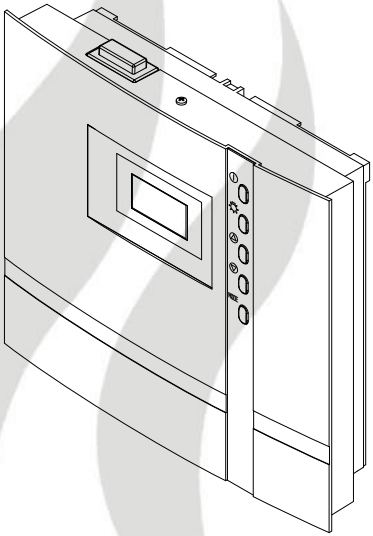
INNOVATIVE SAUNA TECHNOLOGY

EOS

ECON H3

Sauna control unit



GB **Installation and operating instruction**

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English

Table of Contents

Scope of delivery 4
Technical specifications 4
General information about sauna bathing 5
General safety precautions 6
Mechanical installation of the control unit
- Installation place 8
- Surface-mounting installation 8
- Semi-recessed installation 9

Connecting the temperature sensor cables 10
- Installation and connection of the temperature sensor 10
- Installation and connection of the second sensor (bench sensor) 11

Electrical connections 12
- Connecting the sauna heater 12
- Connecting a power extension unit (LSG) 12
- Vaporizer connection 12
- Connecting the sauna lamp 12
- Connecting a ventilation fan 12
- Installation diagram 13
- Terminal layout on the circuit board. 13
- Connection of sauna heaters up to 9 kW 14
- Connection of sauna heaters over 9 kW 14
- Connection of the vaporizer 15
- Connection of the optional humidty sensor 15

Operation 16
- General 16
  - Location of operation elements 16
  - Operating buttons 16
  - Interface in stand-by 17
  - Interface in active operation 17
  - Interface in energy-saving mode 17
  - Cabin lighting 18
  - Initial commissioning 19
  - Change language 20
  - Time setting 20
  - Activate the Life - Guard 21
  - Activate / deactivate the child lock 21

Switching on the sauna heater 22
Switching off the sauna heater 22
Switching on the sauna heater with Life - Guard 22
Individual settings 23
Cabin temperature 24
Life - Guard 24
Auto-Stop (heating time limitation) 25
Preselection time (pre-set timer) 27
Activate the preselection time 28
Deactivate the preselection time 28
Extend the time setting for sauna time 29
Unit fuses 29
Error messages and trouble-shooting 30
The device switch (Switch-off) 31
Service Address: 32
Guarantee 32
Handling procedures for return shipments (RMA) - Details for all returns ! 33

Scope of delivery

(changes without prior notice reserved)

The package contents includes:

1. Control unit
2. Temperature sensor, consisiting of: sensor board with overheating protection fuse, KTY-sensor, sensor housing, two 3x25 mm fastening screws and 2,0 m sensor cable.
3. Plastic bag with three 4x20 mm fastening screws.
4. 1 replacement overheating protection fuse
5. Installation and operating manual

Technical specifications

Rated voltage:	400 V 3 N 50 Hz AC
Power output (dry Finnish sauna):	max 9 kW resistive load (AC 1 operation)
Power output (humid operation):	6 kW for sauna heater + 3 kW for vaporizer unit
Power extension:	up to 36 kW (heater) possibile with an optional LSG device.
Heating time limit:	6 h, 12 h, without limitation (via jumper setting)
Display:	LCD display 65 x 37 mm, alphanumeric, backlighting
Dimensions (H x W x D):	220 x 250 x 67 mm
Protection type:	IPx4 in accordance with EN 60529, splashproof
Temperature control range (dry mode):	30 to 115° C
Temperature control range (humid mode):	30 to 70° C
Humidity control (without sensor):	proportional to time (10-step control)
Humidity control (with optional sensor):	Humidity control basing on relative humidty via humidty sensor F2 (#90.9479 or #945027 as per EN 60335-2-53 norm). Make sure to observe the page 15.
Temperature sensor system:	KTY sensor with safety temperature limiter 142°C. Support for the optional 2nd temperature sensor.
Water level monitor (for vaporizer):	Dry-run protection with automatic shut-down of the vaporizer 2 minutes after the low-level alarm.
Type of temperarure regulation:	Digital two-point control
Output for fan:	max. 100 W
Output for light:	max. 100 W
Sauna dry program:	30 min at 90°C after the end of the humid mode.
Environmental temperature:	-10°C bis +40°C
Storage temperatures:	-20°C bis +70°C

Dear customer

You have purchased a high-quality technical device with which you will have years of sauna fun. This sauna control unit was designed and inspected according to the current European safety standards and manufactured at the factory in accordance with the quality management standard DIN EN ISO 9001:2000.

This detailed installation and operation manual has been prepared for your information. Please observe in particular the **important notes** and the information on electrical connection.

We wish you exhilarating recreational experience and lots of fun with your sauna!

Intended use

This sauna control unit is exclusively intended for the control of the sauna heater in a sauna cabin.

Any other use over and above the intended purpose is not considered as appropriate use! Compliance of the standard operation, maintenance and repair conditions is also an element of appropriate use.

The manufacturer cannot be held liable for deviating, unauthorized alterations and any resulting damages: the initiator of these changes bears the full risk.

General information

Please check whether the unit has arrived in perfect condition. Any transport damages should be immediately reported to the freight forwarder delivering the goods or you should contact the company that shipped the goods.

Please note that you will only be able to achieve an optimum sauna climate if the cabin with its air intake and ventilation, the sauna heater and the control unit are aligned to each other.

Please observe the information and stipulations made by your sauna supplier.

Sauna heaters heat up your sauna cabin using heated convective air. Here, fresh air is drawn in from the air intake which, when heated, rises upwards (convection) and is then circulated within the cabin. Part of the used air is pushed out through the vent in the cabin. This creates a typical sauna climate which can achieve temperatures of approx. 110°C measured directly under the ceiling of your sauna, dropping in temperature to approx. 30-40°C towards the floor. It is therefore not unusual to measure temperatures of 110°C on the temperature sensor hanging over the heater, whilst the thermometer hanging on the sauna wall, approx. 20-25 cm under the cabin ceiling, only indicates 85°C. The bathing temperature generally lies between 80°C and 90°C in the area of the upper bench when the temperature is set to maximum.

Please note that the highest temperatures are always generated over the sauna heater and that the temperature sensor and the safety limiter must be mounted there in accordance with the control unit installation instructions.

When heating up for the first time, you may notice a slight smell caused by evaporating lubricants used in production processes. Please ventilate your cabin before beginning your sauna bath.

General safety precautions

This device can be used by children aged **8** upwards and by persons with physical, sensory, or mental disabilities, or who have inadequate experience and knowledge if they are supervised or if they have received adequate instruction in how to use the device safely and understand the associated risks. Children may not play with this device. Children may not clean or carry out any user maintenance if unsupervised.

Children are to be supervised in order to make sure that they do not play with this device.

⚠ **Attention**: It is forbidden to install the control box in a closed switch cabinet or behind a wooden panelling!

The electrical installation may be done only by a qualified electrical technician.

You must comply with the regulations of your power supply company and applicable VDE regulations (DIN VDE 0100).

⚠ **WARNING**: Never attempt repairs or installations yourself, as this could result in serious injury or death. Only a qualified technician may remove the housing cover.

Please note the dimensions in the assembly instructions, especially when installing the temperature sensor. The temperature above the oven is critical for the temperature setting. The temperature can be held within operating parameters and a minimal temperature gradient inside the bench area of the sauna cabin can be achieved only if unit is assembled correctly.

The device may only be used as intended as a control unit for sauna ovens up to 9 kW (up to 36 kW when combined with a contactor box).

Completely disconnect the control unit from the electrical circuit, i.e. flip all circuit breakers or the main circuit breaker during each installation or repair.

Please note the safety and installation information from the sauna oven manufacturer.

Always heed the specifications and instructions of the cabin manufacturer, too.

When using control units that offer the possibility of external access (GSM-module, remote button, etc.) or time-delayed switching (preselection time, weekly timer, or similar) a trigger guard with covered heating unit is required. (cover protection type 1-5 or S-Guard).

Attention!

Dear customer,

according to the valid regulations, the electrical connection of the sauna heater and the control box has to be carried out through the specialist of an authorized electric shop

We would like to mention to the fact that in case of a warrenty claim, you are kindly requested to present a copy of the invoice of the executive electric shop.

Installation of the control unit

Wall installation

The control unit may only be mounted outside the sauna cabin. It is advisable to select the outside wall of the cabin to which the sauna heater is fixed from the inside as mounting position. If ductwork is already provided for electrical installations then the position of the control unit is predetermined by that. Please follow the instructions for installation:

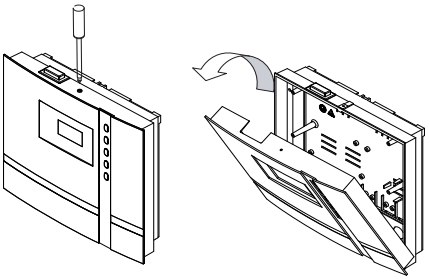


Fig. 1

Remove the control device cover. In order to do this loosen the screw at the top of the housing and pull the housing top upward while swivelling (Fig. 1).

