UKU
WiFi / Local

CONTROL SYSTEM OF ELECTRIC HEATER

3-23

CE IP67 UK CA

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UKU WiFi/Local

CONTROL SYSTEM OF ELECTRIC HEATER

Installation and user manual

ATTENTION! The electrical work described in this manual may only be performed by a licensed electrician.

ATTENTION! Main module can be used with heaters up to 18 kW.

ATTENTION! This appliance is not intended for use by people (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge.

ATTENTION! Children should be supervised to ensure that they do not play with the appliance.

ATTENTION! Keep the installation and user manual in an easily accessible place near the device, so that you always have the safety requirements of the device and information important for use at hand.

The device set includes:

- sauna control panel;
- main module (175mm×75mm×250mm);
- temperature sensor;
- door sensor;
- temperature sensor and door sensor cables (5+5 m; 2×0.23 mm²);
- control panel's cable (3 m; 4×0.34 mm²).

BEFORE INSTALLATION

Before installation read the operation manual thoroughly. Do not install or perform maintenance on the device if you do not understand all of the instructions. Contact vendor or local distributor with any questions or concerns. This way you can use all the benefits of the device and prevent damage.

- The device must be installed and serviced in strict accordance with this manual, and all local laws and requirements. You must obtain all required building and similar permits before commencing installation of the sauna equipment.
- All power must be turned off from the circuit when installing or maintaining the device.
- If you encounter problems that are not covered in this manual, contact the distributor that issued the device for assistance.
- It is not permitted to alter or rebuild the control device.
- The manufacturer has the right to make software updates to the device. You can find the latest version of the operation manual on our website (huum.eu).
- Make sure supply conductors are properly sized per tables, new wiring is recommended. Install on a dedicated circuit.
- It is recommended to connect the device to the mains without residual current circuit breaker.
- UKU control system allows the sauna temperature to be set between 40 and 110°C.
- This product has been designed to work with the devices that meet the requirements of standard EN 60335-2-53:2011.

Control system parts and parameters required for installation

The parts of the control system and sauna details are marked with numbers in the text of the manual and in the figure below:

1 UKU control panel;
2 Main module;
3 Door sensor;
4 Temperature sensor;
5 Heater (not included);
6 Steamer (not included);
7 Ventilation device/lamp (not included);
8 Connecting a 3-phase heater;
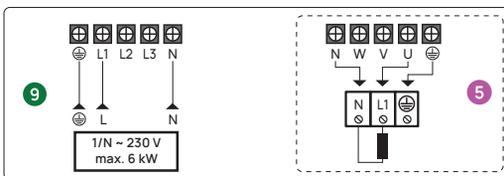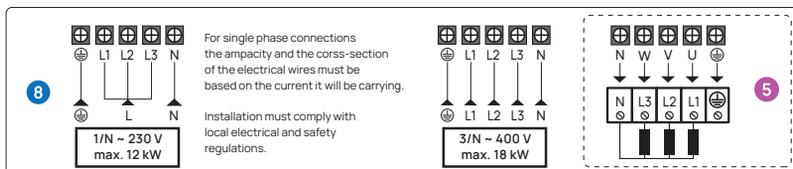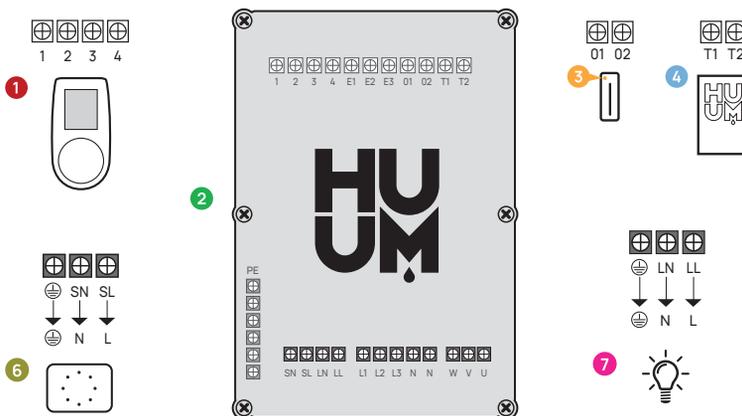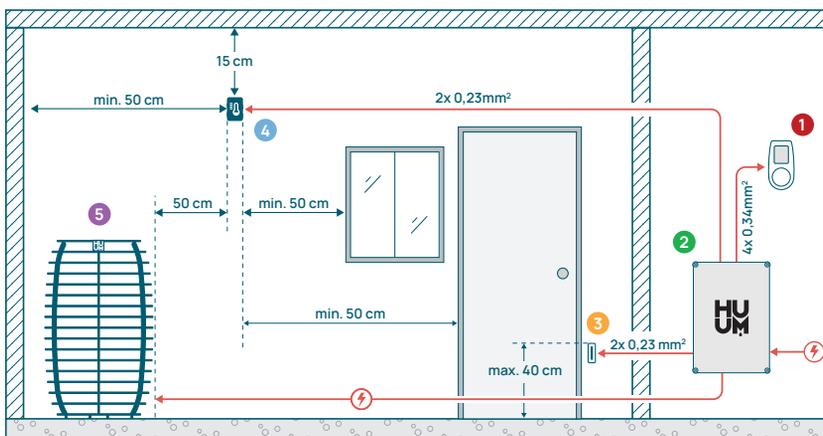**9** Connecting a 1-phase heater.

