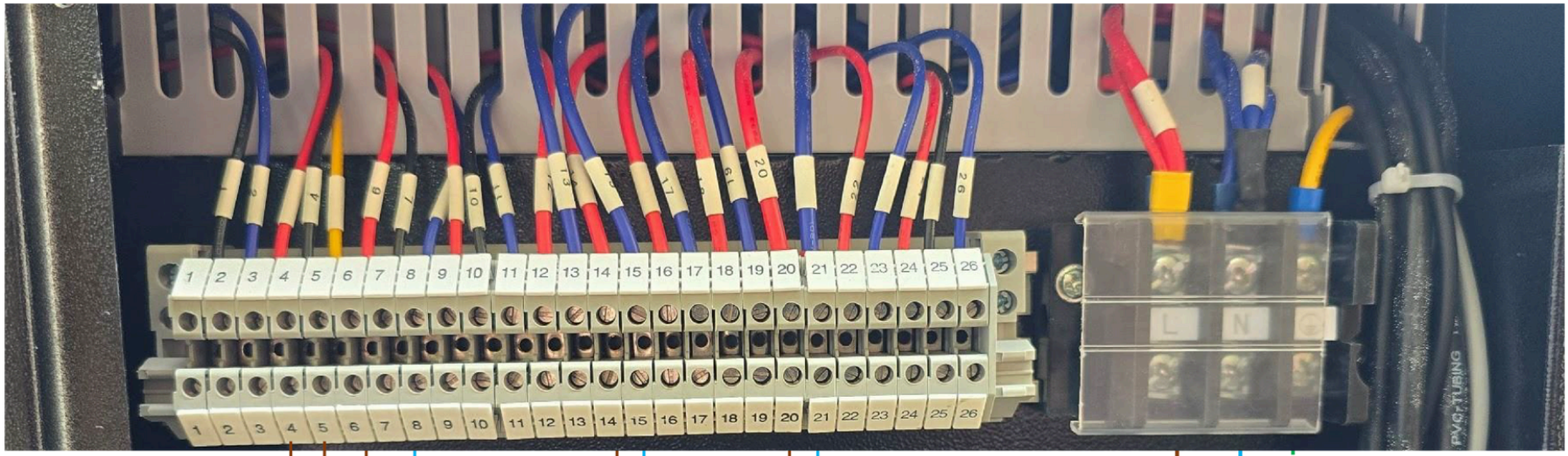
Buffer Accessory Kit

- 16 Water Pump
- 17 Pump Valves x 2

Note:

1. In Multi-Zone systems using a buffer, the controller cannot be the room thermostat.
2. Room thermostats need to be supplied by the installer.
3. TRVs areallowed on the radiators.
4. Always use 22 mm pipe on the Ecogen290 -2, 28 mm on the Ecogen290-3 and 4, and 35 mm on the Ecogen290-6.

Multi-Zone Heating and Hot Water



The hot water cylinder sensor plugs into T8. The sensor is 10 m long. It must go in the cylinder above the immersion heater.

Room thermostats wire from 4 to 5, unit runs in heating when link is made.

If 3-Way Valve port A is connected to the cylinder, wire 6 to live and 8 to neutral. If 3-Way Valve port B is connected to the Cylinder wire 7 to live and 8 to neutral. 7 is live, 8 is neutral in Heating. 6 is L and 8 is N in DHW mode.

Pump after buffer. Wire 14 Live, 15 Neutral, it only runs in heating mode

Immersion heater L to 20 and N to 21 in cylinder, but ONLY if under 2000 Watts.

Unit	Power Supply
Ecogen290 -2	16 Amp
Ecogen290 -3	25 Amp
Ecogen290 -4	32 Amp
Ecogen290 -6	16 Amp (3 Phase)

Controller (10 m)

Set-Up

The table below shows the minimum system water content recommended for each unit. To ensure proper operation of the heat pump, this minimum content must be met.

Unit	Ecogen290 -5	Ecogen290 -8	Ecogen290 -11	Ecogen290 -16 *(3 phase)*
Water Volume	65	100	150	200
Radiators	6	10	12	15

Before you start heating, fill the system with water to 1-2 Bar. Ensure you get all the air out - there is an Auto Air Vent in the heat pump, which will help.

- Make sure you also bleed all the air out of the radiators.
- The heat pump comes configured for Open Zone heating with a hot water cylinder.
- Power it up and you will see a screen like the beside:

You have to make a few settings to the unit before you can start heating.