Surface-mounted installation

1. The 3 mm diameter boreholes for the supplied wood screws 4 x 20 mm are drilled according to the dimensions shown in Fig. 3 + 3.1.
2. Insert one of the wood screws into the top center hole. The control unit is hooked onto this screw. Therefore, leave the screw out by approx. 3 mm (Fig. 3.2).
3. Hook the control unit onto the 3 mm protruding screw in the upper mounting hole.
   Insert the supplied rubber grommets into the openings at the rear wall of the housing and insert the connecting cable through these openings.

Fasten the housing bottom at the two bottom openings (Fig. 4) firmly to the cabin wall.

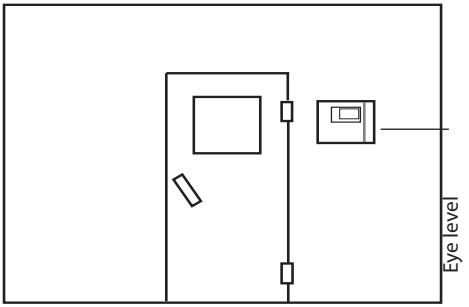


Fig. 3

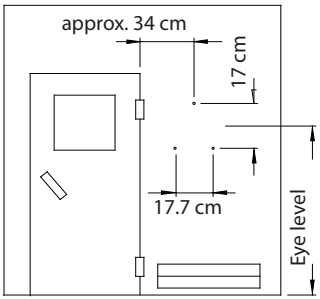


Fig. 3.1

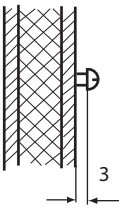


Fig. 3.2

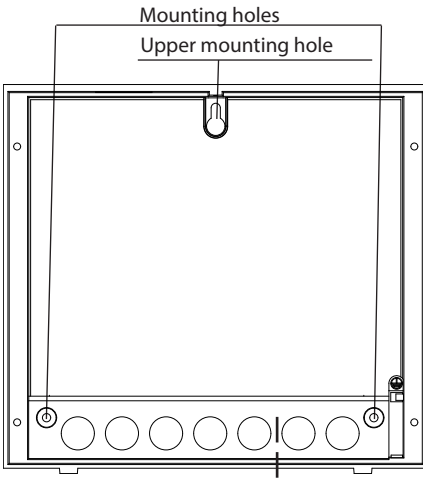


Fig. 4

Recessed installation

1. Cut out a wall section that is at least 3.5 cm deep according to the dimension in Fig. 5.

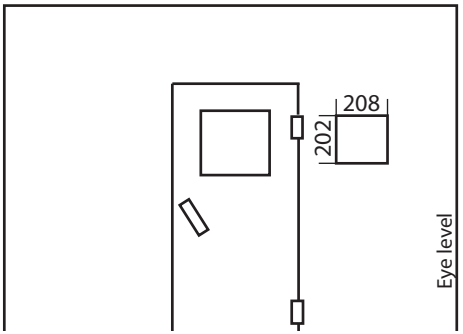


Fig. 5

Insert the supplied rubber grommets into the openings at the rear wall of the housing and insert the connecting cables through these openings.

Place the control unit into the wall opening and fasten it with 4 wood screws.

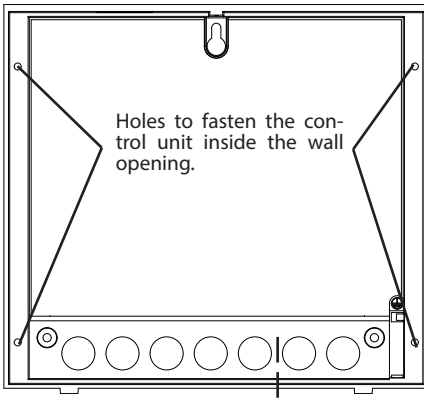


Fig. 6

Connection of the sensor cables

You should not lay sensor and power supply cables together, or draw them through the same feedthrough. This can lead to interferences in the electronics, such as "fluttering" in the relays, which may damage the control unit. If it is necessary to lay the cables down together, or if the line is longer than 3 m, use a shielded sensor cable (4 x 0.5 mm^2).

Connect the shielding to ground in the control unit.

Please observe that the following dimensions relate to the values stipulated during the unit approval as per norm EN 60335-2-53. The heater sensor must always be installed at the point where the highest temperatures are to be expected. Illust. 7 - 9 give you an overview of the mounting point of the sensor.

2. Drill a hole in sauna ceiling panel to lead the cable through, preferably through the middle of one of the wooden boards.
3. Lead the sensor cable through the drilled hole and connect it to the sensor line according to Fig. 10.
4. The cables for the limiter fuse (white) and the temperature sensor (red) shall be connected to the sensor circuit board as per Fig. 10. Insert the sensor board into the casing.
5. Lead the sensor cables through the right-hand cable intake into the control unit. Lay the sensor cables inside the control unit as shown in Fig. 11. Connect the sensor cables to the board as shown in Fig. 12. In order to do this, pull the plug **X2** from the circuit board and plug it back in after the connection of the sensor.

Installation of the temperature sensor

1. Mount the oven sensor in cabins up to 2 x 2m according to Fig. 7 and 8, in larger cabins according to Fig. 7 and 9.

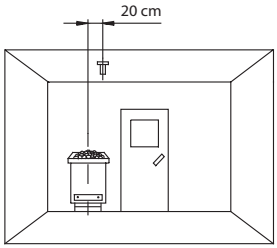


Fig. 7

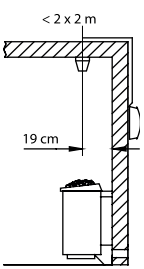


Fig. 8

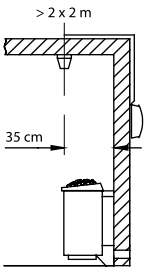
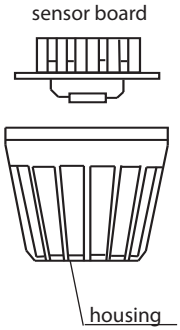


Fig. 9



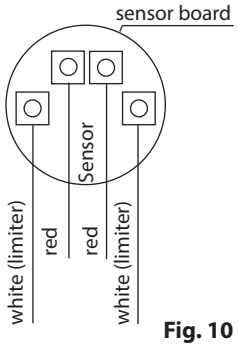


Fig. 10

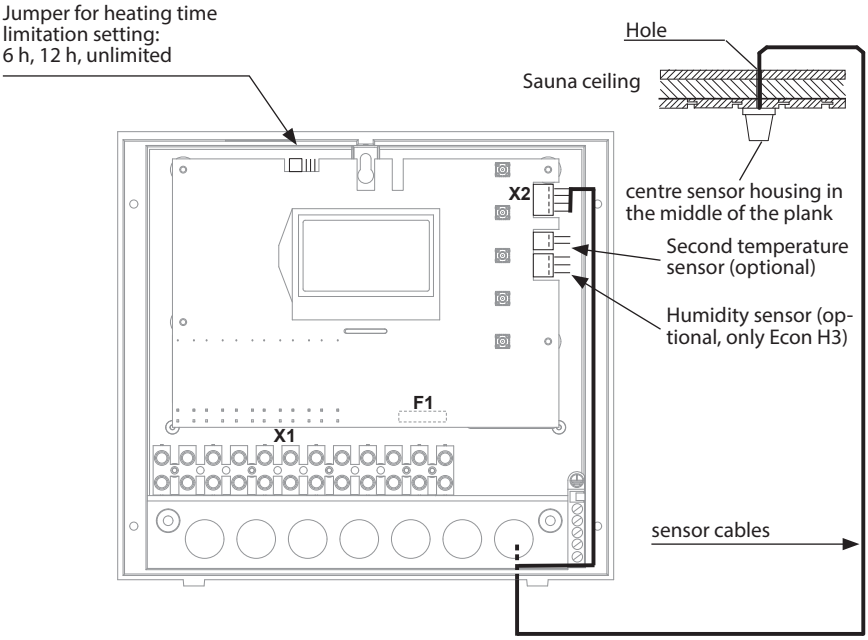
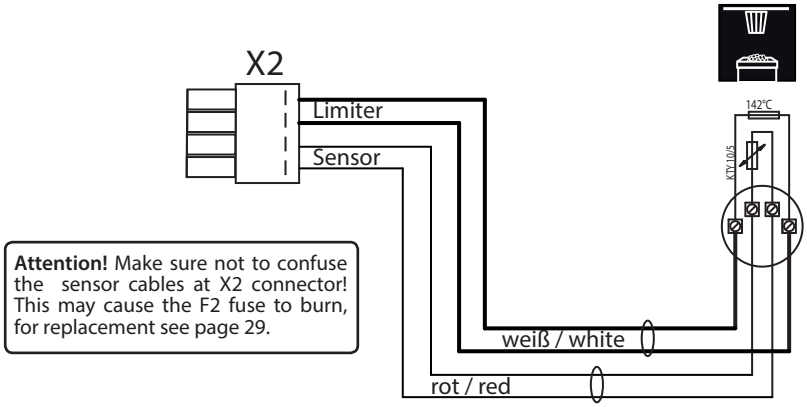


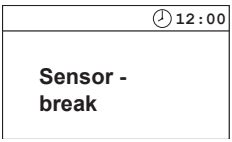
Fig. 11



Attention! Make sure not to confuse the sensor cables at X2 connector! This may cause the F2 fuse to burn, for replacement see page 29.

