

heating systems

GALAXI SMART SERIES ELECTRIC COMBI BOILER

User Manual and Warranty Certificate





Our company, which operates in the heating sector, continues its Research & Development activities by following the developing technology in addition to the production of electric combi boiler and floor heating very closely.

We aim to make our customers benefit from the latest technology by applying technological developments to our products.

Warming and producing hot water will no longer be a problem, we will continue to produce the best products for you.

Thank you for choosing us. Hope to use your product on good days.

Best Regards.



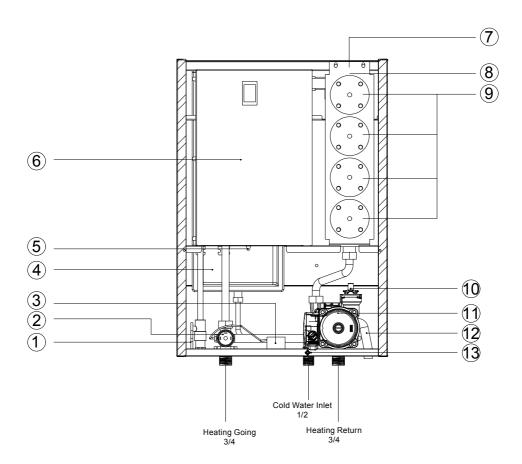


* Always read the operating instructions before using the product.

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PARTS OF ELECTRIC BOILER



- 1. Air intake valve
- 2. Low Pressure Sensor (Water kit)
- 3. Manometer
- 4. Expansion Tank
- 5. Reset Safety Thermostat
- 6. Power Distribution Board
- 7. Boiler Body

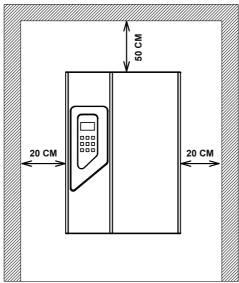
- 8. Boiler Heat Probe
- 9. Resistances
- 10. Automatic Air Evacuation
- 11. Circulation Pump
- 12. 3 Bar Safety Valve
- 13. Filling Valve

DEVICE INSTALLATION

- Do not place the device in humid environments such as bathrooms, rain, snow, etc. it should not be installed in areas where it may be affected by water.
- The device should be mounted on solid walls that can carry itself with the dowel, screw and hanging apparatus supplied with the device
- In order for the Authorized Service to interfere with the device in the event of a technical failure or maintenance, a gap must be left around the device in the following dimensions.
- If the installation of the device has not been carried out according
 to the standards specified in the user guide and the dimensions
 specified below are not left around the device, the Authorized
 Service will charge a fee regardless of warranty status.

Warning

It is the customer's responsibility to install the device according to the standards specified in the user guide.

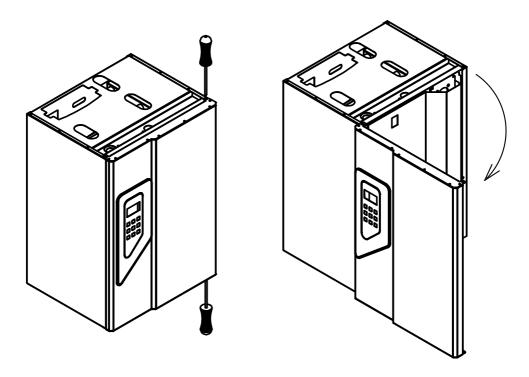


Minimum space values to be left around the device

OPENING THE DEVICE COVER

(Easy-to-open cover)

- The easy-to-open and close cover is designed by Termoakim for easy intervention in the device.
- To open the cover, the bottom right and top screws are removed, as shown in the picture below, and the cover opens to the left side.



