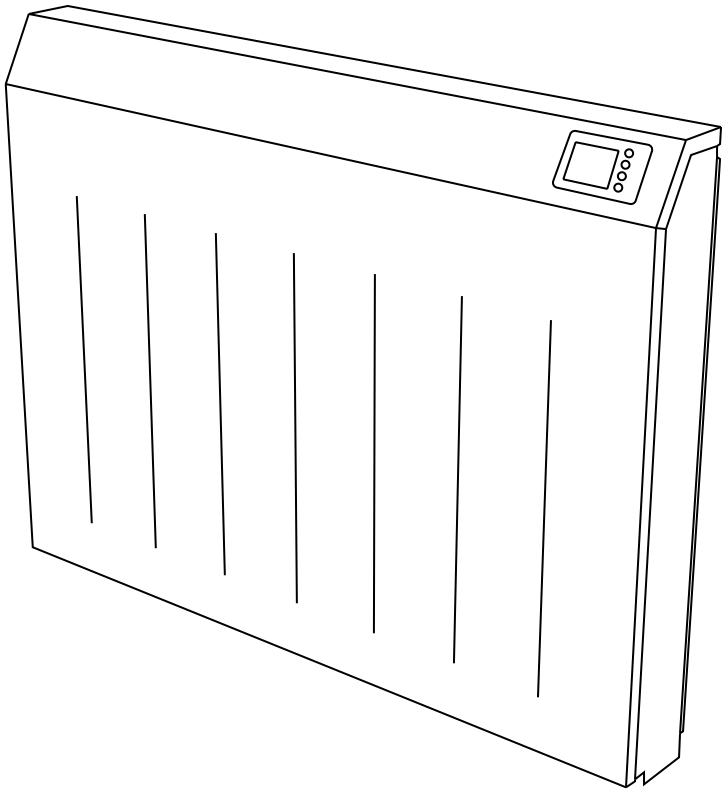
ecostrad

INSTALLATION MANUAL

Ecostrad Magma HHR German Storage Heater



PLEASE READ AND SAVE THESE INSTRUCTIONS

Blank

Symbols

Warning

This symbol indicates a hazard with an average risk level which, if not avoided, could result in serious injury or death.

Warning of electrical voltage

This symbol indicates danger to the life and health of persons due to electrical voltage.

Do not cover

This symbol located on the device indicates that it is prohibited to place objects (such as towels, clothes etc.) above or directly in front of the device.

To avoid overheating and fire hazards, the device must not be covered.

Hot surface

This symbol located on the device indicates that its surfaces are hot during and immediately after operation.

Hot surfaces should not be touched: danger of burns.

Do not spray

This symbol located on the device indicates that it is prohibited to spray the device.

Observe instructions in manual

This symbol located on the device indicates that instructions in the operating manual must be observed when installing and using the device.

Contents

1 | About the Product

This manual describes the Ecostrad Magma HHR German Storage Heater and details how to install the product. It is important to thoroughly review this manual before installing the product.

The accompanying user manual details how to operate the Ecostrad Magma HHR. Store the installation manual and user manual near the installed heater.

Heat Performance

The Ecostrad Magma HHR's patented silent automatic vent system allows the storage heater to control heat release without a noisy fan.

This storage heater generates and stores heat by heating elements that are surrounded by insulated stone bricks. The stone bricks work as a thermal mass, storing the heat within the storage heater core. The heat can only escape from the insulated core when the vent opens, allowing the storage heater to release heat at specific times of day to heat your room without using additional power.

For **technical advice** or help concerning the Ecostrad Magma HHR German Storage Heater, contact the retail establishment or distributor from which the product was purchased.

2 | Warnings & Precautions

READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS.

Read this manual carefully before using or installing the storage heater. Always store the manual in the immediate vicinity of the storage heater or its site of use.

Failure to follow the warnings and instructions may result in electric shock, fire, serious injury, or all of the above. Save all warnings and instructions for future reference.

Warning

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 shall not play with the appliance.

Cleaning and user maintenance shall not be made by children without supervision.

Warning

Children of less than 3 years should be kept away unless continuously supervised.

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, or clean the appliance, or perform maintenance.

Warning

In order to avoid a hazard due to inadvertent re-setting of the thermal cut-out, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Warning

In order to avoid overheating, do not cover the radiator.

Warning

Some parts of this product can become very hot and cause burns. Do not touch the surface when in operation. Do not install close to curtains or other combustible materials. Particular attention should be given where children and vulnerable adults are present.

Warning

Do not use the device in enclosed spaces if persons are present who cannot leave the room independently and are not under constant supervision.

READ ALL SAFETY WARNINGS AND ALL INSTRUCTIONS.

- Keep the power cable away from all hot parts of the appliance.
- Do not use the device if you detect damage to the mains power cable. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- All repairs and servicing must be carried out by a qualified person. To avoid danger any repairs must be completed by the manufacturer, a service agent of the manufacturer or a similarly qualified person.
- Make sure that the voltage indicated on the rating plate for this appliance corresponds to your power outlet.
- The device must not be located immediately below or in front of an electrical socket outlet.
- Do not use this device in the immediate surroundings of a bath, shower, swimming pool or any other water container. Risk of electric shock.

- Do not use the device with wet or damp hands.
- No part of the appliance should be submersed in any type of liquid.
- Cleaning should be carried out using a damp cloth only. No abrasive chemicals or materials should be used.
- Never insert fingers or other objects or body parts into the device. Risk of electric shock or injury.
- Do not use any accessories with this device. Use of accessories may cause damage or danger.
- Keep the device at a minimum distance of one metre from curtains and other flammable materials.
- The device must only be installed in an upright and fixed position in accordance with national installation rules.
- The device is for indoor use only.
- Temperature differences can cause crackling and other noises in the unit. This does not indicate any failure in the radiator.
- Do not use the radiator with a programmer, timer, separate remote control system or any other device that switches the radiator on automatically, since a fire risk exists if the radiator is covered or positioned incorrectly.
- Make sure the minimum safety distances from walls and objects stated in the installation instructions are observed at all times. This is very important to prevent damage to walls, furniture and soft furnishings and to prevent the product overheating.

- Do not use the device in rooms where contact with flammable or potentially explosive materials like dust, gas or vapour cannot be avoided. If the atmosphere becomes temporarily unsafe, such as when painting or remodeling a room, the heater should not be charged and must be covered, especially at the air outlet grille.

Warnings & Precautions

- For installation in commercial buildings (e.g. workshop, hair salon, laboratories, etc.), please contact your professional association.
- Do not use the device in rooms or environments that have a corrosive atmosphere.
- Do not operate the device when wet. If the device gets wet during cleaning, allow it to dry out before using.
- Do not expose the device to water jets.