01 Press the menu symbol ☰

02 Press Setting ⚙, then **Modify parameters**. It asks you to input a password, it is **2345**, then Press **OK**.

03 Go to **01 DHW parameters setting**.

04 If you have wired the immersion heater from the heat pump, set **002 Disinfection** to 1, if not set to 0.

note : The cylinder needs to get to 60C once a week, so you will need to set the immersion heater to do this.

05 Go to **011 T8S-d1** and set the legionella temperature to 60C.

06 Return to the **Modify parameter** screen, press **03 Heating parameter** setting, scroll to **003 H_ModeTAo Max**, press and set this to 20C. This tells the heat pump to stop heating the house in warm weather.

07 Scroll to **003 H_ModeTAo Max**, press and set it to 20C. This tells the heat pump to stop heating the house in warm weather.

08 Press return ⮌, then press the right arrow and go to 6 on **room thermostat setting**.

07 Press **001 thermostat**, set to 1, this disables the on/off button on the controller, and so the unit now operates using the room thermostats.

Weather Compensation

You should tell the unit to operate in “weather compensation” as this saves the home owner 20-30% on the run cost by running the radiators at lower temperatures on warm days and higher temperatures on cold days.

01 Press the menu symbol

02 Press **Service** and then **Climate curve**.

03 Move the slider to switch on heating, it goes orange when it is on.

04 Now press **Zone 1**, **High Temperature** Heating and then **Customisation**.

05 In the **customised curve** screen, slide the switch right so it goes orange.

06 Press **T5SetH1**, type in 50, press **OK**.

07 Press **T5SetH2**, type in 35, press **OK**.

08 Press **TaoH1**, type in -2, press **OK**.

09 Press **TaoH2**, type in 15, press **OK**.

10 Press the symbol of a floppy disk , then press to return to the home screen. Now turn off the power for 30 seconds - the unit will reboot with your new settings.

Testing Heating Mode

01 With the remote controller disabled, the heating is completely controlled by your external thermostat/thermostats.

02 If you try to use the power button on the controller it will let you press on/off but 10 seconds later it will switch off again.

03 Turn any thermostat up in the house to give the unit a start signal, the unit will start in heating. When the unit is off it shows the current room temp, when its running it shows the temperature its trying to get to. The unit takes 3 minutes to start. Once its running the house will go orange to tell you it is in heating mode.

04 At the bottom of the controller in orange is the current room temperature.

05 At the top of the controller screen a circle with a triangle will appear , this tells you the water pump is on.

06 After 3 minutes the compressor will appear top left in orange , now the heating is running.

07 Leave the system on for 15 minutes then check that every radiator is warm and all of them are the same temperature.

08 Make sure the radiators are balanced properly and make sure there are no TRV heads on any of the radiators (a maximum of 1 TRV for every 5 radiators is however allowed).

If the Date/Time needs changing or the beeping from the controller/brightness needs adjusting, see Section 9.

If the system is set up or wired up incorrectly a fault code will appear at the bottom of the screen (see Section 11).

Testing Hot Water Mode

01 Press the power button on the right to switch the hot water on/off.

02 On screen it tells you the current water tank temperature.

03 When the unit is off it shows the current cylinder temperature.,The unit takes 2 minutes to start.Once its running the tap symbol will go orange to tell you it is in hot water mode.

04 To increase the cylinder temperature, press **+**, to reduce it press **–**. We recommend setting this to 50C.

05 Note the unit's priority is hot water - if the cylinder falls 5 degrees C in temperature it will automatically reheat. It cannot do heating and hot water at the same time so in hot water mode, the heating is stopped.

06 Note in hot water mode the 3-Way Valve points towards the cylinder. Check that when it is in hot water mode, the cylinder temperature rises. It's a good idea to do a 30-minute hot water cycle to prove it is working.

07 To set cylinder timers, see Section 9.

08 Once you are happy the unit operates well in both modes, you can hand over to the customer and complete the warranty registration (Section 12).

09. Settings - Clock, Controller and Timers

Clock

01 Press Menu

02 Then press Schedule

03 Then press Time

04 Now, adjust year, month, day, hour and minute.

05 Press the floppy disk to save, then press home to exit.

Controller

01 Press menu

02 Press Display

03 In this screen you can adjust the brightness, sound level and how long the screen stays on for after being touched.

04 Press the floppy disk to save, then press home to exit.

Timers

01 Press menu

02 Press Schedule
Press Time

03 Set the top timer (Timer 1) first.

Note you can have as many timers as you need (Timer 1, Timer 2 etc.).