Figure 1. Electrical connections of the heater.

15 cm

min. 50 cm

2x 0,23mm²

4x 0,34mm²

50 cm

min. 50 cm

min. 50 cm

max. 40 cm

2x 0,23 mm²

1 2 3 4

01 02

T1 T2

PE

SN SL LN LL   L1 L2 L3 N N   W V U

SN SL

N L

LN LL

N L

For single phase connections
the ampacity and the corss-section
of the electrical wires must be
based on the current it will be carrying.

Installation must comply with
local electrical and safety
regulations.

L1 L2 L3 N

L   N

1/N ~ 230 V
max. 12 kW

L1 L2 L3 N

L1 L2 L3 N

3/N ~ 400 V
max. 18 kW

N W V U

N L3 L2 L1

L1 L2 L3 N

L   N

1/N ~ 230 V
max. 6 kW

N W V U

N L1

INSTALLING UKU ELECTRICAL CONTROL DEVICE

- Before installation disconnect the electric heater from the power supply.

- The control panel **1** should be installed outside the sauna room. The control panel with glass case can also be installed inside the sauna room. Please read the instructions on the following pages.

- If your main module **2** supports WiFi or mobile connection, it should be placed in a place with coverage. Insulated rooms and boxes such as sauna room and metal switchboards are not suitable.

- The main module must be installed in a dry location. The device has a protection degree of IP67. Power cables must be secured using the provided cable glands.

- To prevent damage to the device, the operating environment temperature of the main module should remain between -20°C and 50°C and the maximum humidity in the room should not exceed 95%.

WARNING! **The main module must be permanently connected to the circuit. A circuit breaker must be installed to disconnect all poles from the mains. The heater's power cable should be SiHF-JB or similar. The cross-section of the cable depends on the power of the connected heater. See your heater's manual.**

ATTENTION! **Always let the correct cable size be approved and installed by a qualifiedelectrician.**

ATTENTION! **Crimping the power cable ends is mandatory. The compression of the metal sleeve ensures that the wire threads are held in place, minimizing the risk of loose connections that can cause electrical faults or pose safety hazards.**

ATTENTION! **Determine the location of the parts of the control system in the room, then measure the lengths of the cables needed to connect them (see figure 1).**

ATTENTION! **When connecting the main module to one phase, check that the fuse you are connecting to has sufficient amperage. All outputs U, V, W, N, PE should be connected with separate cables.**

Control panel **1**

WARNING! **To avoid over-threading the screw threads, tighten the screws only by hand. Do not use electric screwdrivers.**

- The cable of the control panel must not exceed 20 meters.

- The cable of the control panel must not be routed parallel to the high current cables.

- If it is placed outdoors, it is recommended to protect it with a box to shield it from weather conditions.

Control panel with glass case

The control panel with a glass case can be installed inside the sauna room, but it must be placed away from the heater, with the upper edge no higher than **1 meter** from the floor. Additionally, the control panel must be installed at least 50 cm away from any exhaust ventilation. If there is an exhaust port in the wall that has the door to the sauna, the control panel needs to be installed on the other side of the door. The control panel with glass case is recessed into the wall. Before installation, make a recess in the wall with dimensions of 65 x 105 x 27 mm in the desired place.

Installation steps:

- Remove the protective film of the glass and the control panel button.
- Remove the glass. The glass is fixed with magnets.
- Connect the cable following the numbering.
- Choose fasteners according to the material of the wall.
- Attach the control panel to the wall.
- Carefully place the glass back on the control panel housing.
- Install the button.

ATTENTION! If the wall where you install the glass control panel contains conductive materials (such as metal insulation) that could come into contact with the screws securing the cables on the back cover of the panel, cover the screw heads with insulating tape to prevent a short circuit.