- Do not transport the device during operation.
- Do not sit on the device.
- Do not overload the circuit used to power the device.
- Before carrying out maintenance, care or repair work on the device, ensure the power supply is switched off. Terminals may be under live voltage even if all circuit breakers have been switched off.
- Allow the device to fully cool before touching or transporting the device, or attempting maintenance work.
- The device must be placed where the switches and controllers cannot be touched by a person in a bathtub or shower.
- If the appliance was moved and has been in use before, the thermal insulation must be checked to ensure it is still in good condition. If necessary, damaged or worn parts mus be replaced. Be very careful to not damage the high performance thermal insulation when removing and mounting the heater.
- Do not use the appliance for any other purpose than the described purpose.
- Appliances which are no longer used should be disconnected immediately and the connecting cables should be cut through. Dispose of the appliance in accordance with local regulation.
- Due to the weight of the appliance, check the stability of the floor with an expert. The floor surface must be flat and even. The appliance can be placed on any kind of floor, but deformation may occur to the floor covering due to the heat and weight of the appliance. For example, flooring with PVC, parquet floor, and light coloured carpets.
- To prevent accidents and possible tipping of the heater, it must be fixed to the wall with safety screws, supplied with the heater. The necessary screws and plugs are found in the lower part of the switchboard in a plastic bag.
- If the wall is not strong enough, a more adequate fixing material has to be used.
- When the appliance is filled with bricks, it may sink somewhat into the pile when installed on thick-pile carpeting.
- The installation must be equipped with an all pole circuit breaker, allowing the power supply to be cut off to the appliance in case any maintenance is required.
- Do not place any socket in the direct proximity of the appliance.
- According to the low voltage guidelines, all existing and new installations must be equipped with an earth leakage protection device sensitive also to direct current pulses. This device must be installed by a licensed electrician.

3 | Technical Information

Table 1 | Technical information

Model	E-MAGMA-HHR-SH-17	E-MAGMA-HHR-SH-25	E-MAGMA-HHR-SH-34
Nominal output	850 W	1300 W	1700 W
Maximum room size	13 m^2	20 m^2	26 m^2
Nominal power	1700 W	2550 W	3400 W
Nominal voltage	230 V 50 Hz	230 V 50 Hz	230 V 50 Hz
Nominal charge	13.6 kWh	20.4 kWh	27.2 kWh
Maximum nominal charge acceptance	15.5 kWh	23.2 kWh	30.9 kWh
Dimensions (mm) width x height x depth	670 x 720 x 185 mm	880 x 720 x 185 mm	1090 x 720 x 185 mm
Total weight	88 kg	127 kg	166 kg
Housing weight	24 kg	31 kg	38 kg
Number of brick pairs	4 (8 bricks total)	6 (12 bricks total)	8 (16 bricks total)
Core weight	64 kg	96 kg	128 kg
Heating elements	2 x 850 W	3 x 850 W	4 x 850 W
Top-up heater power	500 W	750 W	750 W
IP rating	IP20	IP20	IP20
Appliance class	Class I	Class I	Class I

4 | Installation

4-1 | Minimum clearances

When installing or operating the Ecostrad Magma HHR, always ensure that the minimum clearances are observed and respected. Risk of fire.

- The floor must be stable and able to bear the combined weight of the storage heater body and its bricks.
- The weight and heat of the storage heater may cause deformation to the floor covering. Particular caution is advised with PVSC, parquet and light-coloured carpet floor coverings.
- For carpeting with a particularly high pile, it is recommended to remove the carpet around the heater's feet to remove the risk of the heavy heater sagging into the carpet over time.
- The storage heater is equipped with wall fixings to secure the unit against tipping. These fixings are not designed to support the full weight of the storage heater. In all installations, the storage heater must rest on its feet.
- Do not place curtains, textiles, or other flammable products such as paper, clothes, or aerosols in close proximity to the heater. Risk of fire.
- Decorative covers may be used with the storage heater, provided the minimum safety distances are observed around the product. However, because the cover can hamper the product's heat output and decrease the efficiency of the product, we do not recommend the use of a decorative cover.
  - A wire mesh guard is the most suitable solution for a protective cover, as a wire guard has minimal impact on the product's heat output.
- Minimum distances are as follows:
  - 20 mm from surrounding walls
  - 500 mm from the front and side of the heater
  - 30 mm between 2 heaters
  - 150 mm from the top of the heater to a brick windowsill
  - 200 mm from the top of the heater to a wood windowsill
  - If the windowsill extends from the wall further than the front panel of the heater, an additional safety clearance is required of 1 mm per 1 mm of sill that overhangs the front panel.

4-2 | Mounting template

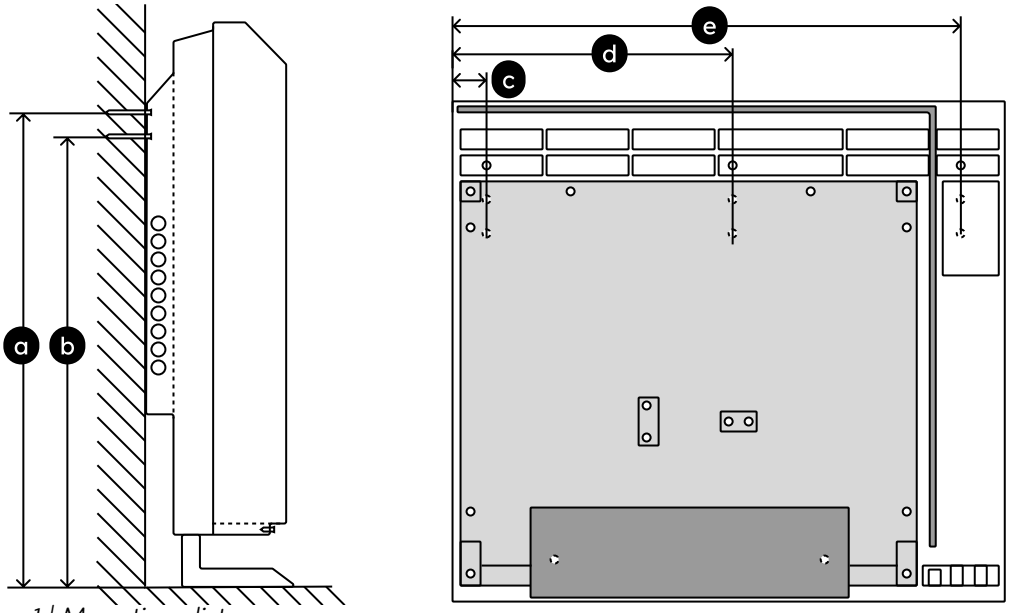


Figure 1 | Mounting distances

Table 2 | Mounting distances

Model	a	b	c	d	e
E-MAGMA-HHR-SH-17	632 mm	582 mm	110 mm	325 mm	587 mm
E-MAGMA-HHR-SH-25	632 mm	582 mm	103 mm	333 mm	800 mm
E-MAGMA-HHR-SH-34	632 mm	582 mm	133 mm	536 mm	1011 mm

Table 3 | Mounting materials

	E-MAGMA-HHR-SH-17	E-MAGMA-HHR-SH-25	E-MAGMA-HHR-SH-34
Wall plugs	2	2	2
Washers	2	2	2
Dry wall screws	2	2	2
Radiator bricks	8 bricks	12 bricks	16 bricks
Cables (not included)	1x for single-fuel 2x for dual-fuel	1x for single-fuel 2x for dual-fuel	1x for single-fuel 2x for dual-fuel

4-3 | Preparing the radiator and wall

Open the box at the bottom, where the feet can be viewed.

1. Place the storage heater box on its face, then tip the storage heater to vertical.
2. Remove the box and packaging materials
3. Remove the 2 screws near the base **(A).** Remove the front panel by sliding the panel up and off the slotted screws at the top of the radiator. (**Figure 2**)
4. Position the storage heater against the wall in the desired installation location. Use a pencil to mark the anchoring screw positions on the wall **(B)**.
   - At least 2 anchoring screws must be installed. To access the optional lower anchoring points, the rear panel may be removed and installed separately by removing 2 screws at the top **(C)**.
   - The mounting distances for the drill holes to install the rear panel separately may be found in **Figure 1** and **Table 2**.