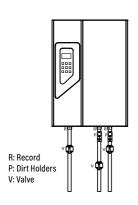
Easy-to-open cover opening shape and direction

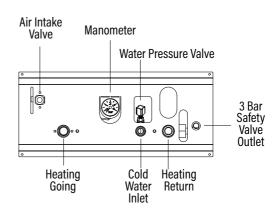
INSTALLATION CONNECTION OF THE DEVICE

- In order to provide a good circulation in the heating installation, appropriate diameter pipes should be used.
- The main pressure in place where the device will be used such as home, workplace, etc. should not be more than 5 bars. If the main pressure is more than 5 bars, the pressure regulator should be installed.
- The installation connection of the device should be made in such a way that its valves, dirt holders and records are complete as shown in Fig.1.
- The air intake valve outlet under the device is used to take the air out of the device. When air is being taken from here, the air intake valve should be connected to any outlet for the future of water(Fig.2).
- The drain outlet under the device should be connected to any
 outlet because it will automatically open and drain itself out in 3
 bars when too much water is pressed(Fig.2).

WARNING

It is the customer's responsibility to complete the installation of the device as specified in the user guide.





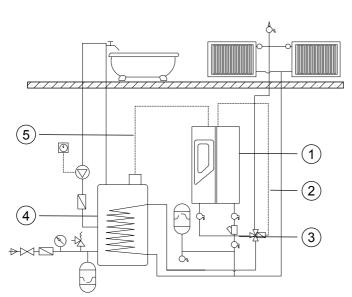
EXTERNAL HOT WATER TANK CONNECTION OF THE DEVICE

The Termoakim Galaxi Smart series is designed to operate in external hot water tank mode on demand. In order to use the device in external hot water tank mode, a fully transitive, three-way valve must be connected to the system and a external hot water tank heat sensor must be installed. Heat sensor and three-way valve output are available in the device. In order to use the summer-winter mode automatically in the external hot water tank mode, the command of the three-way valve must be taken from the device and the external hot water tank heat sensor must exit the device and be connected to the external hot water tank. As this feature is optional, the three-way valve cable and heat sensor are not supplied with the device.

If the device is to be used in external hot water tank mode, external hot water tank mode is switched on from the menu of the device. The device can be used in this mode.

External hot water tank heat sensor and three-way valve cable are not connected to the device if external hot water tank mode is switched on, the device will go into failure mode and will not work

The external water tank connection is shown in the following illustration.



Electrical combi boiler, external hot water tank and radiator connection scheme

- 1 Combi Boiler
- 2 Three-way valve cable
- 3 Three-way valve
- 4 External hot water tank
- 5 External hot water tank heat sensor

ELECTRICAL CONNECTION OF THE DEVICE

- Termoakim Galaxi Smart 6-9-12 kw models are designed to work both monophase and triphase.
- The supply cable to be pulled into the device must comply with TSE (Turkish Standards Institute) norms.
- Electrical connections of the device should only be made by authorized electricians.
- The cable to be drawn to the device must be pulled from the main network panel. The cable to be pulled must be in one piece with no attachment.
- The cable section to be cut into the device, the leakage current relay ampere and the ground cable section must comply with the standards specified in the chart.
- The tightness of the fuse and terminal connections should be checked periodically every year.

WARNING

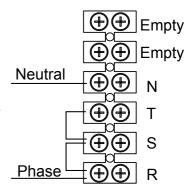
It is the customer's responsibility to comply with the schedule, to install the cable section, leakage current relay and to connect the ground line to the specified standards.

Power Of The Device (kw)	Operating Voltage (V)	Fuse Amperes (A)	Cable Cross Section (mm²)	Grounding Cross Section (mm²)
6	230/400	1x32/3x10	2x4/4x2,5	2,5
9	230/400	1x40/3x16	2x6/4x2,5	4/2,5
12	230/400	1x63/3x20	2x10/4x4	6/4
18	400	3x32	4x4	4
24	400	3x40	4x6	4
30	400	3x50	4x10	6
36	400	3x63	4x10	6

WARNING: The values given were calculated for a maximum length of 20 m cable to be pulled.

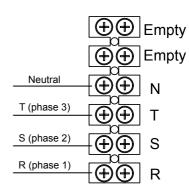
Monophase Connection

From the R S T phase ends at the input terminal, input is made to R phase and bridged to S and T phases. 3 phases are bridged together. Neutral and ground line are connected. Is shown in the figure.



