

# Installation Instructions

**ECOMBI SSH**  
**Digital Smart Storage Heaters**

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ECOSSH158 | ECOSSH208 | ECOSSH308 | ECOSSH408



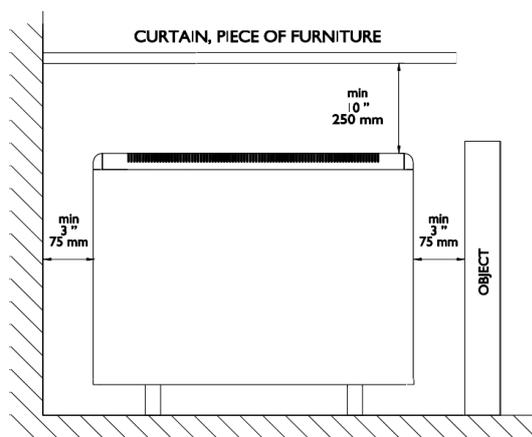
Please read these instructions carefully before installing or using this appliance for the first time.

**ELNUR** powered by  
**Gabarrón**

# 1. IMPORTANT INFORMATION

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury, including the following:

- Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, etc. and curtains at least a foot (30cm) from the front, sides and rear of the heater. It is essential that the indicated minimum clearances are maintained.
- **CAUTION** – Some parts of this product can become very hot and cause burns. Particular attention must be given where children and vulnerable people are present.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved. Children must not play with the appliance. Cleaning and user maintenance must not be made by children without supervision.
- Children aged from 3 years and less than 8 years shall only switch on/off the appliance provided that it has been placed or installed in its intended normal operating position and they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children aged from 3 years and less than 8 years shall not plug in, regulate and clean the appliance or perform user maintenance.
- Children of less than 3 years should be kept away unless continuously supervised.
- Do not operate any heater after it malfunctions. Disconnect power at service panel and have heater inspected by a reputable electrician before reusing. To disconnect heater, turn controls to off, and turn off power to heater circuit at main disconnect panel.
- Do not insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire or damage the heater.



- Do not use this heater to dry clothes. To prevent a possible fire, do not block air intakes or exhaust in any manner. Air inlets and outlets provide proper operation of the appliance and prevent its overheating. **DO NOT** cover air inlet and outlet grills.
- A heater has hot and arcing or sparking parts inside. Do not use in areas where gasoline, paint, or flammable vapours or liquids are used or stored. The use of these heaters is forbidden in any area where there is a presence of gases, explosives or inflammable objects. Never open a charged heater.
- **SAVE THESE INSTRUCTIONS.** This guide must be kept and given to any new user. Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons. The warranty of the heater will not cover any damage caused by non observance of any of these instructions.
- Do not use this heater outdoors.



**WARNING:** In order to avoid overheating do not cover the heater.

## 2. INSTALLATION INSTRUCTIONS

The symbols used in the text are explained below:

 **WARNING** This indication shows the possibility of causing death from electric shock.

 **WARNING** This indication shows the possibility of causing death or serious injury.

 **CAUTION** This indication shows the possibility of causing injury or damage to properties only.

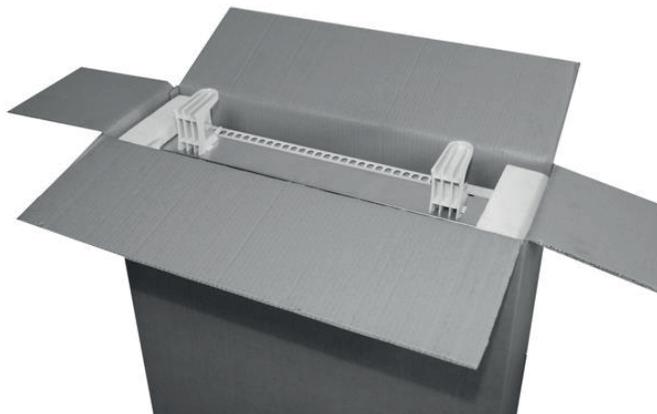
 **Symbol for useful information.**

**IMPORTANT:** Wiring procedures and connections shall be in accordance with the national and local codes having jurisdiction.