Fig. 12

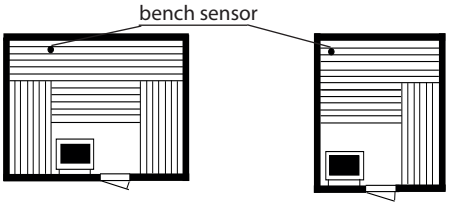
6. After completed installation and correct commissioning of the control unit, the line for overtemperature protection must be checked for short-circuits. In order to do this, disconnect one of the white cables in the sensor casing. The respective error message shall appear in the display.



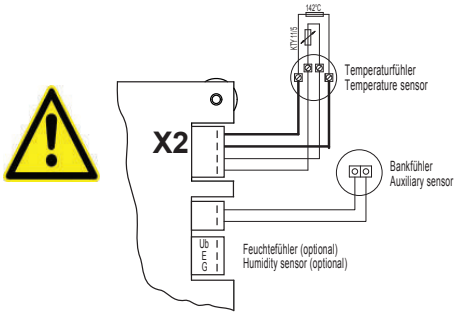
Example of the error message for overheating limiter fuse (DE)

Installation of the optional second temperature sensor (bench sensor)

Installation place: The bench sensor shall be mounted to the ceiling over the rear wall bench opposite to the heater as described in the installation of the bench sensor.



The bench sensor is connected with a 2-core silicone cable from the sensor pcb to the terminals on the right-hand side of the main board of the sauna controller (X2), as shown below.



If the sensor is connected correctly, the control unit shall automatically recognise it once the mains voltage has been switched on again.

By faults of the second sensor the following error messages will be displayed:

„Sensor break" - interruption of the sensor circuit (e.g. faulty contact).

or

„Sensor short" - short circuit of the sensor

In this case, the sensor must be checked by a specialist and replaced if necessary. At room temperature 20 °C, the sensor has approx. 2 kΩ resistance.

In order to keep on operating your sauna cabin despite the second sensor fault switch the unit from power supply, disconnect the cable connection to the second sensor and restore the power supply.

Once the problem has been solved, the control unit shall recognise the sensor after it has been re-connected and the mains voltage has been switched on again

Electrical connections

The electrical connection may only be done by a certified electrician in compliance with the guidelines of the local utility company and the VDE.

In general, there may be only one fixed connection to the network; therefore equipment should be provided that makes it possible to disconnect the system with all poles from the network with a contact opening width of minimum 3 mm.

All electrical installations and all connection lines that are installed inside the cabin must be suitable for an ambient temperature of at least 170 °C.

The power supply line is run to the load control unit and connected to the power input terminals.

Connecting the sauna heater

Install the sauna heater and the vaporizer in front of the air intake according to the manufacturer's installation instructions.

Run the silicone line through the ductwork to the power unit and connect it to the appropriate terminals as directed in the wiring diagram.

Note: In case there is no ductwork available drill a hole next to the air intake opening and run the heater line through this hole to the outside and to the appropriate terminals in the control unit. The silicone line must be buried to protect it from outside influences. Therefore, use a suitable cable-duct or a PVC-pipe through which you can run the line up to the power unit.

Connecting a power extension unit (LSG)

For details refer to the installation instructions of the specific LSG unit.

Connecting the vaporizer

To connect the vaporizer, use silicone connecting lines 4 x 1,5 mm² as well.

Warning: When connecting the vaporizer make sure it is correctly attached to the water bath (WB) and low water shutoff (WM). If you switch these connections, you disable the water deficiency function and bypass the thermostat. As a result, the vaporizer will overheat.

Risk of fire!

The control unit can detect water deficit if there is a zero-potential feed at the WM-input.

Connecting the sauna lamp

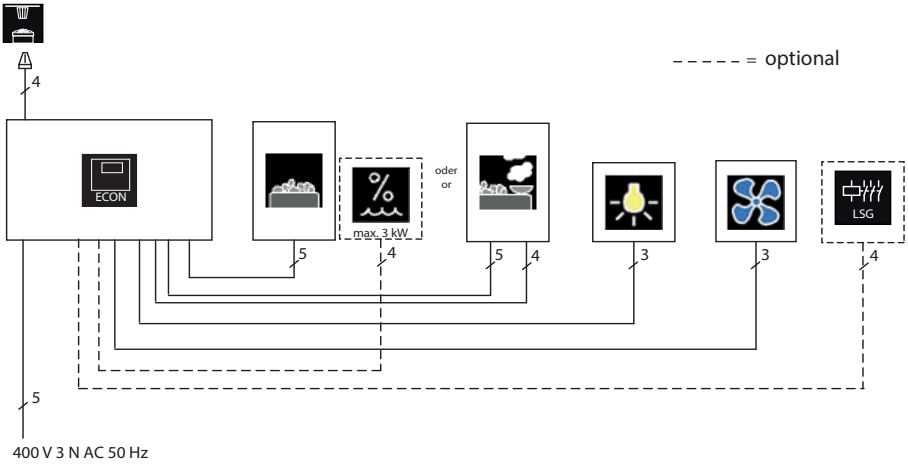
The sauna lamp must be weatherproof protected (IPx4) and resistant to the ambient temperature. The sauna lamp may be installed at any location but never in the vicinity of the rising hot air of the heater.

Connecting a fan

The fan must be weatherproof protected (IPx4) and resistant to the ambient temperature.

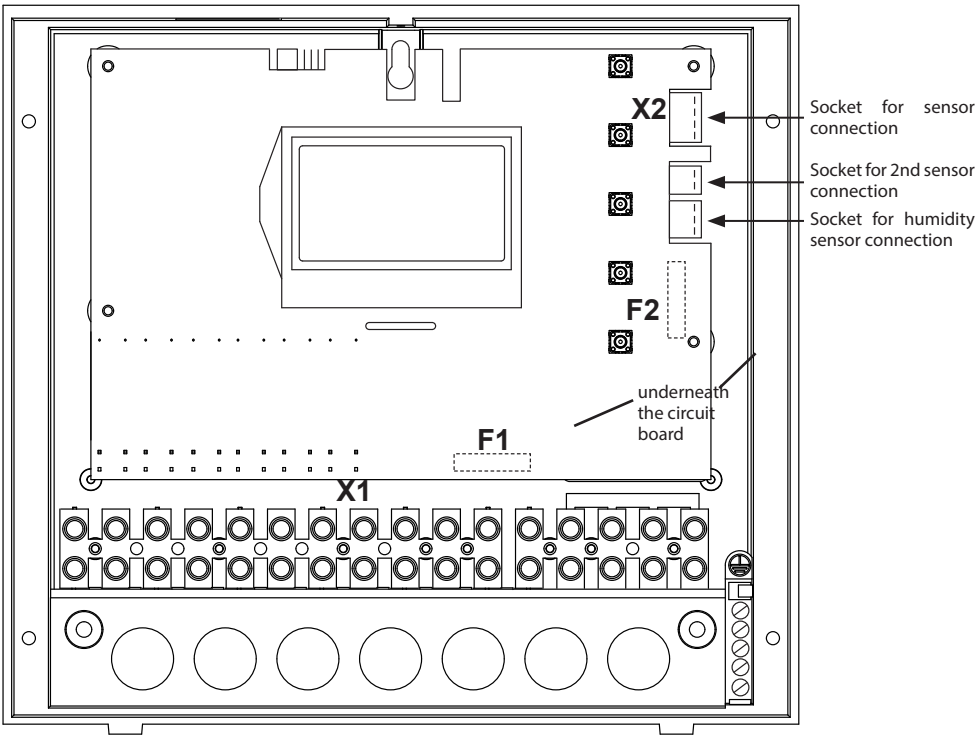
The fan can be mounted at any point, but never near to rising hot air from the heater and as far as possible from the installation position of the IR lamp (may not be in the direct beam).

Installation diagram

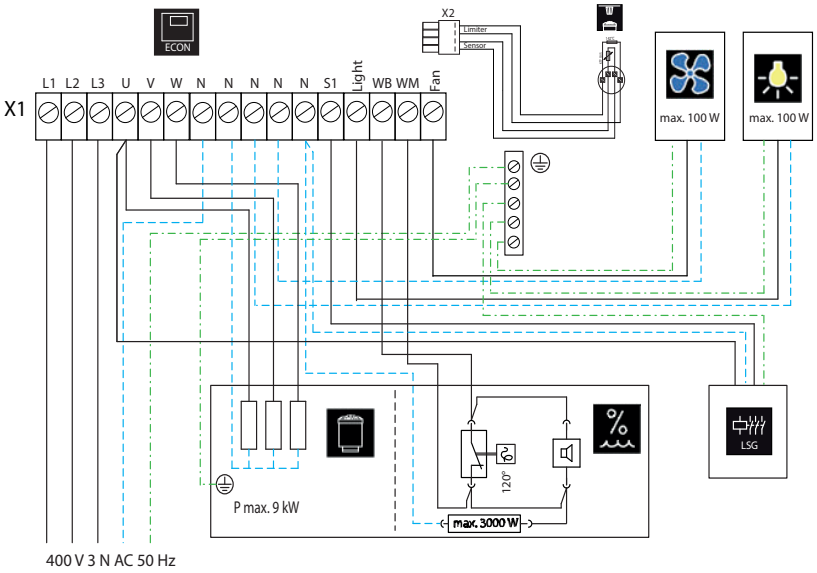


A control lamp indicating active heating must be installed in the room or location of supervising staff by commercial sauna cabins with disabled heating time limitation.

Terminal arrangement on the circuit board.