In sauna rooms, where the recessing of the control panel is not possible due to construction or surface finish, it can be attached to the wall using the control panel mounting frame (UKU surface frame H310301). The mounting frame is an additional product that you can ask your HUUM distributor.

Control panel with wooden case

The control panel with a wooden case can be installed inside the sauna room, but it must be placed away from the heater, with the upper edge no higher than **1 meter** from the floor. Additionally, the control panel must be installed at least 50 cm away from any exhaust ventilation. If there is an exhaust port in the wall that has the door to the sauna, the control panel needs to be installed on the other side of the door.

- Remove the back cover of the UKU control panel to attach it to the wall.
- Mount the back cover on the wall, positioning the upper edge of the control panel at eye level.
- Connect the power cable to the screw terminal of the device.
- Secure the device to the back cover already placed on the wall.
- Use screws to secure it from the sides.

Control panel with plastic case

The plastic control panel must be installed outside the sauna room. If it is placed outdoors, it is recommended to protect it with a box to shield it from weather conditions.

- Connect the cable following the numbering.
- The mounting screw holes are hidden under the control panel button.
- Remove the button by gently pulling it.
- Fix the control panel to the wall with screws.
- Reinstall the button.

Main module ❷

The main module should be installed outside of the sauna room. A weatherproof housing can be added if desired, providing extra protection against water, snow, and condensation, and allowing the module to better blend with the sauna's surroundings. The main module is capable of functioning in temperatures as low as -40°C; however, it is important to note that the display may experience slowdowns at these extreme temperatures.

- If installing outside is not possible, the main module can be mounted inside the sauna room. It should not be positioned higher than 10 cm and must be at least 180 cm away from the heater, ideally under the sauna bench.
  The maximum working environment temperature for the main module is 50°C.
- When mounting the main module, please make sure that you are always able to open the access panel.
- Do not attach the main module to the ceiling or inclined surfaces.
- The screw holes for fixing the main module to the wall are located under the fixing screws of the device cover.
- Fix the main module on the wall in an upright position using four screws, ensuring that the cable openings face downwards.
- Screws are not included.
- Connect the cables of the UKU control panel, temperature sensor, and door switch through a cable glands to the enclosure and main module (see figure 1.).
- Connect the power cable (230V / 400V) through the cable glands to the main module, see figure.

  WARNING! If the cable glands are not used, the IP class of the device does not apply!

Door sensor ③

- The door sensor kit includes a sensor, magnet and fixing tape.
- The length of the cable between the sensor and the main module must not exceed 10 m.
- Install the sensor on the handle side of the door frame, at a maximum height of 40 cm from the floor. When installed higher, the temperature may affect the performance of the magnet and the durability of the magnet tape.
- It is important to ensure that the magnet in the door passes directly by the sensor in the door frame.
- Use a drill with a diameter of 5 mm to sink the door sensor into the door frame.
- Drill a hole and install the sensor.
- Connect the cable to terminals **O1** and **O2** in the main module. Connect the other end of the cable to the cables attached to the door sensor.
- Stick the door sensor magnet to the door leaf using the tape attached to it.
- When closing the door, the sensor and the magnet should remain slightly displaced, and the distance between them must not exceed 10 mm.
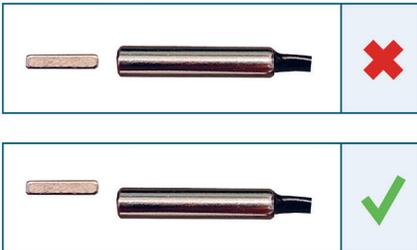
Figure 2. Door sensor placement.

Temperature sensor with overheating protection 4

- The length of the cable between the temperature sensor and the main module must not exceed 10 m.

ATTENTION! The temperature sensor must not be located directly above the heater, but 50 cm from the outer edge of the heater.

- If the temperature sensor is installed on the wall, the sensor must be **15 cm from the ceiling**.

- The temperature sensor must be located at least **50 cm away from the corners** of the sauna room and air openings (door, window, ventilation).

- If the sensor can not be positioned on the wall at the distances specified above due to the size or the construction of the room, the sensor must be installed on the ceiling. The sensor must be positioned 50 cm away from the edge of the heater and installed at the highest point of the ceiling. When installing the temperature sensor on the ceiling, the cable of the temperature sensor (supplied in the UKU kit) must be routed from behind the boarding of the sauna ceiling. When routing the cable externally, it must be protected from UV radiation and external weather effects with a slat or similar.

- Connect the cable to terminals **T1** and **T2** in the main module and to terminals **1** and **2** inside the temperature sensor.

- The temperature sensor consists of the rear and front case halves. Attach the back side to the wall with two screws, ensuring it is straight.