- The installation must be carried out in accordance with the current local electrical regulations. Any installation or reinstallation has to be carried out by an experienced technician.
  - Neither the connecting cable nor any other object must come into contact with the hot unit.
  - Please check that the voltage in the rating label fits the power supply. The nominal charging period of this heater is indicated in the rating label. This appliance must be grounded.
  - The appliance should not be installed just below an electrical socket.
  - The appliance must be installed in such a way that it is impossible for anyone using a bath or shower, to touch the controls.
  - If during any installation the thermal insulation shows any sign of damage, it must be replaced.
  - This heater should be switched off at the circuit breaker before any repair work is carried out. This should also be done during times of the year when heat is not required.
  - This appliance is only for permanent connection to a fix installation. The supply circuit to the heater must incorporate a double pole isolating switch having a contact separation of at least 3 mm.
- After installation a survey of the first charging cycle should be carried out to ensure that the main input thermostat switches off. Ventilate the room during this first cycle.
  - To maintain stability, it is essential that the heater is placed on a level surface and care should be taken to avoid irregular surfaces, such as may result from carpets or tiled surrounds partially protruding under the heater.
  - The presence of air particles of smoke, dust and other pollutants could, in time, discolour the walls and surfaces around the heater.
  - Incorrect time settings, erroneous programming of the reduced rate time and too high temperature settings may result in a high cost of your electricity bill.

In order to achieve a correct installation of this device, follow these steps:

1. Choose the right location to install ECOMBI SSH. The minimum clearances must be respected from the appliance to any combustible material such as furniture or curtains. **To reduce the risk of fire, do not store or use gasoline or other flammable vapours and liquids in the vicinity of the heater.**
2. Open the carton at the indicated side and install the supporting feet without removing the heater.



Turn the carton upside down to allow the heater to stand on its feet and remove the carton. Check that it is the correct model and that it is in good conditions.

**Check that all parts have been delivered and are intact.**

- 1 Ecombi SSH heater casing.
- 1 bag containing 2 screws and 2 rawl plugs.
- 2 supporting feet.
- This guide.
- 1 superior fixing fitting.
- 2 lateral fixing fitting, already installed on the heater



**The casing and storage bricks are supplied separately. Check the supplied bricks packages correspond to the ones indicated on the heater carton.**



**The heater operation is not affected if bricks with minor damage are used.**

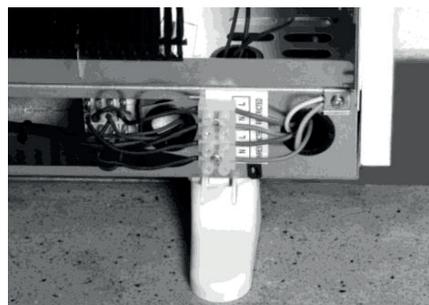
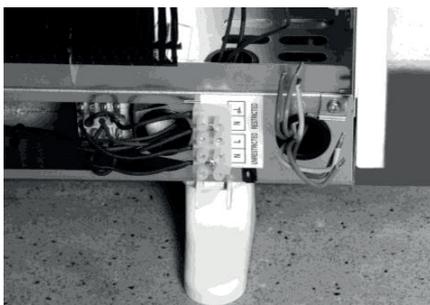
3. Take off the front panel by removing the two screws located at the bottom. Fix the lateral fittings to the metal structure by using the appropriate screws.



4. Place ECOMBI SSH in your selected installation area. Use the heater fixing holes as a template and mark the wall through the fixing holes with a pencil. Drill the required holes into the wall. Place the rawl plugs and screws into the holes before the appliance installation but do not fasten them tightly.
5. Attach ECOMBI SSH to the rawl plugs with the screws. **IT MUST NOT BE HUNG ON THE SCREWS;** these are used only to prevent the device from overturning and not to support it. If there is any doubt concerning the wall strength, consult the corresponding construction specialist. The appliances are heavy; it is the installers responsibility to ensure the correct installation and wall support of these devices to prevent them from overturning.
6. Connect the heater using the wiring diagram included at the end of this manual. Tighten properly the connection block screws. Do not leave any remaining wire inside the heater.



**Touching live connections can cause serious personal injury.**

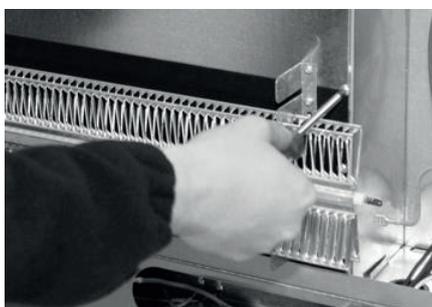


7. Disconnect the aluminium heating element by removing the FAST-ON terminal on each end of the element.



**WARNING: Steel edges can cut.**

Next unscrew the inner panel and remove it.