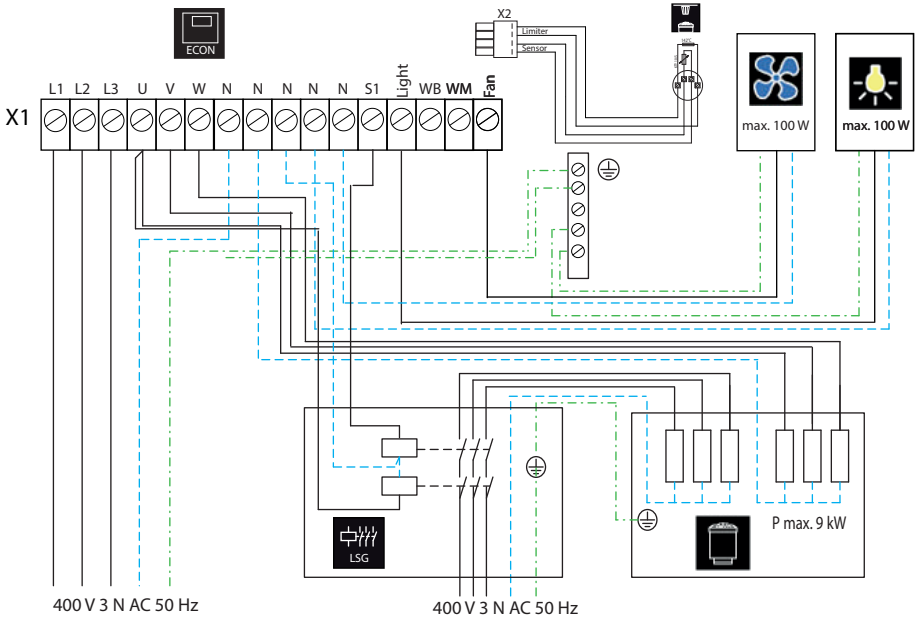


Connecting the sauna heater (max. 9 kW)

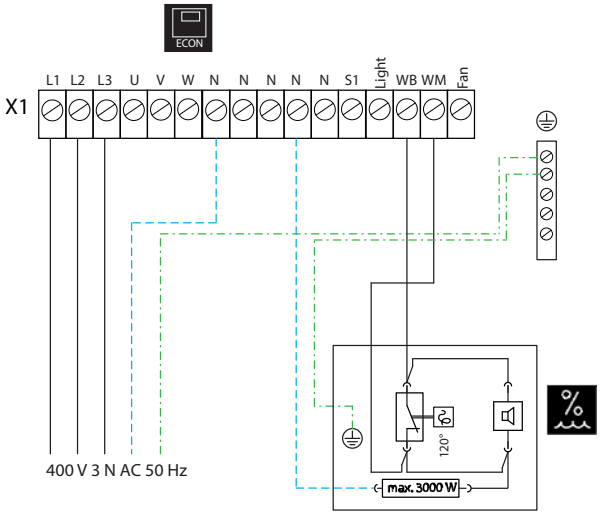


Warning: Always connect the neutral terminal (N) of the sauna oven. During steam operation, one phase of the oven is switched off; therefore the power load will no longer be symmetrical. The result is that the neutral wire is no longer current-free.

Connection of sauna heater > 9 kW



Connection of the vaporizer



Caution: When connecting the vaporizer the output "W" is switched from the sauna heater to the terminal "Wb" to the vaporizer.
In this case, the sauna heater heats only with two thirds of the power.

Installation of the humidty sensor (optional)

1. The humidity sensor is fitted in the centre of the side wall facing away from the oven at a height of approximately 150 cm.
2. Connection of the wiring cables in the sensor is shown on the fig.12.
3. Ensure all connections are correct - incorrect connections may lead to defects in the sensor.

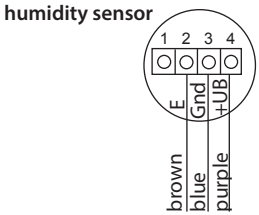


Fig. 12

The sensor is connected to the control unit main board on the right side as shown on the fig. 13 (Abb. 13).

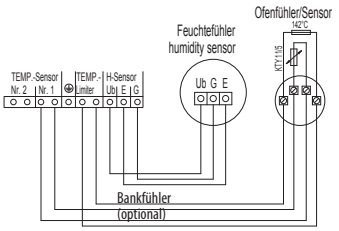


Fig. 13

By humidity control over the humidity sensor the effective humidty control is made as per characteristic curve shown below. All values on the left (green) are permitted (fig. 14).

Programmierte Maximalwerte nach EN 60335-2-53:2012

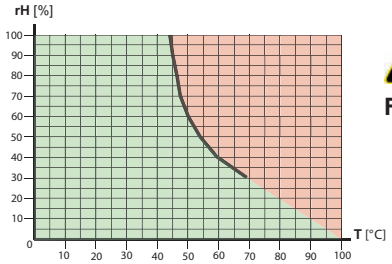


Fig. 14

allowed settings | not allowed settings (unsafe!)

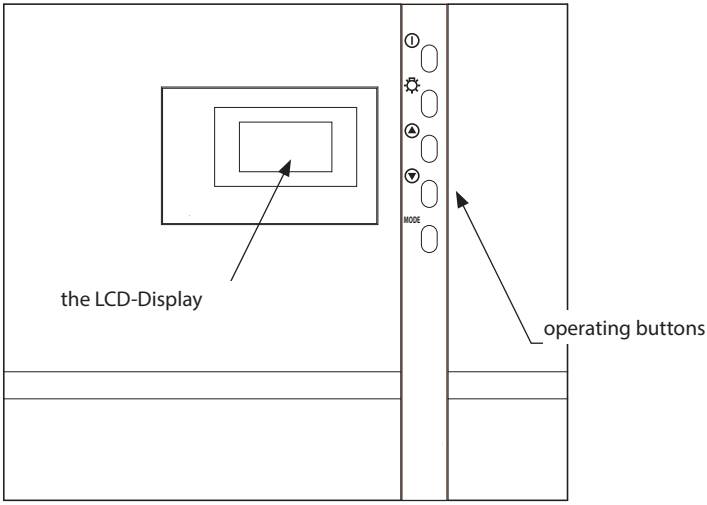
Operation

Once the control unit has been installed with all components and all covers have been fixed, you can put your sauna unit into operation.

The following pages provide the detailed explanation, how to operate your control panel and make all necessary settings.

General details

Operation elements



Operating buttons

= Sauna heating on / off (stand-by)

= Sauna cabin lighting

= Reduce value / next function

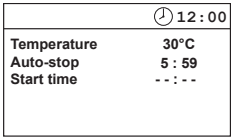
= Increase value / next function

MODE = Programming mode (settings)

Interface in Stand by

is shown if the control unit is in stand-by model

The display will automatically switch this interface from any state if no button has been pressed within >15 Sek.



Interface in active operation

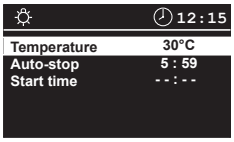
is shown if the control unit is in active operation mode (heating is switched on).

The display will automatically switch this interface from any state if no button has been pressed within >15 Sek (during active heating).

Display of the heating process:

During the heating-up phase the bars behind the temperature figures will fill progressively.

Once the pre-set temperature has been reached, the bars will remain filled.

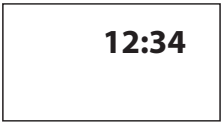


Interface in energy-saving mode

If the control unit is not used for a longer time it will switch into the energy-saving mode.

A clock randomly moving across the display every minute will be shown after 5 minutes, similar to a PC screensaver. The backlight of the display is switched off after an additional 15 minutes

By pressing any key you can wake the unti to the default "Stand-by" interface.



The following applies for <u>all settings</u>:

The following symbols are displayed at the top.

the light symbol (when the light is on)

the clock symbol

12 : 00 current time

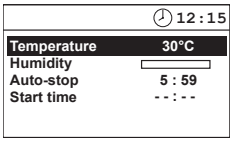
In addition, the following symbols are displayed depending on the selected operating mode.

active child lock (keypad lock)

preset time (switching time preselection)

In order to adjust the individual values to the particular desires, briefly push the **MODE** -button out of Stand-by.

The modifiable parameter will then be highlighted in black and it is possible to select with the ▲ or ▼ - buttons the desired parameter.



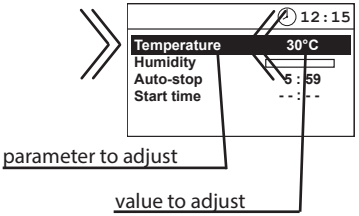
Parameters that blink on the display can be changed and are shown in these instructions as displayed.

By pushing the **MODE** -button again you will arrive at the programming level.

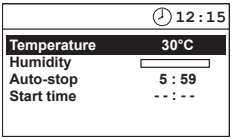
The name of the parameter is now blinking and the modifiable value is highlighted in black.

The value highlighted in black can now be changed with the ▲ or ▼ the - buttons.

All settings out of Stand-by are confirmed by pressing **MODE** >3 s and are saved in the memory of the unit.



The blinking of the parameter ends and the new value is now authoritative until another change is made.

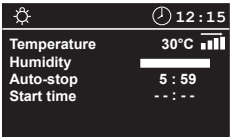


If no button is pressed for >15 seconds the unit switches back to the default display. Changes made up to then will not be saved

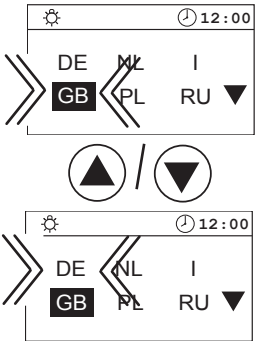
Sauna cabin lighting

The cabin lighting is automatically switched on as soon as the sauna unit is switched on. In the top left of the display the ☼ - symbol is shown. When the sauna unit is switched off the cabin lighting will switch off with a delay of 30 minutes.