A: Front panel screws

B: Anchoring screws

C: Inner panel screws

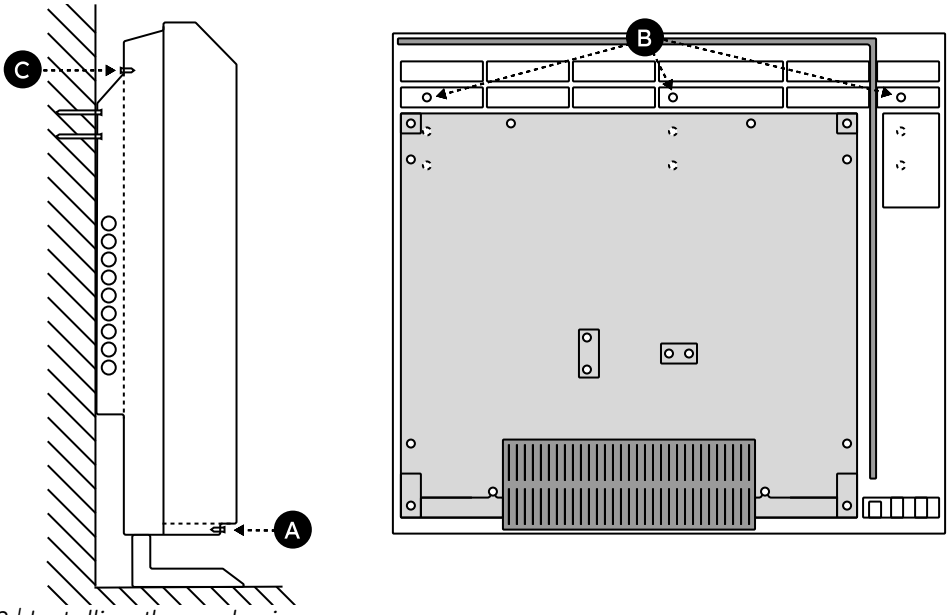


Figure 2 | Installing the anchoring screws

To protect against tipping, the Ecostrad Magma HHR must be fixed to the wall with the appropriate fixings.

5. Remove the storage heater from the wall
6. Drill the wall where marked
7. Insert the wall plugs into the drill holes. Ensure that the correct wall plugs are used for the wall type.
8. Replace the storage heater and attach to the wall with 2 screws and 2 washers

4-4 | Filling the radiator with ceramic stones

9. Remove the 6 screws **(D)** around the inner plate. The 2 screws **(E)** behind the panel heater element should not be removed or loosened. (**Figure 3**)
10. Remove the inner plate gently by sliding up off the **(E)** screws, taking care not to damage the thermal insulation.

D: Inner plate screws (6)

E: Permanent screws (2). Do not remove.

The inner plate slots onto the **(E)** screws when fully installed.

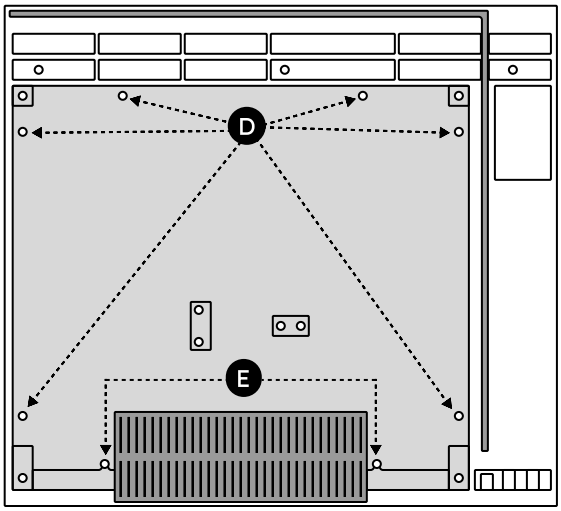


Figure 3 | Removing the inner plate

WARNING

Ensure the storage heater is secured to the wall before filling the heater with ceramic stones.

An unsecured storage heater could tip over, causing injury or death.

To protect against tipping, the Ecostrad Magma HHR must be fixed to the wall with the appropriate fixings.

WARNING

Take care when handling white insulating panels. If damaged, the panels must be replaced. Risk of fire.

11. Remove the cardboard spacers from the core heating elements
12. Gently tip the elements **(F)** outwards. Do not remove elements. (**Figure 4**)
13. Fill the back of the core chamber with the radiator stones, ensuring that the stones are in the correct order and position. The grooves **(G)** on the back layer should face the element **(F)**. (**Figure 4**)
14. Gently tip the elements **(F)** to vertical.
15. Fill the front of the core chamber with the remaining radiator stones, ensuring that the stones are in the correct order and position. The grooves **(G)** on the front layer should be arranged as in **Figure 4**, with the grooves located at the top and bottom, facing the element. (**Figure 4**)

F: Core heating elements

G: Core stones

Tip: Fill the radiator with stones on the left and right first, then fill the stones in the middle.

Always fill from back to front.

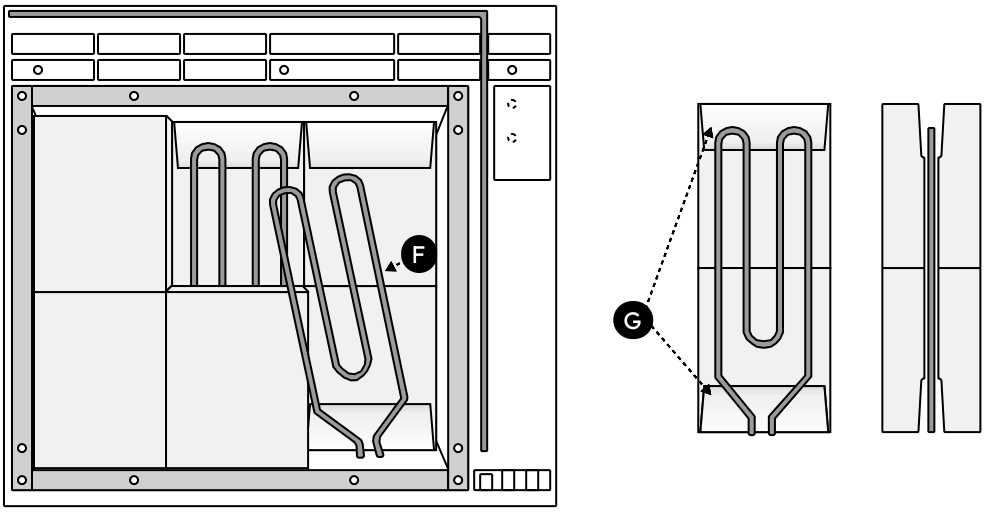


Figure 4 | Installing the stones

16. Replace the inner plate by sliding it onto the E screws, taking care not to damage the thermal insulation. Secure the plate with 6 screws **(D)**. (**Figure 3**)

4-5 | Connecting the electronics

17. Connect the panel heater element to the temperature sensor **(H)**. Black cable on top, brown cable on bottom.
18. Connect the control panel to the inner panel **(I)**. Red cable to red plug, white cable to white plug, black cable to black plug, and ribbon cable to ribbon plug.