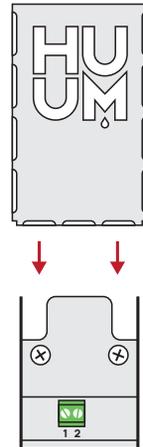- Install the front half as shown in the figure on the right.

Figure 3. Temperature sensor

Installation in case of barrel sauna

If the sensor can not be positioned on the wall at the distances specified above due to the size or the construction of the room, the sensor must be installed on the ceiling. The sensor must be positioned **50 cm away from the edge of the heater** and installed at the highest point of the ceiling. When installing the temperature sensor on the ceiling, the cable of the temperature sensor (supplied in the UKU kit) must be routed from behind the boarding of the sauna barrel ceiling. When routing the cable externally, it must be protected from UV radiation and external weather effects with a slat or similar.
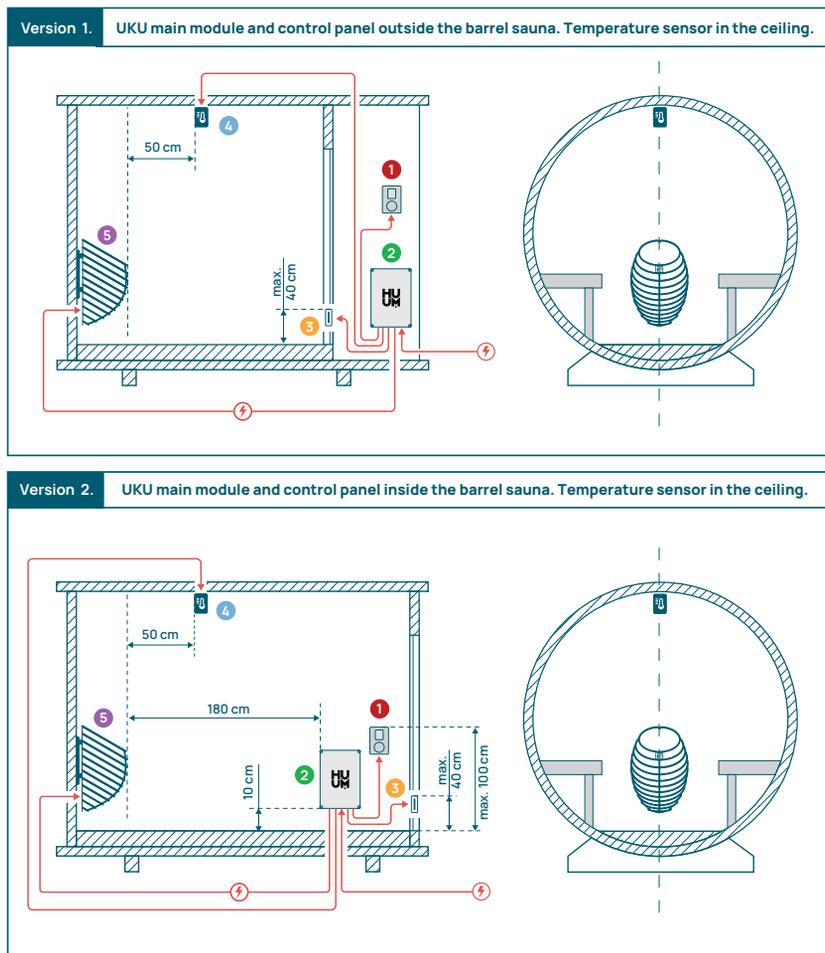

Version 1. UKU main module and control panel outside the barrel sauna. Temperature sensor in the ceiling.

Version 2. UKU main module and control panel inside the barrel sauna. Temperature sensor in the ceiling.

Figure 4. HUUM UKU installation in barrel saunas.

Steamer ⑥

- The maximum power of the steamer is 2500W, voltage 230V/50Hz.
- Connect **SL** (phase), **SN** (neutral) to the outputs of the steamer. To connect, see the **figure 1.**
- After connecting the steamer, turn on the steamer function in the control panel settings. See the **"Humidity settings"** section of the operation manual page 17.

WARNING! When connecting the control system with an electrical heater with a steamer function ensure that the water tank is always filled with water. When the water tank is empty, the steamer function is disabled and there is a risk that the heating element may burn out.

ATTENTION! The steamer cannot be used with target temperature above +90°C.

Ventilation device/ lamp ⑦

- It is possible to connect a lamp or a ventilation device to the outputs **LL** (phase) **LN** (neutral) of the main module. To connect, see the **figure 1**.
- The maximum power of the device is 100W, voltage 230 V/50 Hz.
- After connecting the device, turn on the **"Vent/Lamp"** function in the control panel settings, see the corresponding section on page 16 in the operation manual.
- If the lamp or ventilation device is connected and the corresponding function is active in the control panel menu, you can turn the connected device on and off using the control panel.