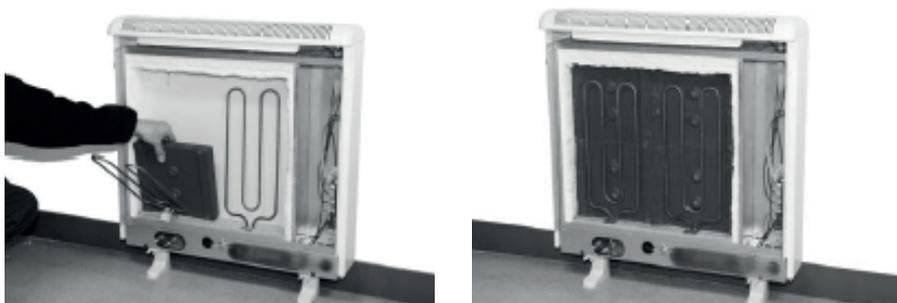


**CAUTION: In the interior part of this inner panel there is a very delicate thermal insulation MICROTHERM panel. It has to be handled with extreme care. AVOID TOUCHING IT.**

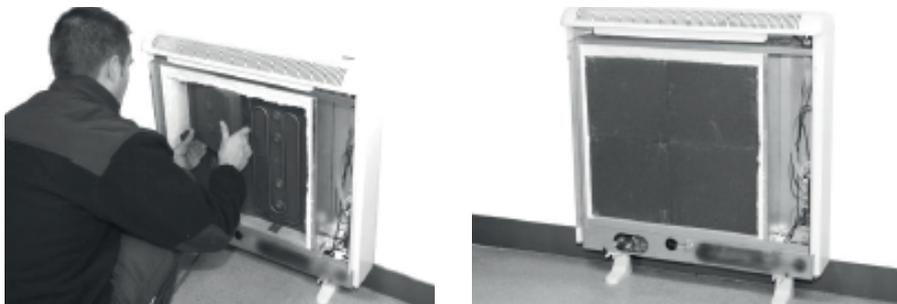
8. Do not disconnect the electrical heating elements. Remove the packing cardboard. Lift and tilt the elements outwards being careful not to damage the insulation on the bottom of the heater.



9. Place the storage bricks carefully, with the flat side facing the back of the heater. Arrange two row levels of bricks.



10. Place the heating elements back into their original position. Place the other two rows of storage bricks with the flat side facing out and always on the heating elements supporting tabs.



11. Replace the inner front panel. If the bricks have been fitted correctly you will have no difficulty in replacing the panel. Make sure the bottom edge of the inner panel is inside the front lip of the heater. Please see below:



Right Position



Wrong Position

12. Reconnect the two FAST-ON terminals to the aluminium heating element attached to the inner panel at both ends.
13. When replacing the exterior front panel, align the 2 plastic upper pegs on the heater with the holes in the exterior panel. Push the top up into place and push the bottom in until it rests on the plastic feet.
14. Replace the front panel with screws.

## RELOCATION



**WARNING: Relocation to another location must be carried out by an experienced technician.**

If during reinstallation the thermal insulation shows any sign of damage, it must be removed and replaced by an identical part.

## MANUALLY RESET TEMPERATURE LIMITER



**MANUALLY RESET TEMPERATURE LIMITER**

This heater employs a manually reset temperature limiter (see LR in the connection diagram).

This safety device operates when high temperatures are reached at the top of the heater. It requires re-setting manually: Let the heater cool. The cause of overheating should be investigated.



**WARNING: Re-setting manually must be carried out only by an experienced technician.**

Turn off the heater at the circuit breaker.

Take off the front panel by removing the two screws located at the bottom. Find the limiter LR in the connection diagram and push the small pin until a click is heard.

# 3. OPERATING INSTRUCTIONS

## 3.1 General information



**CAUTION: DO NOT USE THIS HEATER TO DRY CLOTHES.**  
Do not cover this heater at any time.



### Connection/Disconnection

Power switch. All models are equipped with a switch on the back side panel. It is used to Turn On and Turn Off the ECOMBI SSH.

### Keyboard:



### On/Off

Once the heater is connected to a mains supply you can turn the heater ON by switching the main ON/OFF switch positioned on the rear of the right hand side of the heater as shown above.

### Backlight

Press any button and the display will illuminate with a soft white colour. The display back light will turn off after time if no buttons are pressed.

Programming Buttons will only respond when the back light is on.

### Keyboard Lock



During any operation mode, it is possible to lock the keyboard. You can do this by holding both the **+** and **-** buttons simultaneously until the padlock indicator is displayed on the screen.

To unlock the keyboard, press the **+** and **-** simultaneously until the padlock indicator disappears from the screen.