H: Temperature sensor

Black - Top

Brown - Bottom

I: Control panel

Red - External temperature sensor

White - Core temperature sensor

Black - Air temperature sensor

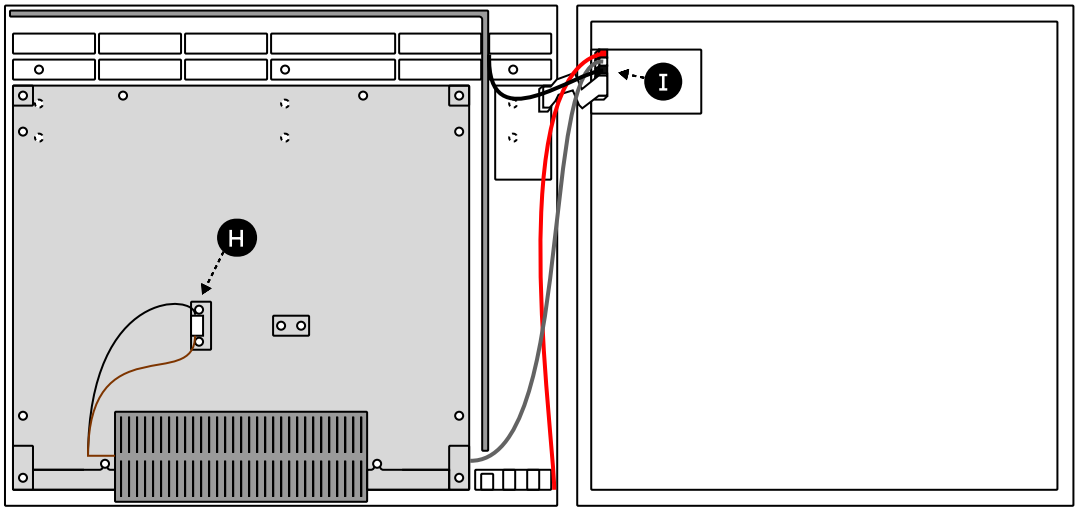


Figure 5 | Connecting the control panel

ATTENTION

- The wiring and connection of the heater must be completed according to all relevant safety standards and rules, including guidelines of the local electrical utility.
- This appliance has protection Class I and must be earthed.
- Supply cables must be fed from the underside of the appliance through the cord anchorage and to the terminal block. The wires must be connected to the terminals. The wiring diagram may be found on the inside of the front panel.
- This installation must be equipped with an all pole circuit breaker, allowing, in case of any intervention, to cut off the appliance's power supply.
- Do not place any socket in the direct proximity of the appliance.
- According to the low voltage guidelines, all installations must be equipped with an earth leakage protection device sensitive to direct current pulses.
- The appliance must be installed by a licensed electrician.

The 24H flex should be connected to the primary energy meter.

19. Connect the power supply. Insert the 24 hour supply flex cable through the black box below the radiator. This black box protects the power connections from being strained by movement of the flex cable.
20. Connect the yellow and green cable to ground
21. Connect the brown cable to L (24 hour supply)
22. Connect the blue cable to N (24 hour supply)
23. Tuck the wires into the body of the radiator, ensuring no part of the flex hangs over the front. This prevents wire pinching when reinstalling the front panel.
24. Tighten the black box to prevent the flex from moving
25. **For 24 hour use (no charging times)**, install 2 red jumper cables between L (24H) and L (8H/14H), and between N (24H) and N (8H/14H). (**Figure 6**) Skip forward to step 32, and do not install the 8-14H supply cable.

For 24 hour use

Install one flex cable into the 24 hour supply, and 2 red jumper cables to power the 8-14 hour supply.

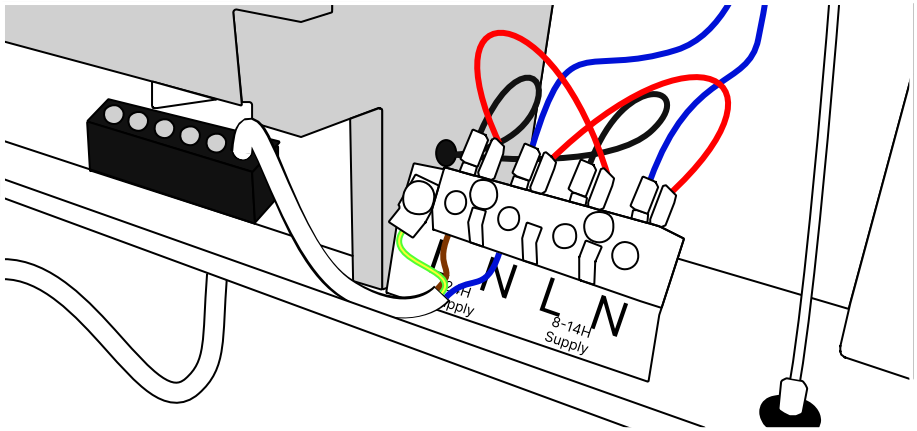


Figure 6 | Connecting the power supply (24 hour use)

26. **For use with a time of use tariff,** ensure that the 2 red jumper cables are NOT installed. (**Figure 7**)
27. Insert the second flex through the black box
28. Connect the yellow/green cable to ground
29. Connect the brown cable to L (8/14 hour supply)
30. Connect the blue cable to N (8/14 hour supply)
31. Secure the flex into the metal container, ensuring no part of the flex hangs over the front. This prevents pinching of the wires when reinstalling the front panel.

The second flex should be connected to the off-peak energy meter.

For use with a time of use tariff

Install one flex cable into the 24 hour supply and a second flex cable into the 8-14 hour supply.

Do not install the red jumper cables.

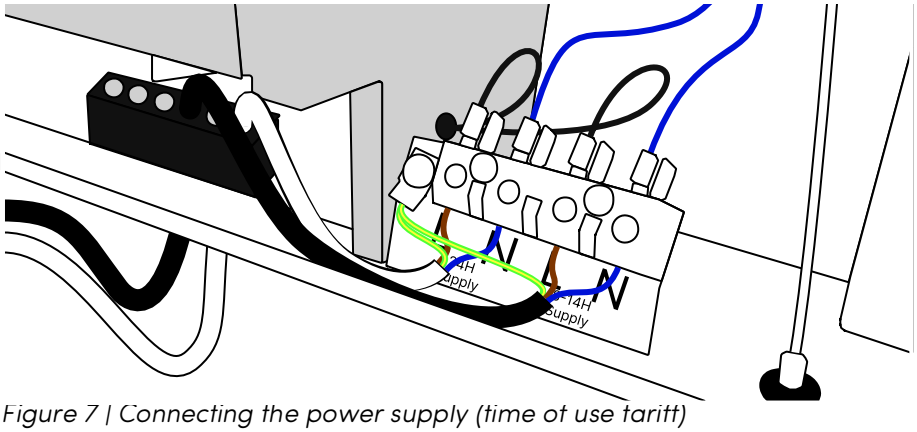


Figure 7 | Connecting the power supply (time of use tariff)

4-6 | Finalising the installation

32. Carefully close the front panel, ensuring that no wires are pinched.
33. The front panel slides over the top ridge of the back panel, and is secured in place by the two screws at the bottom of the front panel.
34. Attach the 2 screws at the bottom to secure the front panel

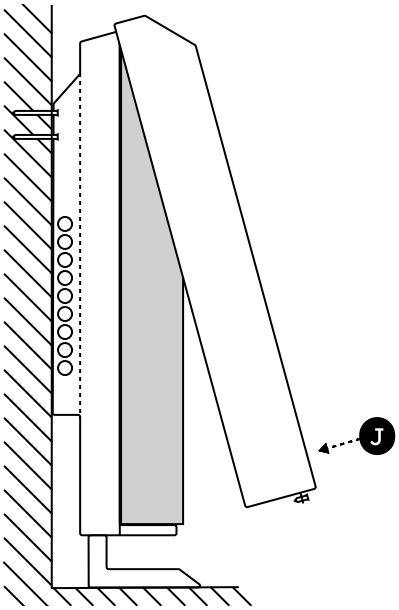


Figure 8 | Installing the anchoring screws

4-7 | Installing the foot covers (optional)

The included foot covers are optional. They provide a visual upgrade, but have no effect on the function of the device.