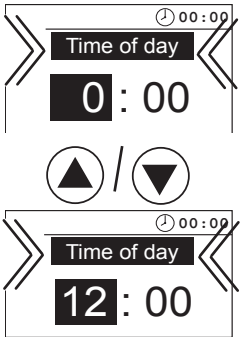
Irrespective of the status of the sauna unit, the cabin lighting can be ☼ switched on or off anytime with the button.



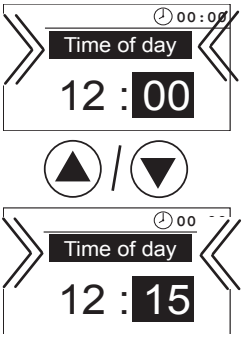
Initial commissioning



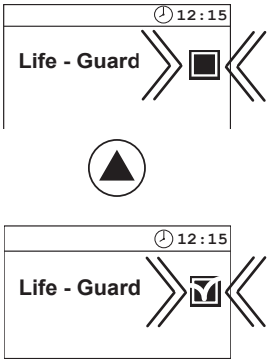
MODE > 3 Sec



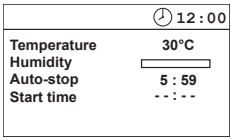
MODE



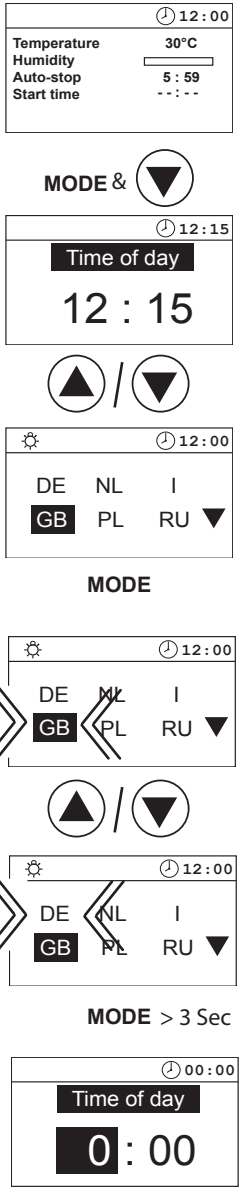
MODE > 3 Sec



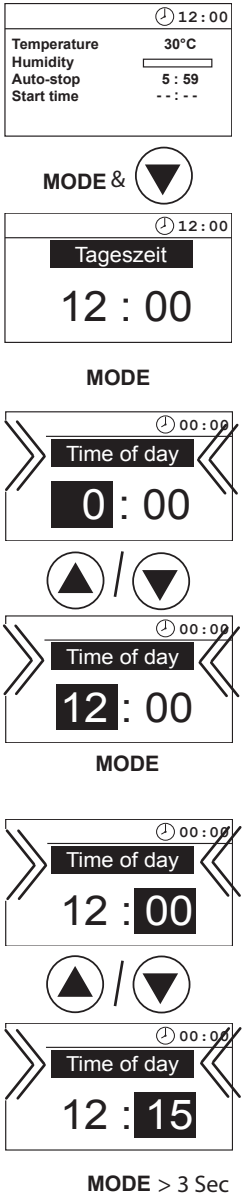
MODE > 3 Sec



Change language

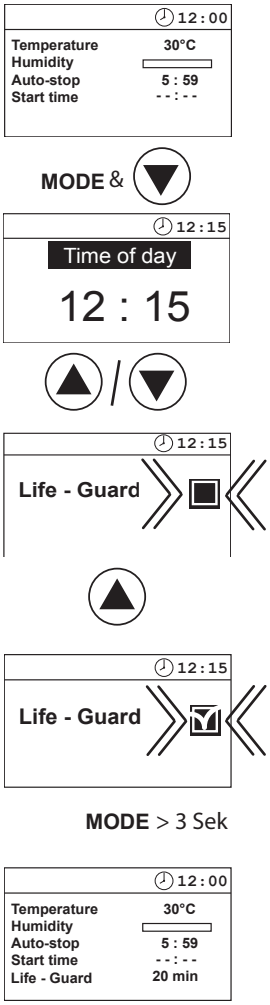


Set (change) time



Activating the Life - Guard

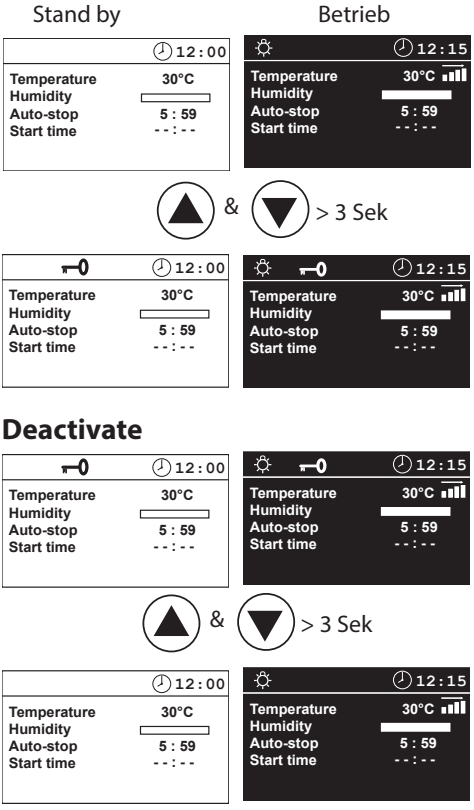
Life - Guard is a settable relatively short time, e.g. 20 minutes, after which the sauna unit is switched off, except for the cabin lighting. After this time has expired the unit can be switched on again by pushing the MODE -button for the set time.



Activate / deactivate the child lock

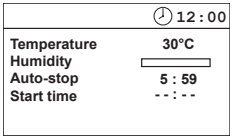
If the child lock is activated (the key symbol is visible in the top section of the display) only the cabin lighting can be switched. All other buttons are without function. The child lock can be activated / deactivated in Stand-by as well as in operation. The unit can still be switched off when in operation.

Activate

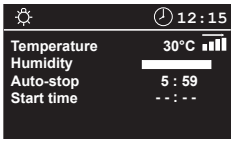


Deactivate

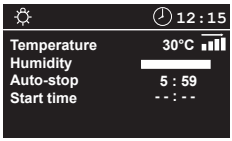
Switching on the sauna unit



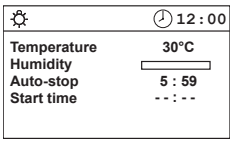
> 3 Sek



Switching off the sauna unit in the Finnish mode



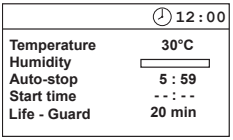
Auto-Stop-Time /



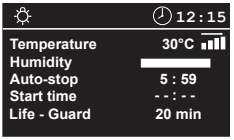
Notice:

In Life-Guard mode it is not possible to change the temperature or humidity settings if the control unit is in the active heating state.

Switching on the sauna unit with Life - Guard

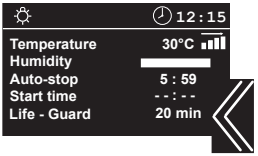


> 3 Sek

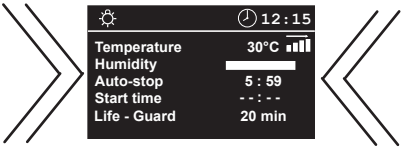


The sauna heater will now heat normal, without „Life - Guard „- time. To activate the function „Life - Guard".

MODE

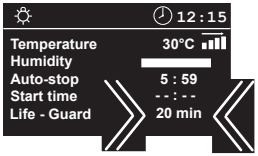


After the „Life - Guard" - time has expired, the sauna heater is switched off and the entire display blinks.

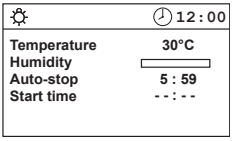


Restart

MODE



or switch off the system



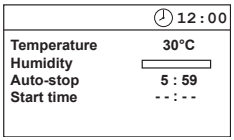
Individual settings

Hereafter we are showing you options that allow you to adjust the controls to your individual needs. The various parameters can be changed in Stand-by or in operation and the changes are saved in the unit. Changes made in operation are effective directly.