### 3.2. Quick Start

Ecombi SSH quick start only requires 2 easy settings:

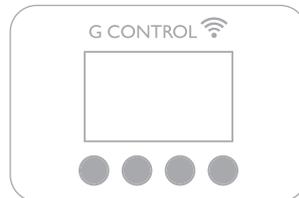
#### TIME AND CHARGE SETTING

Charging Hours: By default, Ecombi SSH off-peak period is set from 00:00 to 07:00. In case off-peak period of your electricity tariff does not match with this setting, you can easily modify it:

- With backlight on, keep pressed  button for 5 seconds until the message "Func." is displayed blinking to access the general configuration menu.
- Press  button until the text "PARA" is displayed blinking.
- Press now  button to access general parameters menu (PARA).
- Parameter UP01 is displayed. Charging period used by Ecombi SSH goes from UPO2 parameter (Charging period start. By default 00:00) to UPO3 parameter (Charging period end. By default 07:00).

- Use  and  buttons to move forward and backward until the parameter to be modified is displayed. Press  button to access the parameter value.
- Use  and  buttons to modify the time of the start / end of the charging period. Use  button to confirm the desired value.
- Press  to exit main menu.

**Time setting:** Ecombi SSH time setting is set on factory by default. Check the time setting in your device. In case time setting is wrong, you can easily modify it following next steps.

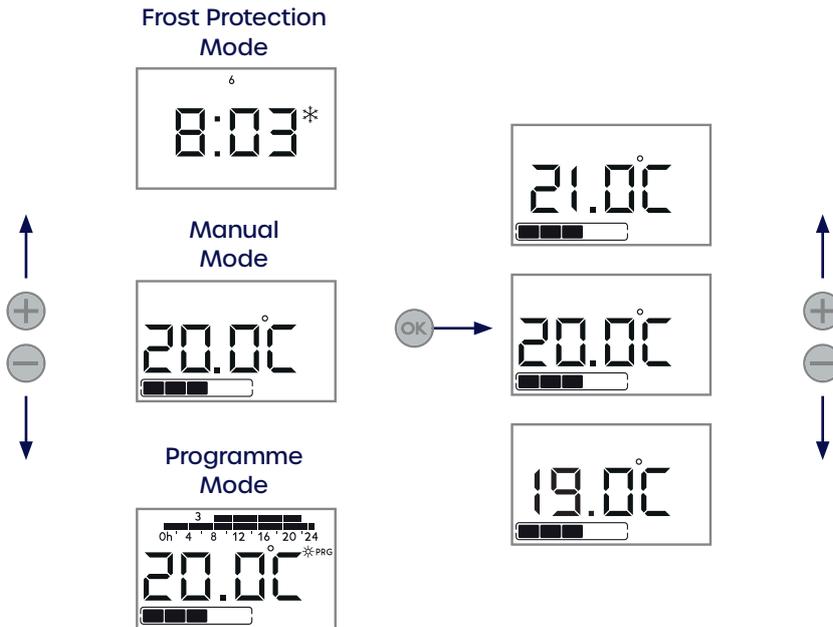
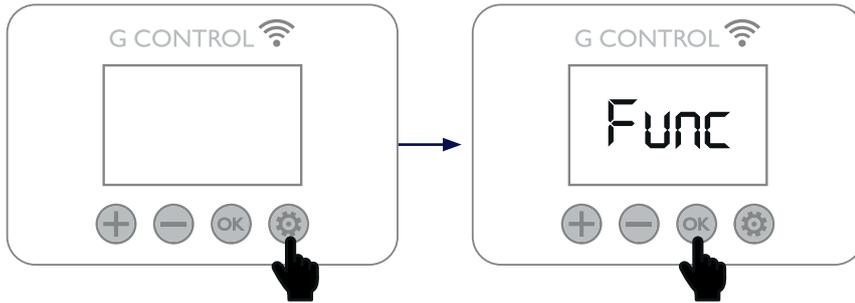


-  MODIFY HOUR
-  CONFIRM AND ADVANCE TO MINUTE SETTINGS
- 
-  MODIFY HOUR
-  CONFIRM AND ADVANCE TO WEEKLY DAY SETTINGS
- 
-  MODIFY DAY OF THE WEEK
-  DAY 1 = MONDAY
-  DAY 7 = SUNDAY
-  CONFIRM AND EXIT

# OPERATION MODE SETTING & TEMPERATURE SET POINT

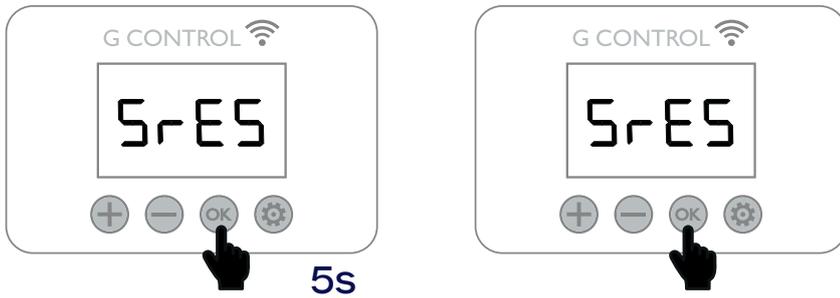
1. With backlight on, keep pressed  button for 5 seconds until the message **"Func."** is displayed blinking to access the general configuration menu.
2. Press  button when the message **"Func."** is displayed to access operation mode menu.
3. Press  or  buttons to select manual (24hours Set-point Temperature) operation mode. Press  button to confirm.