Connecting UKU WiFi control system to the network

- The WiFi modem complies with 802.11 b/g/n standard.
- The main module supports only 2.4 GHz WiFi networks.
- UKU should be connected to the unique 2.4GHz WiFi network. If the name of the network matches with that of 5GHz or 6GHz network, it should be changed.

  ATTENTION! The main module does not support WiFi network names and passwords which are longer than 20 characters.
- To enter the control panel menu settings, hold down the panel button for **9 seconds**.
- Go to **"WiFi settings"** and select **"SSID"** from there. You can confirm the options by clicking on the button.
- In the opened menu, find the **WiFi network** to which you want to connect your sauna control system.
- If you have selected WiFi network, **enter the password.**

- After entering the password, click **connect** and follow the instructions on the screen.
- In the operation manual, information on connecting the sauna to the mobile application has been provided in the chapter **"HUUM mobile application"** on page 13.
- If you have problems connecting the control system to the WiFi network, you can find video instructions and the fastest help at: huum.eu.

HUUM mobile application

If you have chosen UKU control system with WiFi capability, you can also control it using the HUUM mobile application in addition to the control panel. In this way, you can conveniently heat your sauna in the app even when you are away from home.

- Download the **HUUM application** from the application page of your mobile phone's operating system:

- Create a user account in the application.
- Connect the control system ID (X X X X X X) with your user account. The ID of the control system is also the ID of your sauna, you can find it on the sticker located in the upper right corner of the main module cover. The code is also provided on the cover.
- Check whether the functions of the mobile application (e.g. selection of sauna temperature and heating time, heating on and off) work and reach the sauna. The function should start within **60 seconds** of selecting the command in the menu. In case the functions of the mobile application are not activated, contact us: support@huum.eu.
- The number of user accounts linked to one sauna is not limited.

How to add WiFi capability to your UKU Local control system?

If you have purchased UKU Local control system, but want to add WiFi capability to it, you can do so in HUUM mobile application. The upgrade does not require calling a technician, but is activated remotely for an additional fee.

- To do this, download HUUM mobile application, create a user account and link it to your sauna ID (see the previous section **"HUUM mobile application"**).
- You can get further instructions from the mobile application.

TESTING

ATTENTION! Only a licensed electrician may carry out the tests!

WARNING! Testing should be performed with the supply voltage on.
Risk of electric shock!

WARNING! Before starting the test, check that the heater is installed according to the manufacturer's instructions!

1. Check the power terminals of the circuit breaker and the main module.

Bad connections may cause a fire. Switch the power on from the switchboard by using the circuit breaker. The screen will flash for a moment. The device is ready for use.

2. Check the temperature sensor

- If the error message **"Temperature sensor error!"** is displayed on the screen of the control panel, check the temperature sensor cable connections on both the sensor side and the main module side. If the error message does not dissapear, the temperature sensor must be tested. For testing, connect it to the main module with a shorter wire, ruling out a faulty wire. If there is the same error message afterwards, then proceed to the next testing method. The final, most thorough testing method is measuring the resistance of the temperature sensor. It should be around 1,1 kOhm at 20°C. If the resistance is correct, the fault is in the cable or connections. If there is no resistance, the sensor is damaged and must be replaced. For a replacement sensor, please contact the reseller who sold you the HUUM control system.
- In other cases, to test, turn off the circuit breaker of the sauna for a minute and then turn it back on. The control panel should be switched off and display the current temperature when switched on.
- Adjust the target temperature of the sauna to 50°C. Turn on the sauna. If the control panel indicates that the sauna has reached the desired temperature, make sure after 30 minutes that the desired temperature remains noticeably the same. Turn off the heating.

3. Check the door sensor

Close the sauna room door. Turn on the control panel and set the temperature. Turn on the heating. The heater starts heating and the heating elements start glowing red. The relays should activate. Open the sauna room door. The relays should disconnect within 5-10 seconds and the message **"Door open"** appears on the screen. Close the door. The relays activate again, the message disappears and heating continues.

CONTROL PANEL USER MANUAL

- Before use, make sure that you have made the necessary connections according to your control panel model (see **"Connecting UKU WiFi control system to the network"** on page 12).

- A short single press of the button turns the control panel on and starts or stops the heating. The display remains active throughout the heating period.