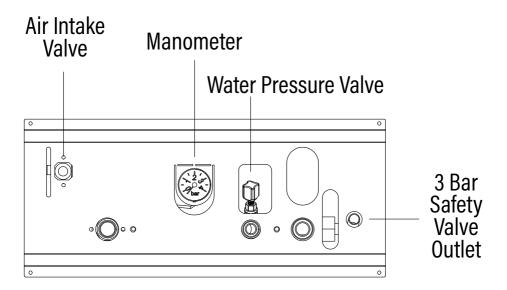
Triphase Connection

Input to R S T phase ends at the input terminal. Neutral and ground line are connected. Is shown in the figure.



FLOODING THE DEVICE

The air intake valve under the device opens. The automatic air drain located through the circulation pump is loosened. The filling valve is opened in half and slowly flooded. Water will come from the air intake valve at the end of the air. Until this process, the flooding continues. When water comes from the air intake valve, the air intake valve is closed. The pressure is brought to 1.5 bar and the water pressing process is completed. When the water pressure of the device falls below 1 bar, it causes a low pressure error. In this case, the filling valve is opened and the pressure is brought to 1,5 bar. If this situation is constantly happening, there is a possibility of leakage in the installation. This may also damage the device. Contact Authorized Service.



INITIAL OPERATION OF THE DEVICE

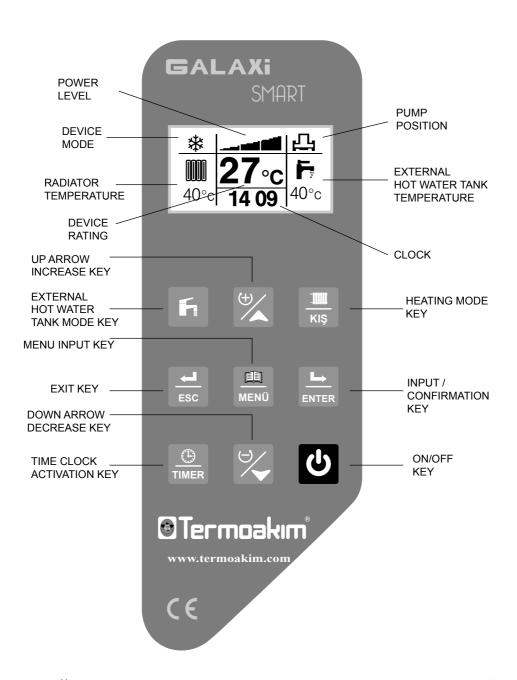
- Ensure that the installation connections of the device are made correctly.
- It should be sure that the air of the device and the installation system (radiator or underfloor heating) is taken and the pressure on the manometer should be 1.5 bar.
- Ensure that the electrical connection of the device is made correctly, that the cable is drawn in the appropriate section, that the leakage current relay is installed in the appropriate amperes, and that the ground line is connected. These procedures must be done by authorized electricians.
- Ensure that the voltage supplied to the device is appropriate, low or not high.
- The radiator temperature and external hot water tank temperature should be set to 40 °C during the first operation of the device.
 When it is operated for a while and made sure there is no air in it, the consumer can adjust the temperature he wants.
- The device must be activated by our technical services in order to operate efficiently and smoothly and to be valid under warranty conditions.

Warning

The circulation pump can be locked due to calcareous water and corrosion in devices that have not been run for 3 months or more after water pressing. The pump should be given way.

For the devices in this case, contact the Authorized Service must be made before starting.

USING THE CONTROL PANEL OF THE DEVICE



Choosing the device's summer / winter mode

Press the power key from the panel. Device information will appear on the screen. Press-heating mode or external hot water tank mode - in the panel to select which position you want it to operate in.

When heating mode is selected in the upper left corner of the mode section on the display, the snow shape will appear. When the external hot water tank mode is selected, the shape of the sun will appear. These shapes show you which mode you are in.