Current charge level and set-point temperature are displayed in this mode.



### 3.3. DEFAULT SETTINGS & UNIT RESET

To reset the unit to factory default settings, hold  and  simultaneously until the message "SrES" is displayed. Confirm the reset with .



#### Default Values

<b>Sun:</b> Comfort temperature		21°C
<b>Moon:</b> Economic temperature		18°C
<b>Frost:</b> protection temperature		3°C
<b>UP01:</b> Initial % of storage charge		100%
<b>UP02:</b> Starting time off peak period 1		00:00
<b>UP03:</b> Ending time off peak period 1		07:00
<b>UP04:</b> Starting time off peak period 2		00:00
<b>UP05:</b> Ending time off peak period 2		00:00
<b>UP06:</b> Charging days of the week		Default -> Charging 7 days of the week.
<b>UP07:</b> Ambient sensor Offset		0°C
<b>UP08:</b> Max. Balancing element - working period		16 hours
<b>UP09:</b> Overtemperature protection		2°C
<b>UP10:</b> Temperature Unit		°C
<b>UP11:</b> Open Window Detection Function		Off
<b>UP12:</b> Adaptive Start Control		Off
<b>UP13:</b> Kind of temperature control		PID
Default Programming		Comfort: 07:00 to 22:00. Eco: 00:00 to 07:00 & 22:00 to 00:00.



**Incorrect time settings, erroneous programming of the reduced rate time and too high temperature settings may result in a high cost of your electricity bill.**

## 4. REMOTE OPERATION USING THE WIFI G-CONTROL HUB

It is possible to control the full operation of the Ecombi SSH remotely with the Elnur-Gabarron app or web-app. The unit must be connected to a G-Control Hub connected to the Internet to use this feature. (Wifi is needed for this feature)

**4.1** To associate the unit to the G-Control Hub, the discovery mode must be activated. Press the associate button at the back of the hub for 3 seconds. An orange flashing light every second indicates association mode.

**4.2** With the hub in association mode, press  on the storage heater for 3 seconds until Link  is shown.

You can control and adjust the programming and temperatures on the Ecombi SSH via the Gabarron-Elnur app.

**4.3** To disassociate the unit, a reset of the unit must be realized. See "Default settings and unit reset". When the storage heater is reset, it will remove the programming and revert back to the default settings and also disassociate from the RF network and G-Control Hub.



## 5. TROUBLESHOOTING

ECOMBI SSH does not heat.

Please check it is connected and switched on.

ECOMBI SSH does not reach set up temperature

Make sure that adequate temperature is selected.  
Make sure the storage heater is sized correctly for heat loss.

"Err" Message in display

Please contact technician.

Keyboard does not respond

If the symbol  is displayed, the keyboard is locked. Hold "+" and "-" buttons simultaneously for 3 seconds to unlock the keyboard. (See Keyboard Lock Section).

ECOMBI SSH does not communicate with the G Control Hub.

Check the unit is associated, the symbol Link  must be shown on the display LCD.  
For distances greater than 30 metros and 2-3 walls, associate first the closest units. Each unit can work as signal extender.  
If Link  symbol is flashing, check the G Control Hub connexion to the network, and if any other device in the RF Net that could be working as signal extender has been removed.

## 6. CLEANING MAINTENANCE INSTRUCTIONS

Before cleaning, make sure the power has been turned off at the circuit breaker panel and that the heating element of the heater is cool.

Occasionally, clean dust with a dry, soft cloth. Do not use any solvent or abrasive product for cleaning.

When the Heating season is finished, please disconnect the device by turning off the power switch located at the right side on the back of the unit or at the circuit breaker.

Any other servicing should be performed by an authorised technician.