35. Remove the adhesive film from the back of the foot cover.
36. Slide the foot cover over the heater foot and press the adhesive securely against the ankle.

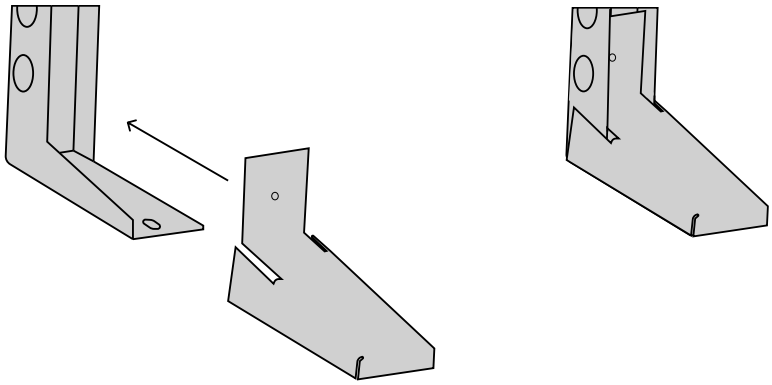


Figure 9 | Installing the foot covers (optional)

4-8 | Post-assembly check

After assembling and wiring the unit, the functionality must be checked.

Before using the appliance, test the following features:

☐ Test the insulation with a test voltage of at least 500 V.

- ❍ The insulation resistance has to be at least 0.5 MΩ

☐ Before switching on the power supply, check the voltage level of the network.

☐ Check the charge wth a kWh-meter and a time measurement

- ❍ Alternatively, use a cold measurement of the ohm value

4-9 | System start-up

If the storage heater has already been in use and has been moved, the first charge must be monitored by an electrician at the new location.

☐ The first charge must be controlled by a qualified electrician.

- ❍ Because of the high performance thermal insulation, the first charge of the storage heater does not need to be done at maximum.
- ❍ Please ensure the room is ventilated after the first use. This can be easily achieved by opening a window.

1. Wait until the charge controller switches off.
2. Measure the charge acceptance in kWh
   - ❍ The charge must not exceed the maximum charge in **Table 1** (page 8)
   - ❍ The charge must not be higher than the maximum charge when cold

After the installation has been completed, this manual and all related manuals must be handed over to the owner or final user of the storage heater.

If the storage heater has already been in use and has been moved, the thermal insulation must be checked to confirm it is still in good condition. If necessary, contact the retail establishment from which this heater has been purchased to request spare parts for repair. Be very careful not to damage the high performance thermal insulation when removing and mounting the heater.

5 | Initial setup

After the storage heater has been installed, the storage heater must be set up with charging times to suit the tariff.

- If the storage heater is not set up with charging times, it will not attempt to charge, and will only heat via the top-up heating element.

5-1 | Questionnaire for homeowner

How will you control your storage heater?

☐ With WiFi

☐ Without WiFi

What is your tariff?

If no tariff, when would you like your heater to charge?

Period 1: _____ to _____

Period 2: _____ to _____

Days: Mon Tue Wed Thu Fri Sat Sun

How do you want to heat your home?

☐ I want to set the temperature manually **(fixed temperature)**

☐ I want my heat to automatically run on a schedule **(weekly schedule)**

When do you want your top-up heating element to be enabled?

It can take up to a week for the storage heater to calibrate the overnight charge to suit the room's heat needs. Ecostrad recommends keeping the top-up heating element active during the initial calibration period.

☐ Peak times only. I want the heater to keep the room at my temperature, even if it runs out of stored heat early. (Recommended)

☐ Off-peak times only. I want the heater to use the top-up heating element to heat the room while the heater is charging, so that I have a quicker charge time.

☐ Peak and off-peak times.

☐ Never. I do not want to use the top-up heating element.

How would you like to set your weekly schedule?

Skip if operating mode is **fixed temperature**

Choose your preferred preset temperatures. Temperatures can be set from 5 °C to 30 °C. Comfort > Economy > Anti-frost

Comfort temperature: _____

Economy temperature: _____

Anti-Frost temperature: _____

Mark the schedule templates with the preferred hourly preset temperatures.

Monday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Tuesday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Wednesday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Thursday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Friday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Saturday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

Sunday schedule:

Comfort:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Economy:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Anti-Frost:	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

5-2 | Initial setup

5-2-1 | WiFi Connection

If the homeowner is using the heater with WiFi, pair the Smartbox and pair the heater with the Smartbox.

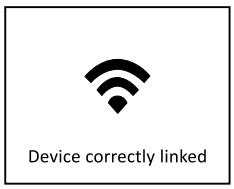
Download the app with the QR Code link below, or search for SmartControl Heating on the App Store or Google Play.

https://ecostrad.com/magma-app/

To pair the SmartBox to the app

1. In the app, press the menu at the top right of the home screen.
2. Press **Add new home**
3. Follow the instructions on the app to set your home name and time zone.
4. Press SmartBox when asked what your device looks like.
5. Connect your SmartBox to ethernet and power.
6. Press the sync button on the front of the SmartBox to put it into pairing mode.
7. The app will begin to search and find your SmartBox.
8. If needed, you can press **Next** to input the device ID code manually. You can also select **Back** to restart the search for your device.
9. Press **Start Search** on the app.
10. The heater will appear on the app, and **Device correctly linked** will display on the heater.

To pair the device with the SmartBox

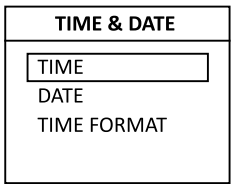


1. In the app, press **Install** on the bottom of the home screen
2. Press **Storage Heater**
3. Press and hold ⏻ for 5 seconds on the storage heater to put the heater into pairing mode.
4. Press **Start Search** on the app.
5. The heater will appear on the app, and **Device correctly linked** will display on the heater.

5-2-2 | Set time

Skip if connected to WiFi. Time will automatically sync.

To set the time and date



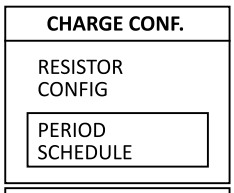
1. Press and hold **Menu** for 5 seconds
   - The settings menu will appear
2. Select **TIME & DATE**
3. Use +, — and **OK** to select and change the **TIME**, **DATE**, or **TIME FORMAT**
4. Press **Save** to confirm and go back

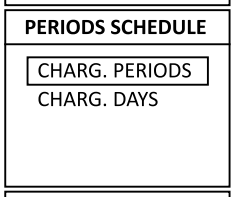
5-2-3 | Configure charge times

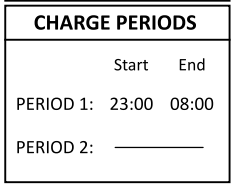
Set up the charge times according to the homeowner's tariff.

