HAAS + SOHN

Pellet stove with heat exchanger

Nameplate:

Installation and operating manual

Pellet stove with heat exchanger

GB

05538080014 09f

Please read through these operating instructions carefully. You will be informed about the function and handling of this stove and you will also save fuel and conserve the environment by heating correctly.
The attached **equipment sheet** is part of these operating instructions.

Notes in the text

Of utmost importance there are the notes entitled **WARNING**. The notes entitled **WARNING** advise you on **serious danger of damage to the heating device or of an injury.**

The note entitled **Notice** advises you on possible damage to your heating device.

The note itself calls your attention to the information important for the operation of your heating device in general.

Contents

1. General information

- Please check the appliance for transport damage when unpacking it. In case of defects, please report these immediately to your stove dealer!
- National and European standards, local regulations and those under building law as well as the relevant state building regulations or fire regulations must be complied with when installing, connecting and putting the fireplace into operation.
- The pellet stove described in these instructions has been tested according to EN 14785 and according to the electrical standard, EN 60335-2-102.

2. General safety information

- The combustion of fuels releases heat energy, which leads to the surfaces of the heating appliance (E.G. doors, inspection window panes, side walls, front wall, flue tube) heating up significantly.
- The appliance starts independently in "Standby mode". Due to the build-up of heat on the window pane, care should be taken that no unsupervised persons, who do not know how to operate the pellet stove, are in the installation room.
- Air extraction equipment such as ventilation systems, extractor hoods, vented tumble dryers etc. or other fireplaces must not have a disruptive influence on the air supply for the stove.
- During operation, the combustion air opening provided must not be closed, throttled, constricted, covered or shut off.
- On stoves with an outdoor air connection, the opening must not be shut or closed during operation.
- This appliance can be used by children form 8 years and above and people with reduced physical, sensory or mental capabilities, if they have been given supervision and instruction concerning the use of the appliance in a safe way and understand the hazards involved. These persons can carry out cleaning and routine maintenance only when being supervised. Do not let children to use the appliance as a toy.
- The combustion chamber door must only be opened for cleaning and maintenance purposes when in "Off" mode. Otherwise this should always be kept closed.
- The pellet stove may only be connected to the mains after being properly connected to the fireplace.
- The protective grille in the pellet container must not be removed.
- The pellet stove must only be operated when the tank cap is closed.
- Never use liquid fuels to ignite the pellet stove or to revive existing embers.
- Do not place any laundry items on the stove to dry!
- When operating your heating appliance, it is forbidden to work with highly combustible and explosive materials in the same or adjoining rooms!
- If the power cord is damaged, for safety reasons it may be replaced only by the manufacturer, service representative, or other suitably qualified person.

WARNING

The stove must not be set up to be operated jointly with the home's air conditioning and ventilation units.

Note

Exceptions:
RLU certified appliances can also be operated with extractor hoods, vented tumble dryers and air conditioning and ventilation units if the stove has also been connected to a balanced flue.

3. Electrical connection

- The stove is operated with a mains voltage of 230V 50Hz.
- Only use the original mains cable supplied with the appliance.
- The socket must be easily accessible.

4. Chimney

WARNING

The chimney must be made of stainless steel or ceramics (glazed inside) in order to be suitable for wet operation, and cannot be soaked with soot. It is necessary due to the low temperature of the fumes your pellet stove has.

WARNING

Prior to the installation, it is always necessary to calculate the chimney according to the standard.

WARNING

The minimum diameter of a chimney stack must be Ø 100 mm.

WARNING

A pellet stove with hot-water exchanger is not conceived to be the main source of heating!

CAUTION

Please observe the national regulations.

4.1. Weather conditions

For the safe operation of the fireplace, it must be ensured that the chimney is able to build up the necessary flue draft. Particular attention needs to be paid to this during the transition period (E.G. autumn and spring) or during poor weather conditions (E.G. strong wind, fog etc.).

4.2. Chimney flue draft at rated heat output of the stove

min. flue draft:	5 Pa	- if the minimum flue draft is not reached, then it is not possible to operate the fireplace properly and it will lead to increased contamination of the burner and inspection window.
max. flue draft:	15 Pa	- if the maximum permitted flue draft is exceeded, this leads to increased fuel consumption.

4.3. Connection to the chimney

CAUTION

For the connection to the chimney, gas-tight flue tubes should be used. Approved flex steel tubes are also suitable. Please observe the national regulations.