04 Each timer can have heating or hot water or both. In the above example, note the top timer is active and so is orange (use the slider to activate /deactivate it) and is for both heating and hot water.

05 To adjust each timer simply select it.

06 You can adjust the start or boot time, the shutdown or off time.

07 Note which zone of heating you are controlling – in the above it is Zone 1 1 2

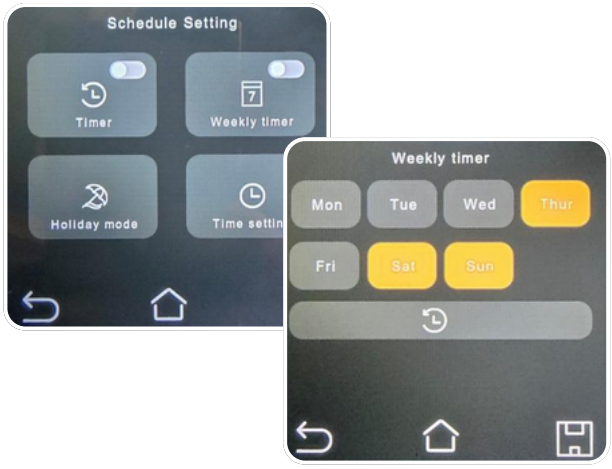
08 Make sure it is on heating - it shows a sun symbol not an icicle

09 Set the temperature you want to achieve.

10 Likewise you can turn on the hot water and set its temperature too.

11 Press save before exiting

12 If you want to have different timers on different days, go to Schedule Setting and press the the Weekly timer and you will be able to set times by each day of the week.



10. Performance Check

01 Press menu then press Setting .

02 Press **Operating parameters.**

03 003 Sv3 is the position of the 3-Way Valve

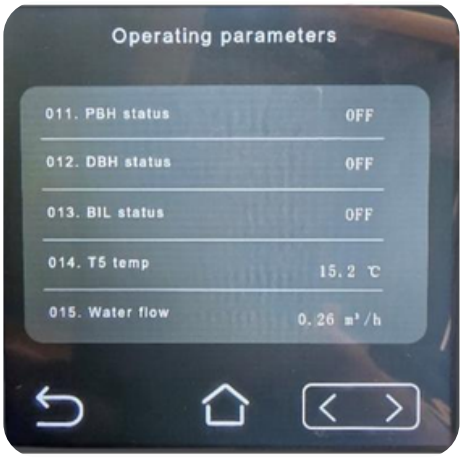
- **off** is heating
- **on** is hot water

04 Press the right arrow twice.

05 Look at 014 T5, this is the flow temperature.

06 Look at 015 water flow, this is the flow rate.

07 1.2 m3 per hour is ideal for the Ecogen290-5 unit, 1.6 m3 per hour for the Ecogen290-8, and 2.4 m3 per hour is ideal for the Ecogen290-11.



Energy Consumption

01 Press Menu , then press **Consumption**

02 At the top is the instantaneous energy consumption, this is best ignored as it varies all the time.

03 Below it however is the total energy the unit has consumed since new, the heat it has produced and the COP (Coefficient Of Performance). The COP indicates the system's efficency - if your COP is over 3 that's good, over 4 is amazing.

11. Fault Codes

If a fault occurs it will show in the bottom left of the controller, for example, F05 in the below:

Three fault codes could appear within the installation process:

F01 indicates that the hot water cylinder temperature sensor is not plugged in at the heat pump. Check the flying lead and that the sensor cable has not been cut

F08 indicates that the temperature sensor for zone 2 is not plugged in. Is the unit set up for 2 zones? If yes, you must plug in a second temperature sensor. We recommend only ever setting the unit to 1 zone. If you reset to 1 zone in the controller, the error will disappear.

F05 indicates that the water is not moving quickly enough around the system. It is possible the filters are dirty, there is air in the system, flexi-hoses are kinked or a valve is shut blocking the system. Check all of these and restart the unit to see if the error code has now disappeared.

For a full list of fault codes, their meanings and recommended actions, please see **https://ecogenica.co.uk/products/.**

If you cannot resolve any fault, please ring our Technical Support Team on **0808 273 5159** or email **info@ecogenica.co.uk.**

How do you clear a fault code after the fault has been rectified? Some faults can be cleared by switching the controller off and on again. If this does not work, reset the power, switch it off for 15 seconds, then switch it on again.