Menu and contents

- 1. Radiator Temperature Adjustment
- 2. External Hot Water Tank Temperature Adjustment
- 3. Timer
- 4. Language Selection
- 5. Device Information
- 6. Date and Time
- 7. Factory Settings
- 8. Factory external hot water tank Mode
- 9. Service

Setting The Set (Temperature) Of The Device Radiator temperature adjustment:

Press the menu button, scroll to the radiator temperature setting, press enter, press the arrow keys to the desired degree and press enter, the degree will be stored. Exit with the Esc key.

Repeat this process while adjusting again.

External hot water tank temperature adjustment:

Press the menu key, press the arrow key to enter the external hot water tank temperature setting, press enter, press the arrow marks to the desired temperature, and press enter. The temperature you requested is set. Exit with the Esc key.

Repeat this process while adjusting again.

* This setting applies only to devices used in external hot water tank mode.

Timer setting:

You can set the device in five different time zones during the day. You can also choose weekly working days. By setting the Timer, you can operate your device at different times to the desired degree.

Press Menu key, scroll to timer position with arrow marks, press enter, program 1 will appear, press enter again, timer page will open, enter the time when the device will start on.

On: 00-00

You'll see a line under the first numbers. This line will show you where you are on the menu. Press enter at the setting place where the line 00-00 is located, the position will be activated. Set the time with arrow marks when you press enter, it is taken into memory. Scroll with the down arrow mark set the minute in the second digits press enter scroll with the arrow mark.

Off: 00-00

Scroll to the first digits of its location, press enter, enter the time of closure, press enter, store the time. Scroll with the arrow sign, press enter in minute numbers, set the minute, press enter, you will move to the degree position, press enter, Adjust the degree, the degree will be stored when you press enter. You've become weekly days. If you want it to work on all days, press enter to position the square full, if you do not want it to work with the arrow key past the empty square to leave the device will not work on the day with the empty square. Exit with the Esc key. The timer setting is now in memory. To run in the timer position, press the timer key in the panel and the device switches to my timer position. In the upper-left corner of the screen, the mode section exits the clock shape and writes the timer in the information corner at stop time. The timer in the information section is deleted when the run time is reached. Next to the clock shape is the number in which program you are in. You need to press the timer button on the panel to deactivate and restart the timer. The program is set to 2-3-45 by doing the same.

Note: you must value it between 00:00 and 23.59 hours because it is a weekly program. If the timer program passes to the next day, you must enter two or more programs into the system.

Language Selection Of The Device

Press menu, scroll to language selection with the arrow key, press enter, select the desired language, and press enter. It is taken into the memory. Exit with the Esc key.

*English *Turkish *Greek

Device Information

This location is the memory section where the pump and malfunctions are recorded in the system. It records all the faults and negatives it sees during the period of operation of the device, and the prescription of the device is kept.

- 1. <u>ID number</u>: The computer operating code of the device.
- 2. <u>Setup</u>: First start date. The date is the date automatically taken to memory after the device is activated.
- 3. Room: The number of times the device is deactivated by the room thermostat.
- 4. Pressure: Counts the device's lack of water.
- 5. <u>Telephone</u>: Counts the number of times the device is switched on with the phone.
- 6. <u>Private</u>: This mode counts how many times the device has been checked with another device.
- 7. <u>High Temperature</u>: Counts how many times the device has seen high temperatures.
- 8. <u>Safety Thermostat</u>: Counts how many times the device sees a safety thermostat.
- 9. Boiler Sensor: Counts the boiler sensor failure of the device.
- 10. External hot water tank Sensor: Counts the external hot water tank sensor failure of the device.
- 11. Pump: Counts the working time of the circulation pump.
- 12. <u>Power outage</u> Counts how many times the device has suffered a power failure

Setting the date and time of the device

Press the menu button, press the arrow key to move to the date and time position, press enter, press the arrow key to adjust and press enter, the date and time setting is stored.

Factory settings

This location is activated by the service and cannot be adjusted by the customer.

Service location

Press menu, press ok to service position, press enter, the Thermoakım® factory technical support phone is displayed. The service number of the zone is displayed in the Authorized Service Area. You can see this number if entered by the service.