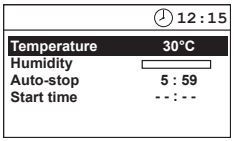
Cabin temperature

Setting range: Finnish mode 30 - 115°C
Humidity mode 30 - 70°C

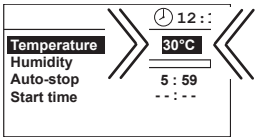
In Stand-by

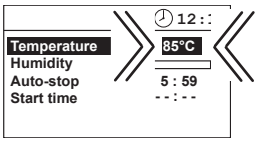


MODE

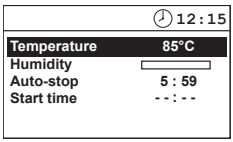


MODE

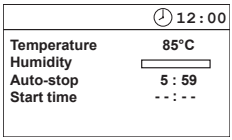


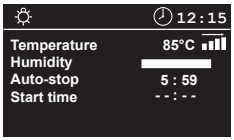


MODE > 3 sec

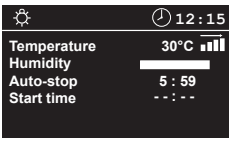


15 sek. / > 3 sec

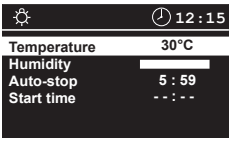




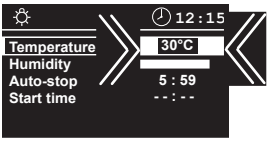
In operation

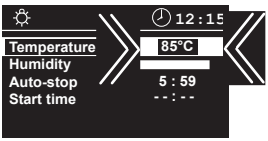


MODE

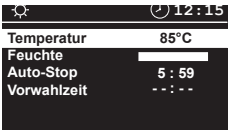


MODE

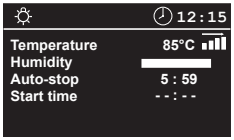




MODE > 3 sec



15 sec



Humid mode operation

The prerequisite for humidity operation is the connection of a suitable vaporizer unit up to max. 3 kW to 230 V AC. The control unit will switch the vaporizer, depending on the set humidity value (proportional or rel. humidity).

Note: Whilst the vaporizer is being switched on, the heater only works with 2 phases, meaning that part of the power is switched to the vaporizer. On symmetrically wired heaters (equal heating output per phase) 1/3 of the heating output of the sauna heater is therefore switched off. This serves on the one hand to protect the user from excessive temperatures, but also to limit the switching capacity to 3.5 kW per phase.

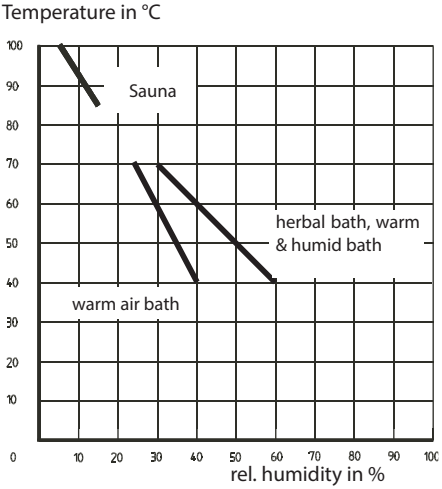
The humidity which may be realistically achieved greatly depends on the layout of the sauna cabin, the sauna heater used and the vaporizer power. Therefore, you will have to determine the setting which best suits your preferred cliamte. Always select the temperature first (from 30 to 70°C) and then the humidity.

Heaters and vaporizer with the power optimally matching the sauna cabin can allow to achieve the humidity values given in the table by 100% humidity setting (proportional mode).

Temperature	rel. air humidity
60 °C	50%
50 °C	60%
40 °C	70%
30 °C	80%

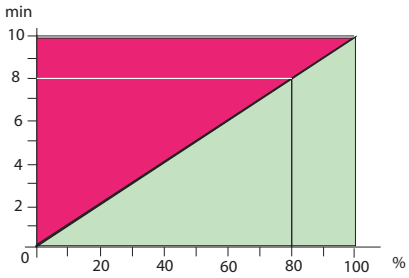
These achievable values lie higher than the values which are actually required. Therefore, after heating up, please lower them. Please observe that the cabin temperature is highest directly under the cabin ceiling, whereas the relative air humidity is low. The relative air humidity increases as the temperature sinks towards the cabin floor.

The following diagram shows you the relative air humidity temperature values for the standard bath forms and comfort zones.



Without connection of the optional humidity sensor the humidity intensity shown in the display corresponds to the time proportional vaporizer setting. Therefore, the relative air humidity is not preselected or shown on the display in such case, but rather the switch-on frequency of the vaporizer in percent. The below diagram is intended to clarify this.

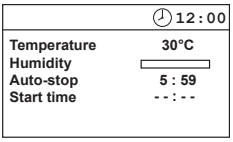
In order to control humidity basing on the relative humdity values the optional F2 humidity sensor shall be connected.



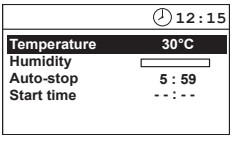
The vaporizer will be activated if a value is displayed in the field „Humidity". The setting "--" deactivates humid mode. Please also observe that after a dry (Finnish) sauna the vaporizer will not switch on unless the temperature has dropped to the allowed (safe) level.

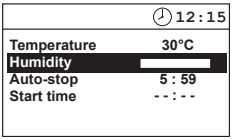
Humidity regulation (propotional to time): In stand-by

If a value is entered here the sauna unit automatically goes into humidity operation when switched on.

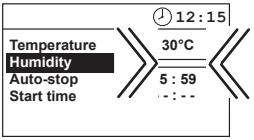


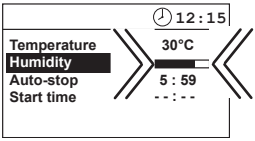
MODE



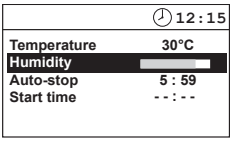


MODE

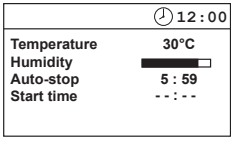


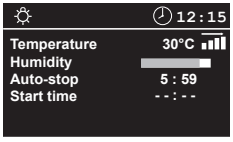


MODE > 3 sek.

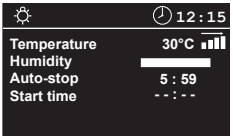


15 sek. / > 3 Sec

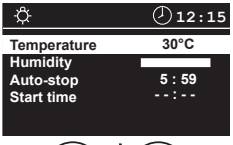


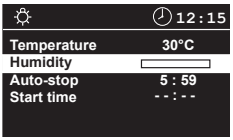


In operation

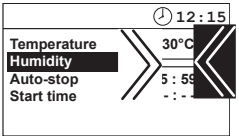


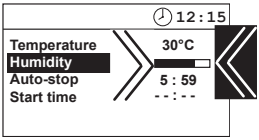
MODE



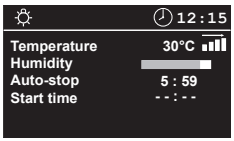


MODE

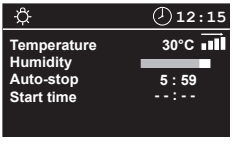




MODE > 3 sec



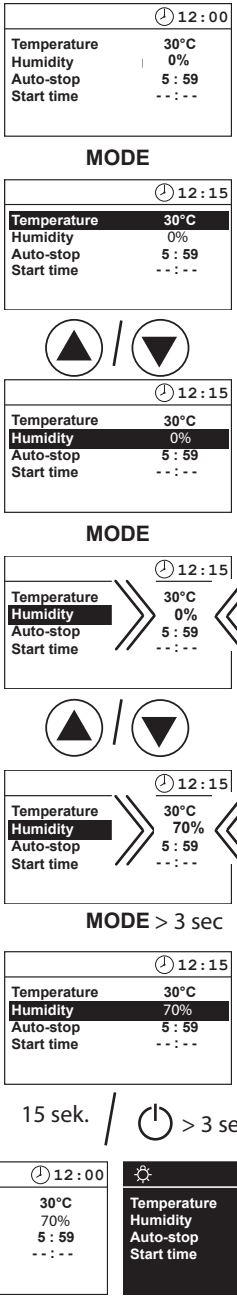
15 sec



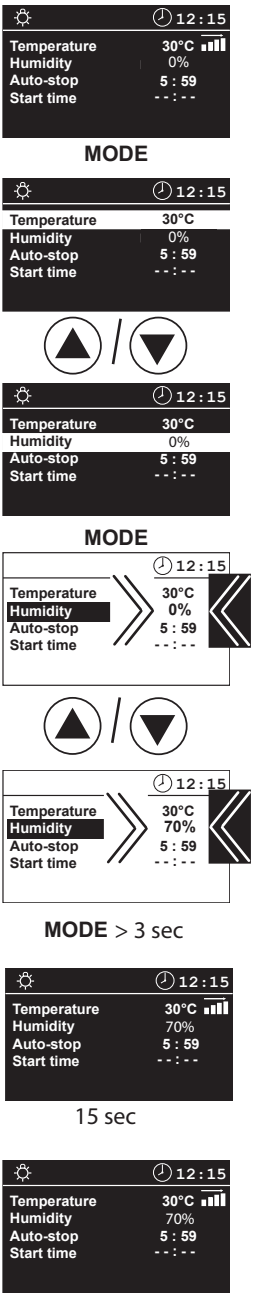
Humidity regulation (by connected humidity sensor)

If a value is entered here the sauna unit automatically goes into humidity operation when switched on.

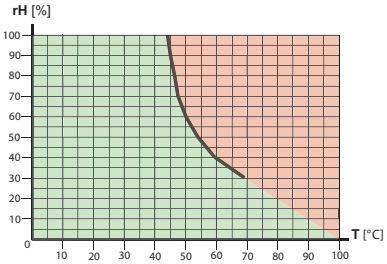
In stand-by



In operation



The humdity intensity shown on the display by connected humidity sensor corresponds to the relative humidity of the air in % around the humdity sensor. It is possible to pre-set and monitor the desired relative humdity in the sauna. The allowed settings (temperature / humdity) are shown on the below chart:



The vaporizer will be only activated when some value is entered and shown under „humdity" paramater on the display (to disable humid mode set the value to „--").