This can also be completed via the WiFi app if preferred.

To set the period schedule

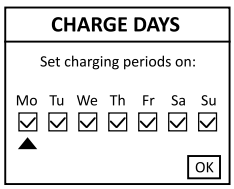






1. Hold **Menu** down for 5 seconds to enter the settings menu
   - Use +, — and **OK** to navigate the menu
2. Select **ADVANCED**
3. Select **CHARGE CONF.**
4. Select **PERIOD SCHEDULE**
5. Select **CHARG. PERIODS**
6. Select the period you wish to schedule
7. Select the start time of the period
8. Select the end time of the period
9. Press **Save**
10. Repeat from step 6 to configure the start and end times for a second period (optional)

To set the charging days

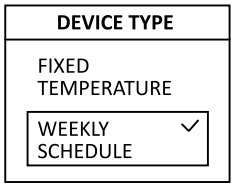


1. Hold **Menu** down for 5 seconds to enter the settings menu
   - Use +, — and **OK** to navigate the menu
2. Select **ADVANCED**
3. Select **CHARGE CONF.**
4. Select **PERIOD SCHEDULE**
5. Select **CHARG. DAYS**
6. Add a tick mark to the days the radiator is allowed to charge on
7. Press **Save**

5-2-4 | Choose operation mode

This can also be completed via the WiFi app if preferred.

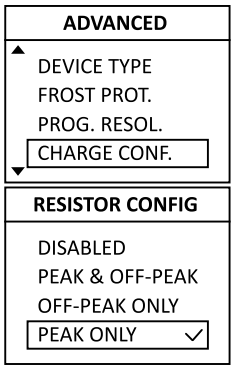
To select the preferred heating mode



1. Hold **Menu** down to enter the settings menu
   - Use +, — and **OK** to navigate the menu
2. Select **ADVANCED**
3. Select **DEVICE TYPE**
4. Select your preferred heating mode
   - **FIXED TEMPERATURE**: the target temperature is set manually
   - **WEEKLY SCHEDULE**: the heater follows a 24/7 schedule
5. Press **OK** to confirm

5-2-5 | Configure top-up heating element

To set the resistor configuration



1. Hold **Menu** down for 5 seconds to enter the settings menu
   - Use +, — and **OK** to navigate the menu
2. Select **ADVANCED**
3. Select **CHARGE CONF.**
4. Select **RESISTOR CONFIG**
5. Select the desired period to enable the top-up heating element
6. Press **Save**

5-2-6 | Configure weekly heating schedule

Skip if operating mode is **fixed temperature**

In the **program** menu, the 24/7 schedule can be adjusted. Each day can be programmed separately, or the schedules can be copied across days.

This can also be completed via the WiFi app if preferred.

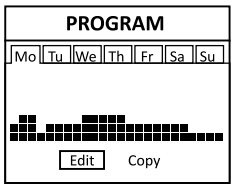
To change a preset temperature

Range:
5 °C to 30 °C

Comfort > Eco
Eco > Anti-Frost

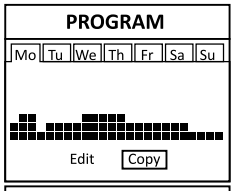
1. Press and hold **Menu** for 5 seconds
   - The settings menu will appear
2. Select **TEMPERATURES**
3. Select the preset you wish to change
4. Use + and — to adjust to your desired temperature
5. Press **OK** to confirm and go back
6. Repeat from step 3 to change an additional temperature preset

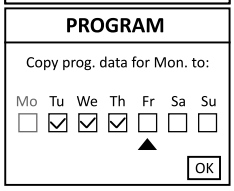
To program the heater



1. Press and hold **Menu** for 5 seconds
   - The settings menu will appear
2. Select **PROGRAM**
3. Select the weekday you wish to program with +, — and **OK**
4. Press **OK** to select **EDIT**
5. Use + and — to highlight the hourly period that you wish to change
6. Press **OK** to adjust the temperature preset
   - Comfort: 3 squares
   - Eco: 2 squares
   - Anti-Frost: 1 square
7. Repeat from step 5 to assign preset temperatures to each hour
8. Once satisfied with the program for the current day, press **Save**

To copy a daily program to a different weekday





1. Select the weekday with the program you wish to copy with +, — and **OK**
2. Select **COPY** with +, — and **OK**
   - The screen will show a checklist of weekdays
3. Use +, — and **OK** to add a tick mark the weekday(s) you wish to overwrite with the program
4. Press **Save**

6 | Wiring Diagrams

Product Specification
Model: E-MAGMA-HHR-SH-17
Core wattage: 1700 W
Top-up wattage: 500 W