To see a full history of the fault codes that the unit has reported, press menu then press Setting and **Fault code.**

12. Warranty

- Ecogenica offers two warranties: Standard Cover, which is included in the purchase price of the heat pump unit, and Premium Cover, which can be purchased for an additional £200.
- Both warranties cover only the heat pump and controller. They do not cover installation errors, pipework, radiators or underfloor heating in the house.
- All the accessories that come with the unit (cylinders, valves, switches and pumps) are covered by a two-year, parts-only (no labour) warranty.
  If these parts fail, they will be replaced free of charge under warranty, but the installer will charge to diagnose, remove and fit them.
- It is important that the homeowner decides at the time of purchase which of the two warranty options for the heat pump and controller they would like.
- The warranty of choice will be registered with Ecogenica by the installer.
- Once the warranty level is chosen and registered, it is not possible to up/downgrade.
- Under both Standard and Premium warranties, the installer who installed the unit attends the site to service the unit and rectify any problems.
- If they cannot do this, the distributor and/or Ecogenica will recommend another installer from a list of accredited installers who will be invited to take over this work.
- If an installer cannot be located, Ecogenica will send a service engineer within the next 7 days.
- If the unit has a problem, the installer can call Ecogenica from the site to report the fault and ask for help if necessary.

Registration Process

- The installer must submit photos of the installation as part of the warranty registration process (see details on the following page).
- This enables the Ecogenica technical support engineers to ensure the quality of the installation and to advise the installer on any changes that may need to be made, thereby reducing the chance of performance issues, faults or problems that will require the installer to return to the site.
- The installer can email these photos or WhatsApp them to the Ecogenica technical support team, where they will be held on file.
- This registration process has been designed to be much simpler and quicker than the industry standard, which involves filling in a form, scanning it and emailing it in.
- If the photos are not acceptable, the installer will be asked to re-take and re-submit them.
- Warranty cover will only be activated once these photos have been submitted to the required quality and no issues are detected.
  Any changes required will require the submission of new photos showing that those changes have been made.

The photos must show the following:

01 Sticker/label on side of the unit stating model type, date of manufacture etc.

02 Outdoor unit installed including feet.

03 Drainage area for the unit.

04 Pipework behind the unit.

05 Hot water cylinder.

06 Heat pump controls wiring.

07 Pipework going to cylinder.

08 Weather compensation curve setting on controller.

09 Hot water setting on controller.

Each unit comes with a 2-year warranty, but this can be upgraded to a 7-year warranty for a fee of £200 payable when the heat pump is purchased. Details of each type of cover are as below:

Standard Cover

- The warranty covers the cost of the parts, and there is a fixed labour allowance for repairing the unit depending on the work to be undertaken.
- For example, for a compressor the allowance may be £150, whilst a fan motor receives £50.
  This will be irrespective of travelling distance or time.
- The allowance will change over time so updated details will be available on request.
- Warranty spares come directly from Ecogenica, and the aim is to deliver within 24 hours.
- A visit from an Ecogenica service engineer is charged at £600 a day, paid by the installer previsit.
- Ecogenica will refund the fee if the problem is directly attributable to the heat pump, not leaking radiators, etc.
- The installer is responsible for deciding if they will pass this charge on to the homeowner.

Premium Cover

- For £200 the warranty cover can be extended to 7 years from the date of delivery to the site.
- In addition, Ecogenica offers a performance guarantee that a technical support engineer will call the installer back within 15 minutes of office hours.
- Ecogenica will pay for all parts and a fixed labour allowance during the 7-year warranty using a fixed labour charge (see Standard Cover).
- If the installer cannot repair the problem, Ecogenica will provide a replacement service exchange unit of similar age and condition free of charge and will collect the faulty unit at the same time.
- Every spare part for the unit is kept in stock and can be shipped anywhere in the UK the next day with DPD tracking.
- When an installer installs their first Ecogenica unit, Ecogenica will provide a bookable free video call to help with the commissioning. The installer simply pre-books a time with our technical support team, and they will call the installer at the agreed time to talk the installer through the commissioning process, which should take approximately 30 minutes.
- Ecogenica will also provide the installer with a video that can be watched on-site to explain the commissioning process.
- A visit from an Ecogenica service engineer is charged at £450 a day and is guaranteed within 3 working days of the fault being reported. The installer must pay the £450 pre-visit. The service engineer will meet the installer on-site to assist in repairing the unit and fixing any problems on-site.
- Ecogenica will refund the fee if the problem is directly attributable to the heat pump, not leaking radiators etc.
- The installer is responsible for deciding if they will pass this charge on to the homeowner.