Please pay attention that the vaporizer will only switch on if the temperature in the sauna cabin does not exceed the maximum limit for the given humidity setting. If the sauna has been used in dry (Finnish) mode the temperature should sink first under such limit.

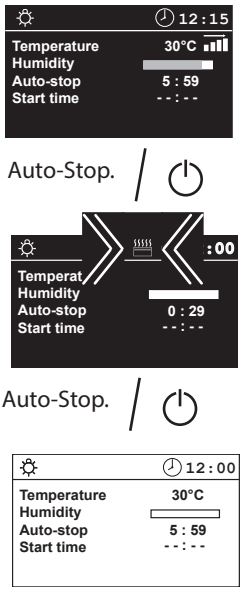
For instance if you used the sauna with 90°C und then switched to the humid mode, then the vaporizer will only switch on after the temperature will sink under the limit value.

Switching off the sauna in humid mode

In order to get the sauna cabin dry after humid operation, the „after-heating" mode will switch on after your switch off the heater. The sauna will be heated for approx. 30 minutes at 90°C temperature. In the upper part of the display a blinking symbol will be shown. Additionally the optional fan (if installed) will be switched on to accelerate the ventilation.

The sauna unit automatically turns off once this time has expired.

If you wish to interrupt the reheating phase beforehand, push the -button again.

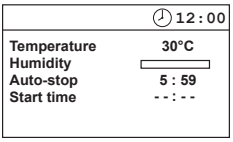


Auto-Stop

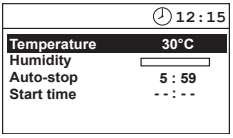
Auto-Stop is the time to which the heating time is limited. The sauna unit automatically turns off once this time has expired.

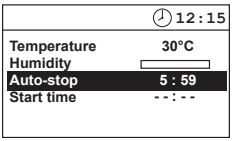
Depending on the configuration of the control, the time is adjustable from 0:01 to 6:00, to 12:00 hours or to 24 hours (unlimited mode).

In stand-by

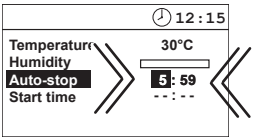


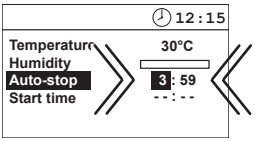
MODE



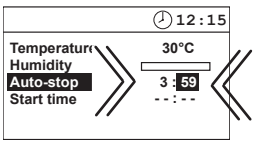


MODE

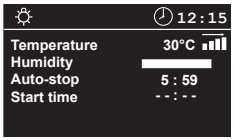




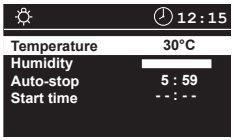
MODE

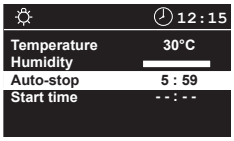


In operation

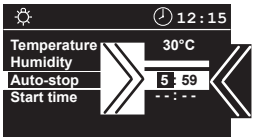


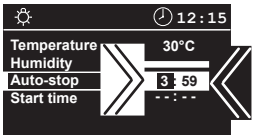
MODE



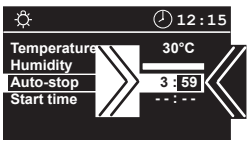


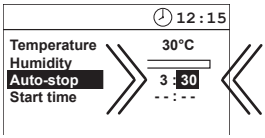
MODE



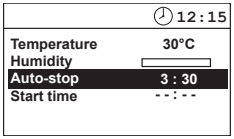


MODE

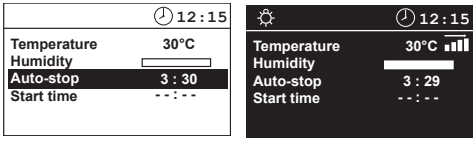


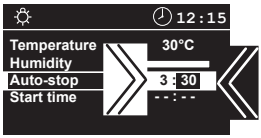


MODE > 3 sec

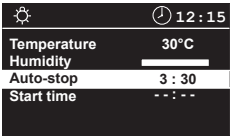


15 sec / > 3 sec

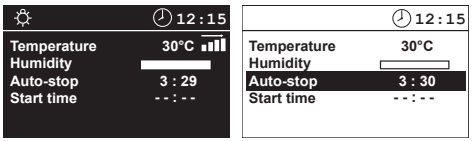




MODE > 3 sec



15 sec /



Time preseltion

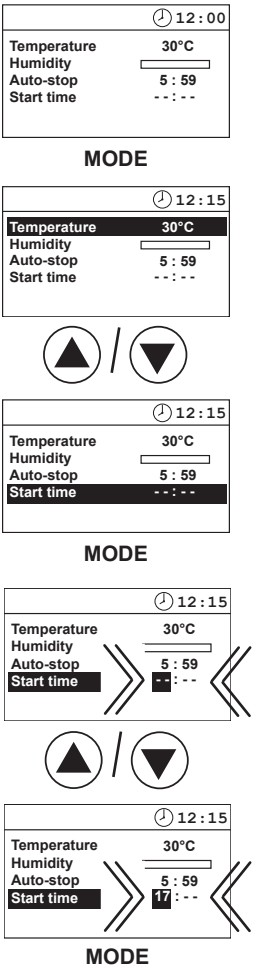
Using the time preselection, you can preselect a switch-on time within 24 hours for your sauna heater. See page 34 for more details.

Always make sure that there are no objects on the sauna unit before the heating process begins. Fire risk!

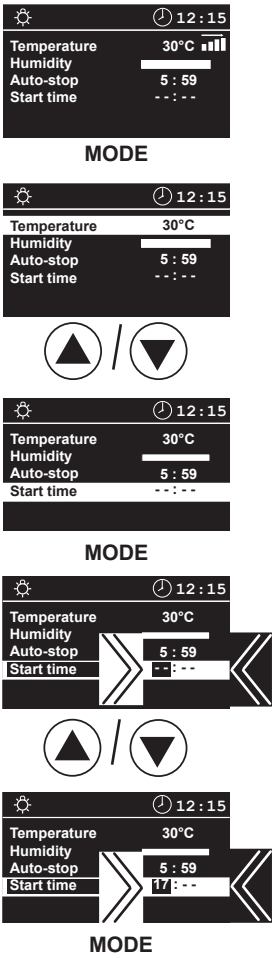
Please remember however that the cabin must heat up for approx. 40-50 minutes in order to achieve a pleasant climate in the cabin. If, for example. you wish to start with your sauna bath at 18:00 hrs, please select 17:10 hrs as your preselection time.

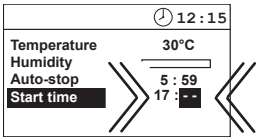
If the sauna unit is to be used without preselection time, "**-- : --**" must be entered in the display under preselection time. Please notice that the "0:00" value will still mean the enabled time preselection and the manual sauna switching will not be possible.

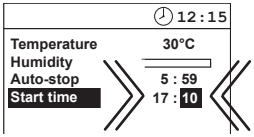
In stand-by



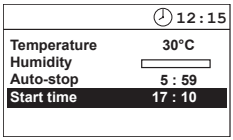
In operation



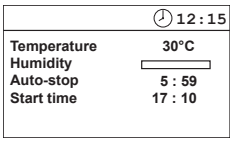


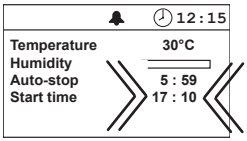


MODE > 3 sek.

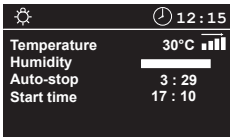


15 sek. /

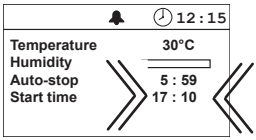




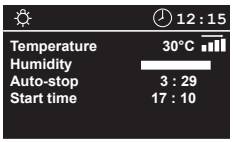
Zur vorgrwählten Zeit

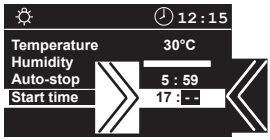


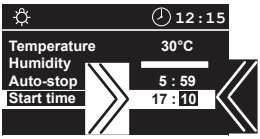
Activate the time preselection



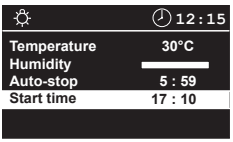
Zur vorgewählten Zeit



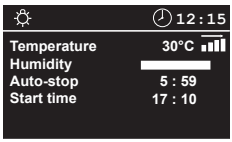


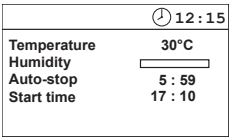


MODE > 3 sek.

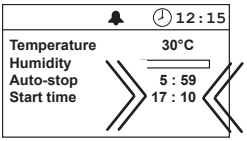


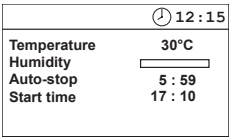
15 sek. /





Deactivate the time preselection





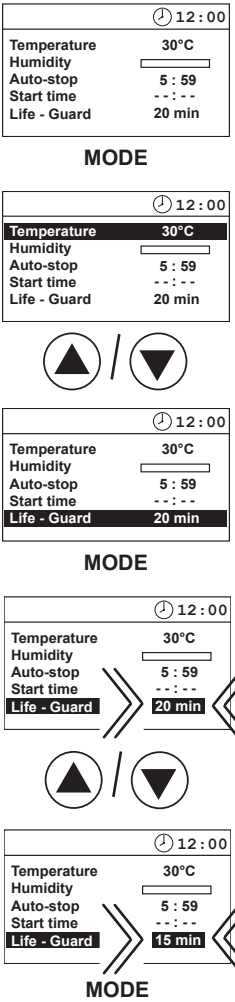
If the sauna unit is to be used without preselection time, "**--:--**" must be entered in the display under preselection time.