- You can set the maximum possible heating time of the heater in the menu of the control panel on the wall. In case of private saunas the choice of heating time is **3** or **6 hours**, in case of semi-public saunas **12 hours** and in case of public saunas **18 hours**. By using the mobile application you can choose the heating time yourself, but its length cannot exceed the settings of the control panel.

- The current sauna temperature is displayed in the middle of the screen.

- The target sauna temperature is indicated by a number in the upper right corner of the screen. Turn the button to select the target temperature.

- Press the button to start heating. During heating the heating symbol is displayed above the temperature on the screen. (〰).

- To enter the control panel settings menu, hold down the button for **9 seconds.**

- Select **"Back"** for each function to exit the menu.

Timing of heating

- UKU control system allows you to schedule the start of heating.

- To activate the timer function, press and hold the button for **6 seconds.**

- When the desired time is selected, a single short press on the button switches the timer on. The function of the timer will not activate unless you press the button!

- The timeline appears on the screen, showing how much time is left until the heater is turned on.

Control panel settings menu

The following parameters can be set in the menu:

WiFi settings – changing WiFi settings, selecting a suitable network and connecting to it.

- Press and hold the button for **9 seconds** to enter the control panel settings menu.

- Go to the **"WiFi settings"** option. The necessary steps for selecting the WiFi network and establishing the connection have been described in the section **"Connecting UKU WiFi control system to the network"** on page 12.

Lamp settings – settings for controlling devices connected to the control system (e.g. ventilation, sauna lamp).

1. Vent/Lamp

- To control devices connected to the control system from the control panel, this function should be turned on **(On)**.
- Press the button for **9 seconds** to enter the menu.
- Find the **"Lamp: On/off"** function in the menu and make the choice that suits you.
- If the function is active, you can turn the relevant device on or off with **two quick button presses** using the control panel.

2. Door switch

If the function is activated, the device connected to the control system (e.g. ventilation, sauna lamp) turns on automatically for a user-defined time period of 10, 15 or 20 minutes when the sauna door is opened.

- Press the button for **9 seconds** to enter the menu.
- Find the **"Door switch"** function in the menu and choose a suitable period of **10, 15 or 20 minutes.**

NB! **The devices are connected to the outputs LL (phase) LN (neutral) of the main module of UKU control system. The maximum power of the device is 100 W, voltage 230 V/50 Hz.**

Heating settings – heating settings of the heater.

1. Temperature unit

- The function allows you to choose the measurement unit of the sauna temperature: °C (Celsius) or °F (Fahrenheit).
- Press the button for **9 seconds** to enter the menu.
- Find the **"Temperature unit"** function in the menu and select the appropriate unit of measurement.

2. Heating time

- Allows you to set the heating time, after which the control system automatically turns off the heater.
- Press the button for **9 seconds** to enter the menu.
- Find the **"Heating time"** function in the menu and set the heating time according to your sauna type:
  - → **Private saunas 3h or 6h**
  - → **Semi-public saunas 12h**
  - → **Public saunas 18h**

- When using the local control panel, the heater follows the heating time specified in the settings, but the user can also stop the heating earlier.

- When changing the heating time to more than **6 hours (max heating time for private saunas)**, the user should confirm that it is a **semi-public sauna (max heating time 12h)** or a **public sauna (max heating time 18h)**.

3. Max temp/Min temp

- The function allows you to set the minimum and maximum temperature range of the sauna.

- By default, these values are **min 40°C and max 110°C.**

- Press and hold the button for **9 seconds** to enter the settings menu.

- Find the **"Min temp"** function in the menu and select the appropriate temperature.

- Repeat the same to set **"Max temp".**

NB! The limitations set in the control panel menu cannot be overridden in the mobile application.

4. Heating algorithm

- Allows you to choose the heating algorithm Simple or Smart.

- Simple algorithm keeps all heating elements working at the same time until the desired target temperature is reached.

- Smart algorithm starts turning off the heating elements one after the other before reaching the target temperature. If the temperature in the sauna drops, one heating element after another is turned on to maintain the temperature. Smart algorithm allows you to save electricity consumption, especially for heaters with a large amount of stones (50+kg).

- Press and hold the button for **9 seconds** to enter the settings menu.

- Find the **"Heating algorithm"** function in the menu and make a suitable choice.

NB! Smart algorithm is not suitable for use on the heaters with less than three heating circuits.

Humidity settings – sauna steamer settings.

1. Steamer

- To control the steamer connected to the control system from the control panel, the function should be activated **(On)**.
- Press the button for **9 seconds** to enter the menu.
- Find the **"Steamer: On/Off"** function in the menu and make the appropriate selection.