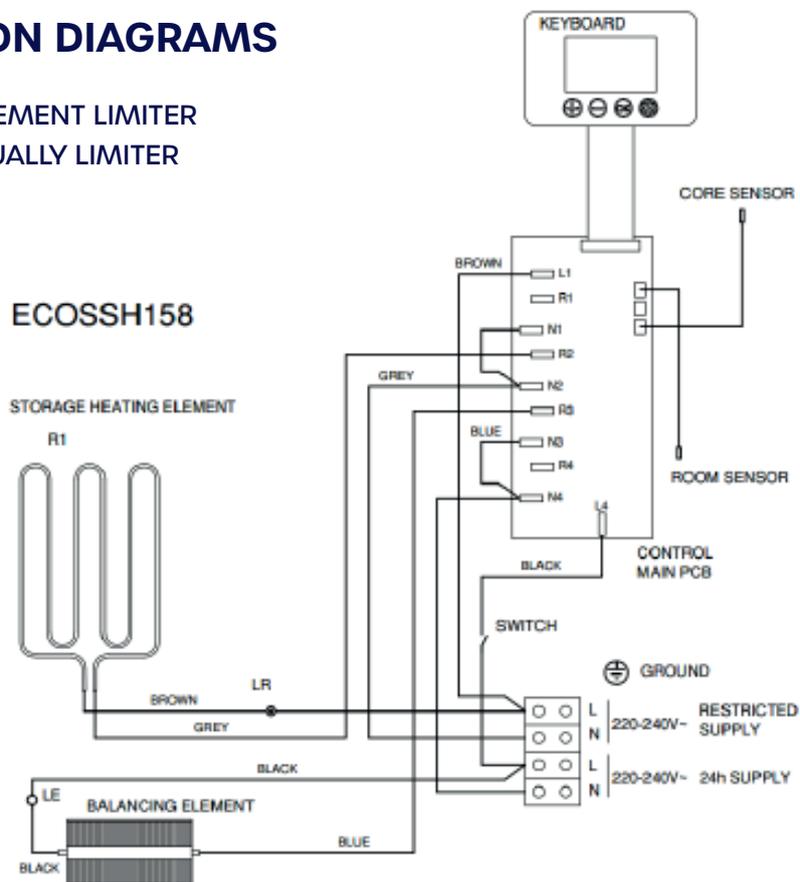
ECOMBI SSH has been manufactured under a fully assured quality system and using environmentally friendly processes. Once its useful life is finished please take the device to a recycling depot so that its components can be recycled in an appropriate way.

## 7. MAIN COMPONENTS LIST

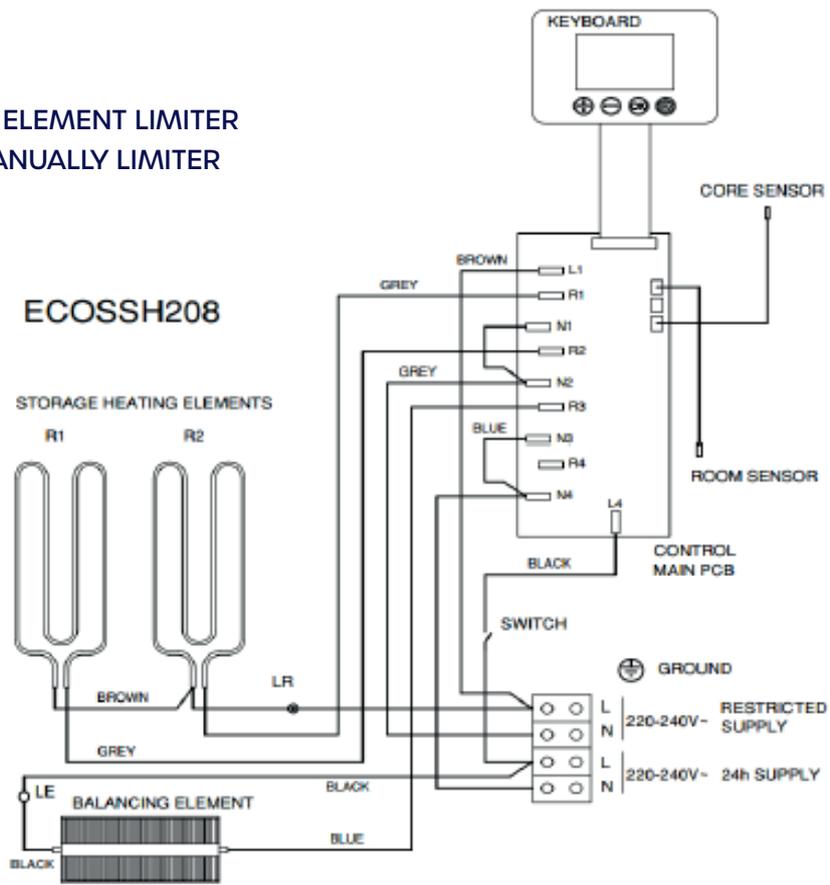
Storage Heating Element (All except ECOSSH158)	Ref. 15190091
Storage Heating Element (ECOSSH158)	Ref. 15190875
450W Balancing Heating Element (ECOSSH158)	Ref. 15190105
600W Balancing Heating Element (ECOSSH208)	Ref. 15190110
900W Balancing Heating Element (ECOSSH308)	Ref. 15190120
1200W Balancing Heating Element (ECOSSH408)	Ref. 15190130
Switch	Ref. 46100530
Power PCB & Fixing Bracket	Ref. 15191890
Keyboard PCB ECO SSH	Ref. 15191873
Core Sensor	Ref. 15192140
Room Sensor	Ref. 46102195
110°C Balancing Element Limiter	Ref. 15190725
135°C Cut Out Manually Limiter	Ref. 10190460