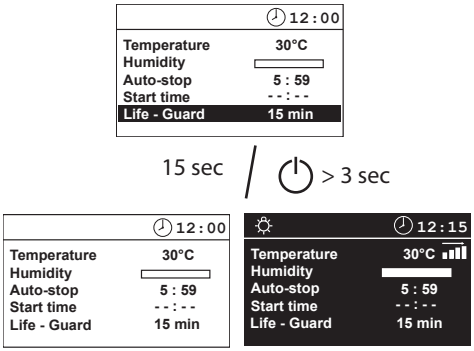
Life-Guard

Here you can set a short period of time after which the sauna will be automatically switched off (interrupted) and may be immediately restarted for the same period of time by pressing the MODE button.

The setting of the „Life-Guard“ time may be made only in stand-by mode. The „Life-Guard“ function must be activated in the basic set-up menu and shown on the display.

In stand-by



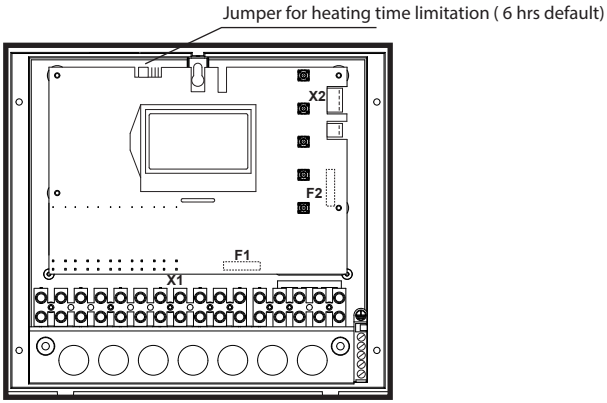


Extension of the heating time limitation

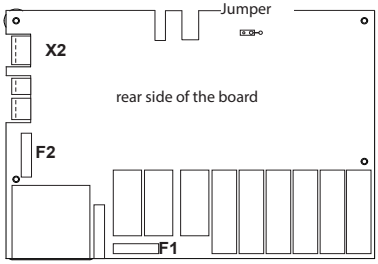
By switching a jumper you can extend the time setting for sauna time from 6:00 to 12:00 hours or to unlimited operation time. Please notice that such extension is only permitted for certain commercial sauna cabins and may be restricted by the local legal regulations.

⚠ Such work must be carried out exclusively by an expert. Prior to any kind of work disconnect the control unit from the power supply on all phases. (Switch off main switch, or trip the ground circuit breaker). **Risk of electric shock!**

Open the control unit. The jumper is located in the middle of the top edge of the mainboard. Set jumper to the required position. Close the control unit. Restore the power supply.



Jumper		6:00 hours heating time limitation (factory default)
Jumper		12:00 hours heating time limitation
Jumper		no heating time limitation



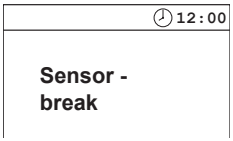
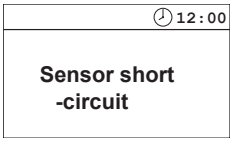
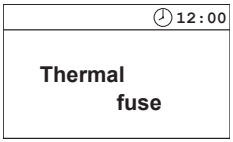
Device fuses

On the rear sinde of board you will find the protective fuses. For replacement make sure to use the fuses of the same type and of the same resistance value.

F1 = T 2A	Fuse primary electronics as well as light and fan
F2 = T 250 mA	Fuse secondary electronics

Error messages and troubleshooting

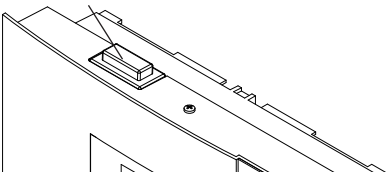
The control unit continuously monitors the sensors for short circuits and interruptions. The error messages appear as follows:

Display	Cause	Remedy
	= Interruption in the room sensor circuit. The temperature sensor (KTY) is defective or the line to the temperature sensor is interrupted.	Have cables and KTY checked by an expert. KTY at 20°C shall have ca. 2 kΩ and may need to be replaced.
	= Short-circuit in the room sensor circuit. The temperature sensor (KTY) is defective, or the line to the temperature sensor is short-circuited.	Have cables and KTY checked by an expert.
	= Interruption in the limiter circuit. The thermal fuse (142°C) has tripped due to overheating or the line to the thermal fuse is interrupted.	Have the cables and thermal fuse checked by an expert. Check the reasons for the possible overheating.
 Empty display, unit does not function.	= The fuse F2 is blown. The fuse F2 is blown, for instance if the sensor cables (sensor and limiter lines) were confused.	Check the sensor and the 2nd sensor (if installed) for correct connection at X2 connector. Replace the fuse F2 with the same type fuse.

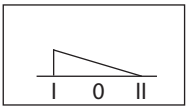
The device „Switch-off“ switch

You will find the rocker switch on the top side of the control unit. You can completely disconnect the control unit from the mains using this switch.

Switch-off by ECON control units

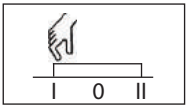


Switch-off



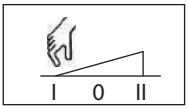
Unit turned on
(default Position I)

Press the switch on the left side of the rocker to the first latch (**switch setting 0**). The switch will be in the middle position. The unit is now completely switched off (disconnected).



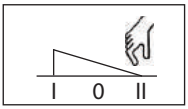
Unit fully switched off
Position 0.

To turn the light on in the cabin while the unit is still disconnected push the left side of the rocker to the second latch (**switch setting II**).



Light switched on;
Unit switched off.
Position II.

To make the unit ready for operation, switch back to the initial position (**switch setting I**). The unit will return to stand-by mode.



Unit switched on.
Position I.

Please keep this address in a safe place together with the installation guide.

To help us answer your questions quickly and competently please provide the information printed on the type shield including the model, item no. and serial no., in all inquiries.

Service Address:

EOS Saunatechnik GmbH
Adolf-Weiß-Straße 43

35759 Driedorf-Mademühlen, Germany

Tel: +49 (0)2775 82-514
Fax: +49 (0)2775 82-431

servicecenter@eos-sauna.de
www.eos-sauna.de

WARRANTY

The warranty is provided according to the legal regulations at present.

Manufacturer's guarantee:

- The period of guarantee starts from the date of purchase and lasts up to 2 years by commercial use and 3 years by private use.
- Always include the completed guarantee certificate when returning equipment.
- The guarantee is void for appliances which have been modified without manufacturer's explicit agreement.
- Damages caused by incorrect operation or handling through non-authorized persons are not covered under the terms of guarantee.
- In the event of a claim please indicate the serial number as well as the item number and model name with detailed description of the fault.
- This guarantee covers defective parts and labour but not the defects caused by wear and tear.

In case of complaint please return the equipment in its original packaging or other suitable packaging (caution: danger of transport damage) to our service department.

Always include the completed warranty certificate when returning equipment.

Possible shipping costs arising from the transport to and from point of repair cannot be overtaken by us.

Outside of Germany please contact your specialist dealer in case of warranty claims. Direct warranty processing with our service department is in this case not possible.

Equipment commissioning date:

Stamp and signature of the authorized electrician:

Handling procedures for return shipments (RMA) - Details for all returns !

Dear customer
we hope that you will be satisfied with the purchased EOS product. In the rear case if you may have a claim and will need to return a product, please follow the procedures specified below. This will enable to ensure a quick and effective handling of the return shipment.

Please observe for all returns!

Please add the provided **RMA-voucher completely filled out** together with an **invoice copy** to the return shipment! Do not stick it on the goods or on the packaging. **We do not accept return shipments without these papers.**

Not prepaid parcels **will be refused** and returned to Sender! Please always ask your dealer or EOS service department about the most economical return shipment way.

Please pay attention that the goods have to be sent back in the **original scope of delivery** and in **original packing**.

We recommend to use an **additional solid and break-proof covering box** which should be padded out with styrofoam, paper or similar. Transport damages as a result of faulty packing are for the sender's account.

Form of complaint:

1) Transportation damage

Please check the content of your parcel immediately and advise the forwarding company of a claim (parcel service/ freight forwarder)

Do not use damaged goods!

Ask the forwarder **for a written acknowledgement of the damages.**

Report the claim promptly by phone to your dealer. He will discuss with you how to act in this case.

If the transport box has been damaged, please use an additional covering box. Do not forget to add the **acknowledgement of the damage of the forwarding company !**

2) Faulty goods

The implied warrenty period is 2 years.Please contact your dealer in case of **faulty or wrong articles or missing accessories.** He will discuss with you the individual case and try for immediate and customer-friendly solution.

For **economic returns** within Germany you will get an **RMA-number from the manufacturer.**

All returns have to be in the **original packing of the goods with corresponding accessories.** Please repack the goods to avoid damages. In case of wrong delivery, please do not use this article .

3) Problems of installation and functioning

Please **read the manual carefully first of all** and pay attention to the indicated assembly or installing instructions.

Your dealer should be the first contact person because he knows his products best and also knows possible problems.

In case of function problems with an article, please check at first whether there is an obvious material defect. The quality system in our factory reduces malfunctions of new appliances to almost zero.