- To adjust the humidity level in the sauna, push the button down and turn it to the **right (higher humidity)** or to the **left (less humidity)**. You can make this selection in the main view of the control panel.
- The intensity of the steamer is displayed in the lower left corner of the screen (e.g. within 0-99).
- The steamer works only when the sauna is in heating mode.

The control system regulates the steam generator using a formula, so the actual humidity in the sauna may vary depending on the characteristics of the sauna.

ATTENTION! **The steamer does not start immediately after activating the heater, but shortly before the target temperature is reached. This ensures a faster heating time. For more information, see "Hum. start temp".**

ATTENTION! **The steamer function will be automatically deactivated if the set temperature is higher than 90°C.**

Hum. start temp

Defines how many degrees before reaching the target temperature the evaporator starts working.

Default: 10°C. Possible range: 0-20°C. Selecting 0 means the steam generator starts working when the target temperature is reached in the sauna.

- Press the button for **9 seconds** to enter the menu.
- Find the **"Humidity settings".**
- Find the **"Hum. start temp"** function in the menu and select the appropriate degree. To make your selection, turn the knob, then confirm the selection by pressing the button.

Hum. display style

- Press the button for **9 seconds** to enter the menu.
- Find the **"Humidity settings".**
- Find the **"Hum. display style"** function in the menu and select the desired style by clicking. You can choose between two options: **"% of maximum allowed"** and **"Relative humidity %".** To make your selection, press the button.

% of maximum allowed

- You can set the maximum allowed percentage of relative humidity at the given target temperature. The maximum relative humidity in the sauna is specified by the standard.
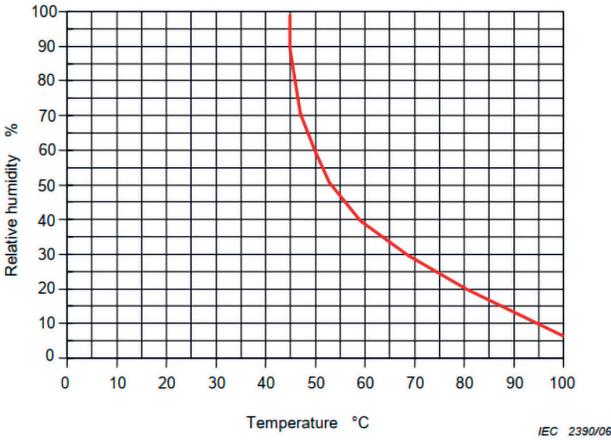

Figure 5. Temperature/relative humidity characteristic during normal operation.

Relative humidity %

You can select the relative humidity for your sauna. The maximum relative humidity in the sauna is specified by the standard and varies according to the target temperature. The higher the temperature, the lower the permissible relative humidity in the sauna. Refer to the accompanying chart.

2. Steamer safety

- This function notifies you when the steamer has run out of water.

- In the default setting, the function is enabled. If you wish to disable it, please follow the described steps.

- Press the button for **9 seconds** to enter the menu.

- Find the **"Steamer safety: On/Off"** function in the menu and make the appropriate selection.

- When the main module detects that the water has run out, the steamer turns off.

- It is not necessary to use the setting if the steamer already has a built-in water level sensor.

Safety settings - setting up the safe use of the sauna.

1.   Remote start safety

To confirm the safety of your sauna for remote heating activation,
follow the steps below:

- Close the door of your sauna (if you have the control panel installed inside the sauna, still follow the steps mentioned below. After confirming, you have 15 seconds to leave the sauna and close the door).

- Press and hold the control panel button for **3 seconds** until the safety confirmation prompt appears.

- By answering yes, remote (from the phone app) launch is enabled. It is indicated by three gray dots (● ● ●) on the control panel screen.

- If you do not answer or the answer is no, the system will not allow you to start heating from the mobile phone.

- Once you've confirmed the safety of the sauna, it will be considered safe until someone opens the door again. If the door is opened, before you start the sauna from your app, the remote launch will be deactivated and the above mentioned steps have to be repeated.

ATTENTION! **In the settings menu it is possible to turn off the remote launch confirmation on the control panel. In this case, you can remote launch (from the phone app) your sauna, without confirming the safety of the sauna on the control panel. If you would like to do this, follow the steps mentioned below. By turning off the test question, the sauna may be started remotely without confirmation that conditions in the sauna are safe. This may result in property damage, and serious or fatal injuries.**

- Press the button for **9 seconds** to enter the menu.
- Go to **"Safety Settings".**
- Find the function **"Remote start safety: Enabled/Disabled".**
- Select **"Disabled".**

2.   Overheating pause On/Off

The sauna control system has mandatory pausing mechanism during heating. This pause algorithm addresses situations where the heater's power is insufficient for the specific sauna room, or the ventilation is done incorrectly, causing the heater to operate at full capacity continuously. By implementing these pauses, the system reduces the risk of overheating surfaces near the heater.