## 8. CONNECTION DIAGRAMS

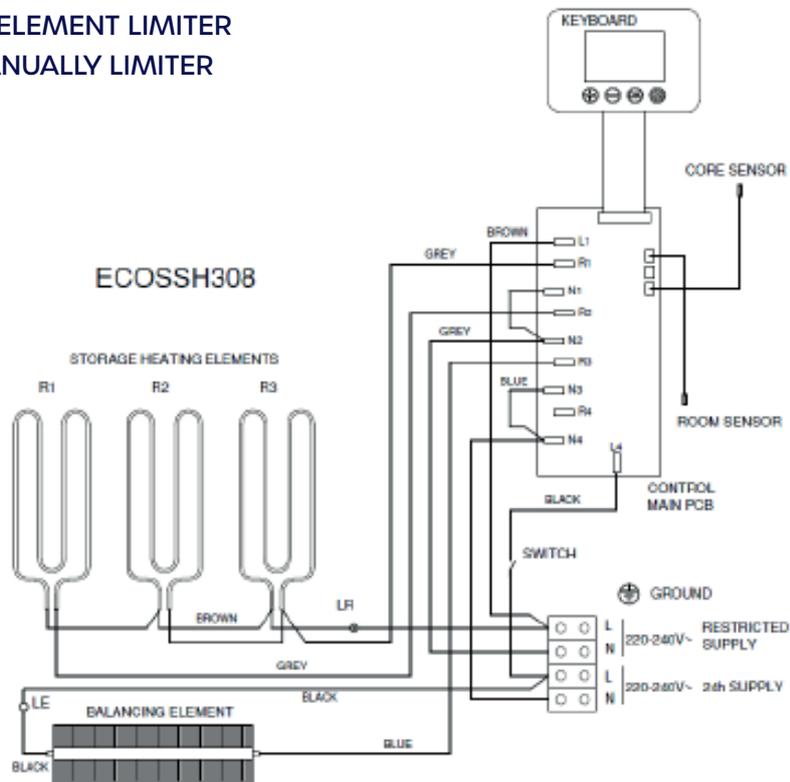
- LE BALANCING ELEMENT LIMITER
- LR CUT OUT MANUALLY LIMITER



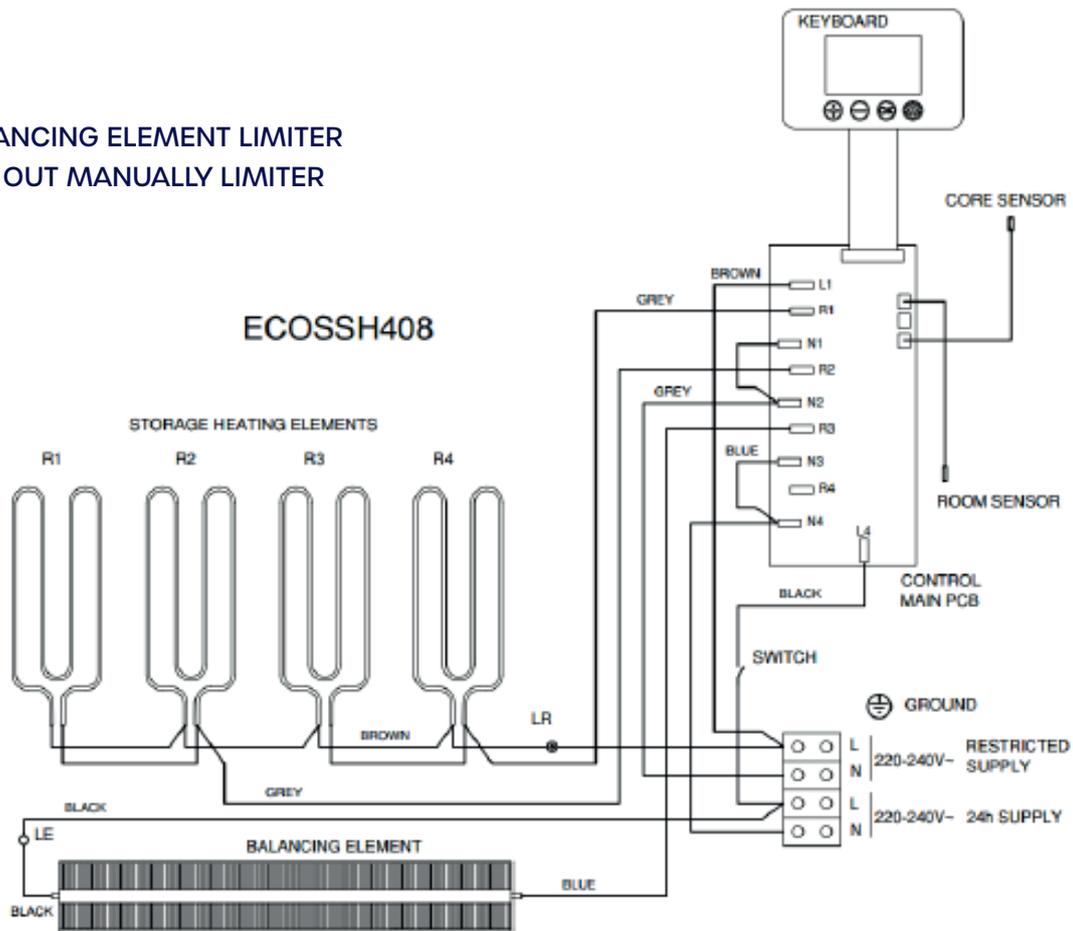
LE BALANCING ELEMENT LIMITER  
 LR CUT OUT MANUALLY LIMITER



LE BALANCING ELEMENT LIMITER  
 LR CUT OUT MANUALLY LIMITER



- LE BALANCING ELEMENT LIMITER
- LR CUT OUT MANUALLY LIMITER



## 9. TECHNICAL FEATURES

Model	ECOSSH158	ECOSSH208	ECOSSH308	ECOSSH408
Connection	220 - 240V -			
Balancing Element Output	450/490W	600/653W	900/980W	1200/1307W
Storage Heater Output	975/1062W	1300/1415W	1950/2123W	2600/2831W
Charge Period	7.6 - 7h	7.6 - 7h	7.6 - 7h	7.6 - 7h
Charging	7.4 kWh	9.9 kWh	14.9 kWh	19.8 kWh
Insulation	Class I	Class I	Class I	Class I
Length	55cm	66cm	89cm	111cm
Height	73cm	73cm	73cm	73cm
Depth	18cm	18cm	18cm	18cm
Weight	59kg	77kg	112kg	147kg
Num. Of Bricks 7,5kg	-	8	12	16
Num. Of Bricks 11,5kg	4	-	-	-
Brick Type Package	11072	11016	11016	11016



Storage heater elements and balancing heating element will never operate at the same time.

# PRODUCT FICHE

MODEL(S): GABARRON ECOSSH158, ECOSSH208, ECOSSH308, ECOSSH408

## ErP

Item	Symbol	Value				Unit
		ECOSSH 158	ECOSSH 208	ECOSSH 308	ECOSSH 408	
<b>Heat Output</b>						
Nominal heat output	P <sub>nom</sub>	0.55	0.75	1.125	1.5	kW
Minimum heat output	P <sub>min</sub>	N.A.	N.A.	N.A.	N.A.	kW
Maximum continuous heat output	P <sub>max, c</sub>	0.55	0.75	1.125	1.5	kW
<b>Auxiliary electricity consumption</b>						
At nominal heat output	e <sub>l max</sub>	0.000	0.000	0.000	0.000	kW
At minimum heat output	e <sub>l min</sub>	0.000	0.000	0.000	0.000	kW
In standby mode	e <sub>l sb</sub>	<0.0005	<0.0005	<0.0005	<0.0005	kW

Item	Value. All models
<b>Type of heat input</b>	
Electronic heat charge control with room and/or outdoor temperature feedback	Yes
<b>Type of heat output / room temperature control</b>	
Electronic room temperature control plus week timer	Yes
<b>Other control options</b>	
Room temperature control, with open window detection	Yes
With distance control option	Yes
With adaptive start control	Yes

<b>Contact details</b>	ELNUR, UK Unit 1, Brown Street North, Leigh, Wigan, WN7 1BU
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Commission Regulation (UE) 2015/1188 of 28 April 2015.  
Ecodesign requirements for electric storage local space heaters.

# ELNUR

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info@elnur.co.uk

**Manufactured by:**

ELNUR S.A.  
Travesía de Villa Esther, 11 28110, Algete  
Madrid Telephone: +34 916281440



The symbol on the product or in its packaging indicates that this product may not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local council office, your household waste disposal service or the shop where you purchased the product. These instructions are only valid in the EU member states.

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[www.elnur.co.uk](http://www.elnur.co.uk)



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GA-2006/0284



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