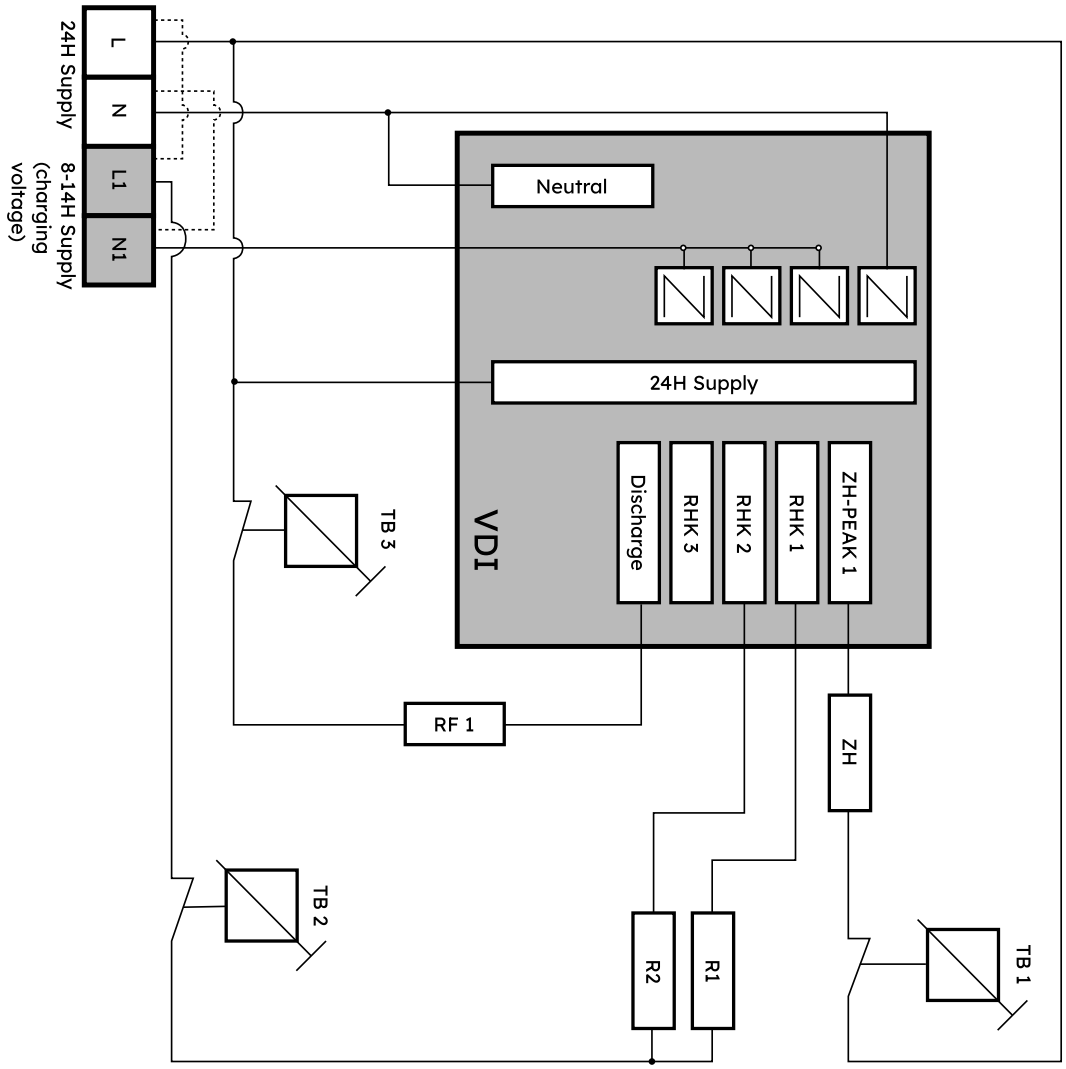
Components

L,N	24 hour supply
L1,N1	8-14 hour supply (dual supply)
R1,R2	core heating elements
RF 1	silent automatic vent
TB 1	top-up element temperature sensor
TB 2	core temperature sensor
TB 3	room temperature sensor
ZH	top-up heating element
VDI	charging electronics

WARNING!

All power must be disconnected before accessing the terminal connections. Even with removed fuses, there can still be voltage at these terminals!

Loose plug connections can lead to malfunction (e.g., melting of the connectors). Please make sure all plugs are tightly fit and secure!



Product Specification
Model: E-MAGMA-HHR-SH-25
Core wattage: 2550 W
Top-up wattage: 750 W

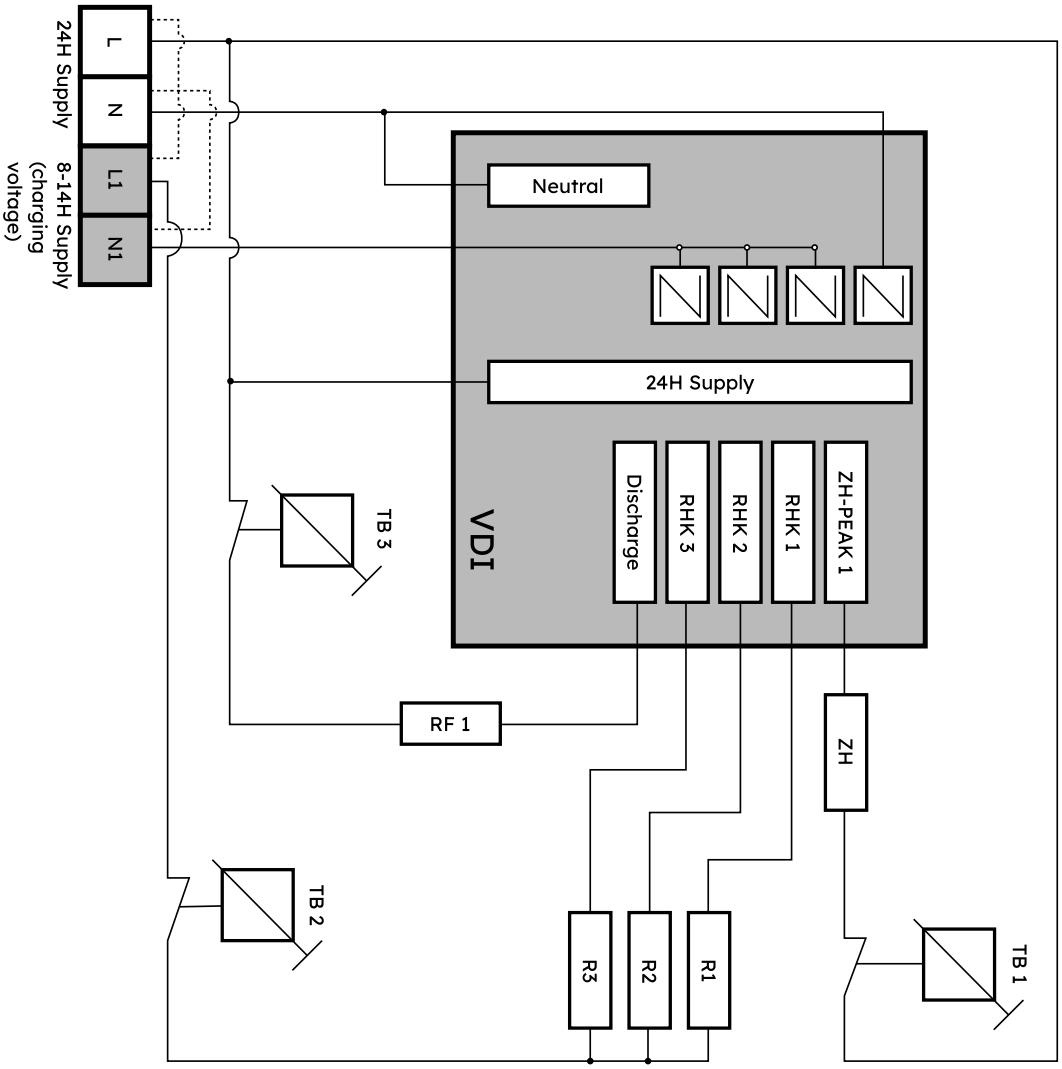
Components

L,N	24 hour supply
L1,N1	8-14 hour supply (dual supply)
R1,R2,R3	core heating elements
RF 1	silent automatic vent
TB 1	top-up element temperature sensor
TB 2	core temperature sensor
TB 3	room temperature sensor
ZH	top-up heating element
VDI	charging electronics

WARNING!

All power must be disconnected before accessing the terminal connections. Even with removed fuses, there can still be voltage at these terminals!

Loose plug connections can lead to malfunction (e.g., melting of the connectors). Please make sure all plugs are tightly fit and secure!



Product Specification
Model: E-MAGMA-HHR-SH-34
Core wattage: 3400 W
Top-up wattage: 750 W