DEVICE ERROR INFORMATION

Low Pressure Error: Automatic pressure control is performed in the device. The device is designed to be a minimum of 0.8 bar and a maximum of 1.5 bar. When the pressure of the device falls below 0.8 bar, it gives a low pressure error and protects itself by shutting down.

Solution: You will see the water pressure in the manometer under the device. There is a filling valve on the right side, which opens slowly and the pressure on the manometer is brought to 1.5 bar and the valve is closed. When the device is turned off and turned on, the error information on the display will be erased.

You can now use your device in any location.

Safety Thermostat Error: The device has a reset safety thermostat. When the water temperature inside the device rises to 95 °C and above, the device turns off to protect itself and this error appears on the display. Solution: If this error is given, you will need to reset your device. Insert your hand through the opening at the bottom of the device as shown in the picture and remove the cover of the reset thermostat. After waiting for a while, press the reset button. If the rating is still high, the button will not fit in. When you press it after the degree has dropped, it will snap into place with the click sound. The device is reseted with this way. When the device is turned off and turned on, the error information on the display will be erased. You can now use your device in any location. If this error repeats repeatedly, contact the service.

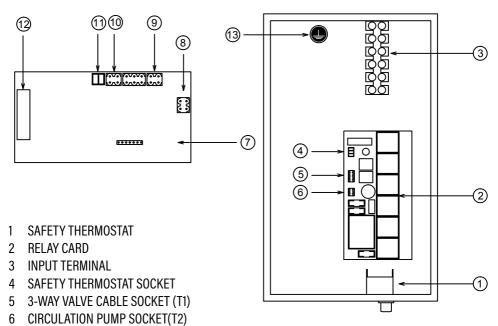
Boiler Sensor Error: It gives the error of the probe measuring the temperature of the boiler. The cable may have come off or the terminal may have made oxide. Check the input by looking at the control panel outputs. If the error still persists, contact the service.

External Hot Water Tank Temperature Sensor Error: It is the fault of the probe that measures the temperature of the external hot water tank. The cable may have come off or the terminal may have made oxide. Check the input by looking at the control panel outputs. If the error still persists, contact the service.

* This error code applies only to devices used in external hot water tank mode.

High Temperature Error: If the temperature of the device is 85 °C and above, this error will occur. Please contact the Authorized Service.

ELECTRICAL CONNECTION DIAGRAM AND PANEL OUTPUT INFORMATION



- 7 CONTROL PANEL
- 8 ROOM THERMOSTAT SOCKET(T3)
- 9 PRESSURE SWITCH (WATER KIT) (T4)
- 10 EXTERNAL HOT WATER TANK HEAT PROBE
- 11 BOILER SENSOR
- 12 DATA CABLE
- 13 GROUND LINE CONNECTION

SAFETY PRECAUTIONS OF THE DEVICE

Prevention Against Freezing: When the water temperature in the heating circuit falls below 5 °C, the circulation pump is automatically switched on and the water is revved up.

Prevention Against Pump Locking: When the device is turned off, the circulation pump is operated automatically every 72 hours in case of lock and jam.

Warning: In order for these preventions to work, the device is switched off and never switched off from the fuse. Especially in the winter months should be closed in cases where there is a risk of frost, the device should be drained of water.

PERIODIC MAINTENANCE OF THE DEVICE

The following maintenance must be performed by the Authorized Service every year regardless of whether the device is guaranteed or not.

- Water circuit is checked whether there is any leakage, if any sealing is provided.
- Whether the resistances are working is controlled by measuring instrument.
- Check the seals of the resistances. Replaced if necessary.
- The safety parts in the device, safety valve, safety thermostat, air purger, low pressure sensor (water kit) are controlled.
- The tightness of the electrical connections is controlled.
- The air of the expansion tank is controlled.
- The voltages coming to the device are controlled.
- The device's heat probes are controlled.
- The manometer of the device is checked. If there is any congestion, it is cleared.
- The general condition and operation of the device are checked.