13. Maintenance

The heat pump should be serviced **ONCE A YEAR** to comply with the warranty.

The installer should provide the homeowner with evidence of all servicing so that the homeowner can keep a log in the event of any warranty claim.

Maintenance should be covered by the installation contractor. If the installer is not available another Ecogenica qualified contractor can take over the maintenance and warranty.

The annual service should include the following:

01 Stop the unit, clean the Magnetic Filter and replace the strainer.

02 If Glycol or an anti-freeze is in the system, test the level using a Glycol tester - the level should be 25%. If you don't have a glycol tester, a glycol tester/refractometer can be bought from your heat pump supplier or online.

03 Refill the unit, pressure should be 0-3 bar, open all valves.

04 The operation of the unit against the hot water cylinder needs to be tested. First, draw off 50 litres of water - run a couple of taps for 5 mins to achieve this. The unit should start up automatically in hot water mode. If it does not, press the DHW power button on the controller. In 3-4 mins it will start heating the cylinder and a compressor symbol will show at the top of the remote controller. The heat pump should be able to achieve 50C cylinder temperature without using the immersion heater.

05 While running, check the outdoor unit for damage and debris.

06 Clean the coil. We recommend that an approved air conditioning or heat pump cleaning chemical be used - your distributor will stock this. Instructions are given on the bottle.

07 Clean and polish the outside casing - we recommend car wax or ACF50 to do this.

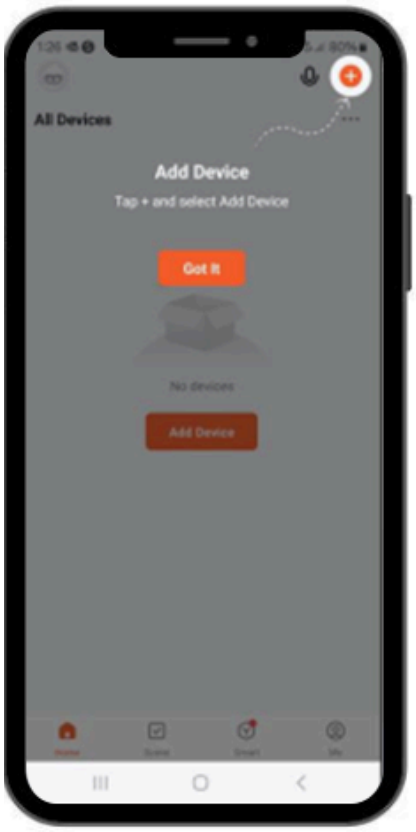
08 Measure the temperature of the flow using the remote controller (See Section 10).

09 Measure the flow rate from the flow meter (See Section 10).

10 With the unit running flat out, measure the temperature of the air as it enters the coil and the temperature of the

14. Wi-Fi App

The App is called TuyaSmart and can be found on the App Store or Google Play.



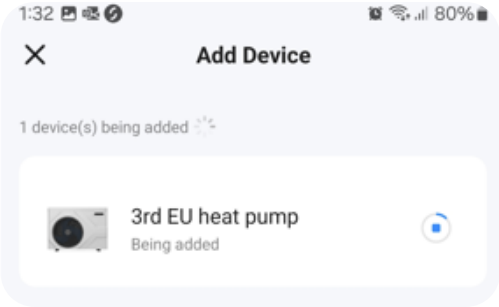
Once downloaded you need to find your heat pump.

01 First turn the power off to your heat pump for 30 seconds – it is only in pairing mode after the power is restored.

02 On the App start searching for a new device by pressing the +

Important:
On the heat pump controller, press ☰ , press Wi-Fi then **Reset.**

03 The App will now show you a list of the units it can see. You are looking for a 3rd EU heat pump.



04 Once you have successfully paired the unit to the phone, click on it. Now enter the Wi-Fi password and hold your phone near the heat pump so it will be added to the network.

05 The App will search again and once it is found, press Done.

06 Then you are away and can start, stop, set temperatures etc.

ECOGENICA

INNOVATION MEETS TECHNOLOGY

Contact Us

Should you have any questions or require further information or support, please do not hesitate to contact us at:

info@ecogenica.co.uk

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