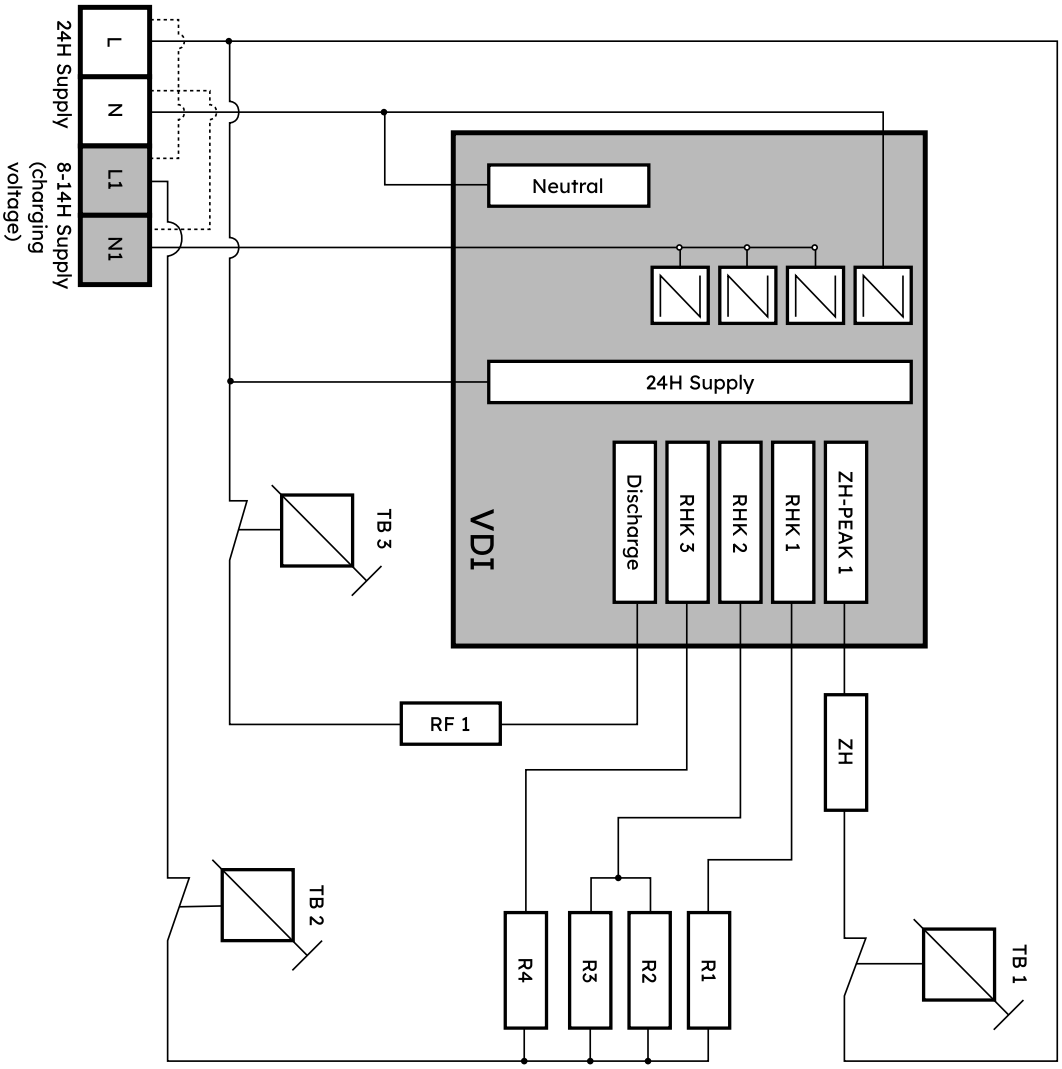
Components

L,N	24 hour supply
L1,N1	8-14 hour supply (dual supply)
R1...4	core heating elements
RF 1	silent automatic vent
TB 1	top-up element temperature sensor
TB 2	core temperature sensor
TB 3	room temperature sensor
ZH	top-up heating element
VDI	charging electronics

WARNING!

All power must be disconnected before accessing the terminal connections. Even with removed fuses, there can still be voltage at these terminals!

Loose plug connections can lead to malfunction (e.g., melting of the connectors). Please make sure all plugs are tightly fit and secure!



7 | Warranty

The Ecostrad Magma HHR German Storage Heater carries a 10-year guarantee on the body and a 2-year guarantee on electrical components.

What does the warranty cover?

Within the stated period, starting from the date the customer receives their unit, Ecostrad guarantee to repair or replace the unit where a fault is due to defects in materials or manufacturing.

What does the warranty NOT cover?

The warranty does not cover any defect arising from damage, negligence, usage outside the product's intended purpose or fair wear and tear. The warranty is only valid when the unit has been used at the specified supply voltage, and in accordance with all conditions specified in this manual. The warranty will be void if the heater has been covered, tampered with, or if the ratings label has been removed.

The warranty does not cover failures and faults due to force majeure, accidental damage, mishandling, external impact, chemical agents or atmospheric phenomena, incorrect use of the device, the purchaser's faulty electrical installations, transporting the device or problems caused by the device being handled by persons not authorised by Ecostrad. If the unit has been installed, an invoice may be required to confirm the work was carried out by a qualified professional. Ecostrad cannot accept responsibility for damage, loss or injury caused by incorrect installation, maintenance, cleaning or covering the device.

How to claim

The warranty is a contract with the original purchaser and does not transfer if the unit is re-sold, gifted or inherited.

Proof of purchase, including order number and order confirmation or invoice, will be required if a claim is made.

The warranty covers only the model of heater shown on the purchase invoice. The warranty covers the repair or replacement of the defective product only and Ecostrad shall have no liability for installation costs or consequential losses however incurred.

Claims must be made with the establishment where the device was purchased. This warranty does not affect the customer's consumer rights.

8 | ErP Ecodesign Information

Table 4 | Information requirements for electrical room heaters

Designation	E-MAGMA-HHR-SH-17	E-MAGMA-HHR-SH-25	E-MAGMA-HHR-SH-34
Heating Capacity			
Nominal thermal output (P_{nom})	1.7 kW	2.55 kW	3.4 kW
Minimal thermal output (indicative) (P_{min})	1.7 kW	2.55 kW	3.4 kW
Maximum continuous thermal performance	1.7 kW	2.55 kW	3.4 kW
Auxillary current consumption			
At nominal thermal output (el_{max})	1.7 kW	2.55 kW	3.4 kW
At minimum heating capacity (el_{min})	1.7 kW	2.55 kW	3.4 kW
In standby mode (el_{SB})	0.8 kW	0.8 kW	0.8 kW

Item	Unit
Type of heat supply, only for electrical storage heaters in rooms (select one type)	
Manual thermal charge control, with integrated thermostat	NO
Manual thermal charge control with acknowledgement of the room inside and/or outside temperature	NO
Electronic charge control with acknowledgement of the room inside and/or outside temperature	YES
Heating power supported with a fan	NO
Type of heating power / room temperature control (select one type)	
Single-stage heating capacity, no room temperature control	NO
Two or more manual stages, no room temperature control	NO
With mechanical room temperature control	NO
With electronic room temperature control	NO

Item	Unit
Electronic temperature control in the room, depending on the time of day	NO
Electronic temperature control in the room, depending on the weekday	YES
Other control options (multiple choice is possible)	
Room temperature control with presence detection	NO
Room temperature control with detection of an opened window	YES
With remote control option	YES
With adaptive start control	YES
With limitation of heating time	NO
With a black lamp sensor	NO

9 | Disposal

In accordance with WEEE Directive 2012/19/EU, the icon with the crossed-out waste bin on electrical or electronic equipment stipulates that this equipment must not be disposed of with household waste at the end of its life. You will find collection points for free return of waste electrical and electronic equipment in your vicinity. The addresses can be obtained from your local authority.

The separate collection of waste electrical and electronic equipment enables the re-use, recycling and other forms of recovery of waste equipment, and prevents any negative effects for the environment or human health caused by the disposal of hazardous substances potentially contained in the equipment.

For queries, contact:

The UK manufacturer

Ecostrad Ltd.
Unit 21 Ash Way
Avenue C
Thorp Arch Trading Estate
Wetherby
West Yorkshire
LS23 7FR

https//ecostrad.com

The ROI Importer

Ignition Heatco Ireland Limited
Unit 282
Block G
Blanchardstown Corporate Park 2
Dublin
Republic of Ireland
D15 R65X