The pause logic:

1. 90 minutes of heating.
2. 10 minutes of pause.
3. An additional 10 minutes of pause or pause until the temperature drops by 10 degrees from the start of the pause.
4. 45 minutes of heating.
5. 10 minutes of pause.
6. An additional 5 minutes of pause or pause until the temperature drops by 10 degrees from the start of the pause.
7. Repeat steps 4-6.
8. When the desired temperature is reached, the logic stops.

If you would like to disable the pauses function:

- Press the button for **9 seconds** to enter the menu.
- Go to **"Safety Settings"**.
- Go to **"Pauses"** and select **"OFF"**.

Failure det

Turns on/off the logic that shuts off the heater when abnormal heating behavior is detected. The logic - if the temperature does not rise by 30°C within 60 minutes of heating, the heater will shut off. This only works if the initial temperature of the sauna is below 40°C when heating starts.

Child lock

- The child lock function adds security and prevents unauthorized persons from operating the heater without supervision.
- To enter the menu, hold down the button on the control panel for **9 seconds.**
- Go to **"Safety Settings"**.
- Find the **"Child lock: on/off"** function in the menu and make the appropriate selection.
- If the function is activated, the child lock is applied automatically when the screen of the control panel turns off.
- To remove the child lock and activate the screen, while holding the button, turn it a **quarter turn to the right**, then **back to the beginning**, then a **quarter turn to the left** and **back to the beginning**.

Settings password

- If necessary, it is possible to protect the settings menu with a password.
- You can turn on the function and set the password in the settings menu.
- To enter the menu, hold down the button on the control panel for **9 seconds**.
- Go to **"Safety Settings".**
- Find the **"Settings password: on /off"** function in the menu and make a suitable choice.
- Set a password.
- If the function is on, the user will be asked for a password every time when entering the menu. By default, the feature is turned off.

NB! Once you have set a password, store it securely. If you forget or lose your password, contact the user support at: support@huum.eu

Using the mobile application

- You can download HUUM mobile application to your phone:

- You can find information about creating a user account and connecting the sauna to the application in the section **"HUUM mobile application"** on page 13.
- In HUUM mobile application you can:
    - → Set the desired sauna temperature and heating time (the last time setting remains in the memory).
    - → Turn the sauna on and off.
    - → Control sauna steamer and lighting functions.
    - → Get notifications when the target temperature is reached and the sauna is ready.
    - → Set the sauna heating times up to two months in advance.
- Instructions for navigation can be found inside the application. The buttons (!) provide detailed additional information.

GENERAL SAFETY INFORMATION FOR THE USER

- All included sensors must be installed with the control system.

- When the overheating protection is applied 130°C, the sauna must be inspected and the safety of the sauna should be ensured. When the overheating protection is activated, the error message **"Temperature sensor error"** appears on the screen. If the overheating protection is triggered, it indicates that the temperature sensor is permanently damaged. For a replacement temperature sensor, please contact the local reseller.

- UKU control system may only be used with a heater which power in one heating circuit does not exceed **6 kW.**

- It is not allowed to modify or rebuild the device.

- If you encounter any issues not addressed in this manual, please contact the reseller from whom you obtained the device for assistance.

- The manufacturer has the right to make software updates to the device. You can find the latest version of the operation manual on our website: huum.eu.

INTENDED USE

- Before heating, always make sure that there are no objects on the heater. Non-flammable objects can also cause overheating and fire hazards.

- After ensuring that the sauna room is safe, close the sauna room door. It should remain closed during heating as heating with the door open is ineffective; the heat escapes from the room.

- To use the remote control, ensure in advance that the heater is in working order and there are no objects on it. If **"Remote start safety"** is enabled (page 20), confirm the safety prompt. Also, ensure that the sauna room door is closed.

- The device is not intended for use by people with limited physical, sensory or mental abilities (including children) or by people with insufficient experience and/ or insufficient knowledge, excl. if they are supervised by a person responsible for safety or have received instructions for use from such persons.

- Make sure that children do not play with the device.

- For longer breaks in use, turn off the sauna's current protection at the switchboard.

- Old equipment contains recyclable materials. Do not throw old devices in the household waste, but investigate the possibilities of disposal of devices at the waste stations in your area or at the local municipality.

WARRANTY

General terms and conditions can be found on our webpage: huum.eu/warranty

Find the most up-to-date material on the manufacturer's website: huum.eu

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