- The flue tube must be securely fitted on the flue gas spigot.
- The flue gas tube must not be installed with a drop to the chimney.
- It is also essential to ensure that the flue tube does not stick out into the open cross-section of the chimney, which would interfere with the flue gases rising and prevent the optimal cleaning of the chimney.
- The use of wall lagging is recommended for the insertion into the chimney.
- Longer horizontal flue gas connections reduce the necessary flue draft.
- All openings leading into the same chimney, such as stove and chimney cleaning apertures, must be closed.

GB

4.3.1. Multiple use

The stove is not approved for multiple use.

4.3.2. Connection to the existing chimney (example)

The plug for outlet of the condensate is of help in the cleaning and in the generation of the condensate.

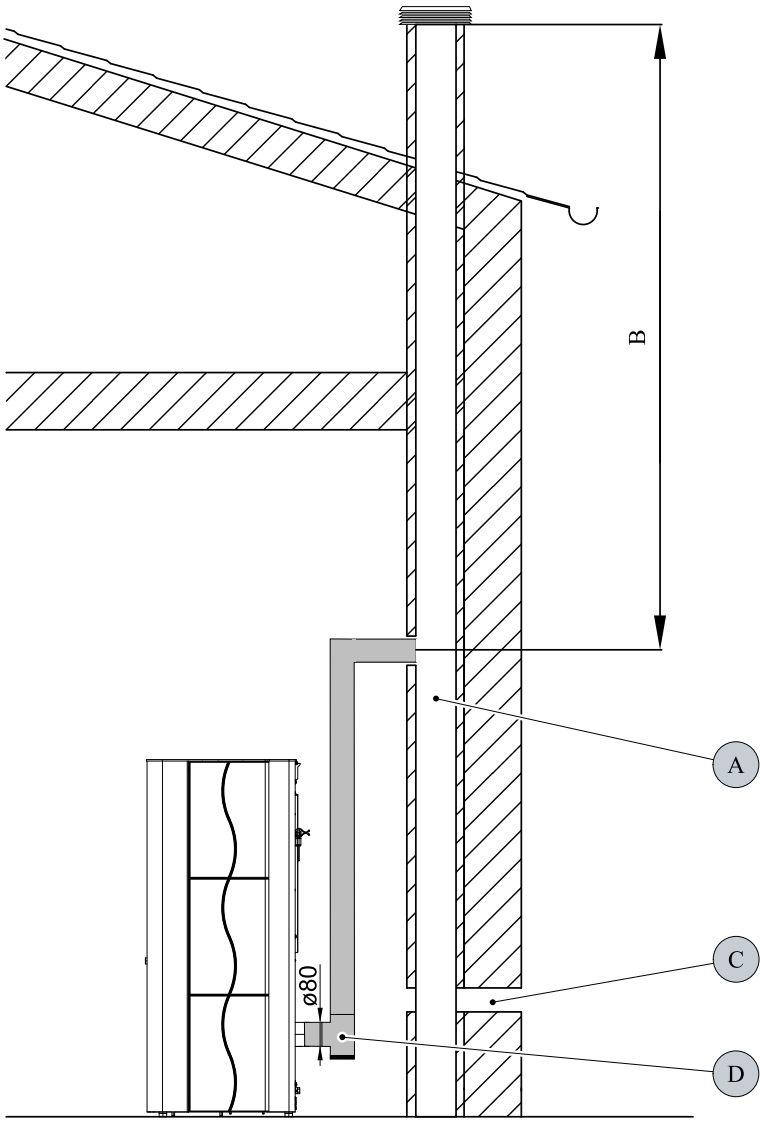


Figure 1: Connection to the chimney:

A	Chimney
B	Effective length of the chimney
C	Inlet of outside air
D	T-shaped block with plug for discharge of condensate

GB

5. Installation

CAUTION

For comfortable maintenance and service are following distances recommended:
at the sides – minimum 50 cm
at the back – minimum 25 cm

5.1. Minimum gaps to flammable components

CAUTION

When installing the stove, it is essential to observe the official fire protection regulations. Please observe the national regulations to this effect.

WARNING

As the minimum distances from flammable or temperature-sensitive materials (E. G. furniture, wallpaper, wooden cladding) and from load-bearing walls, the specified gaps "at the back", "on the sides" and in the "direction of radiation forwards" must be maintained **according to the nameplate**.

WARNING

Floor protection:
In case of flammable or temperature-sensitive floor coverings, the appliance must be placed on a non-flammable base (see drawing).

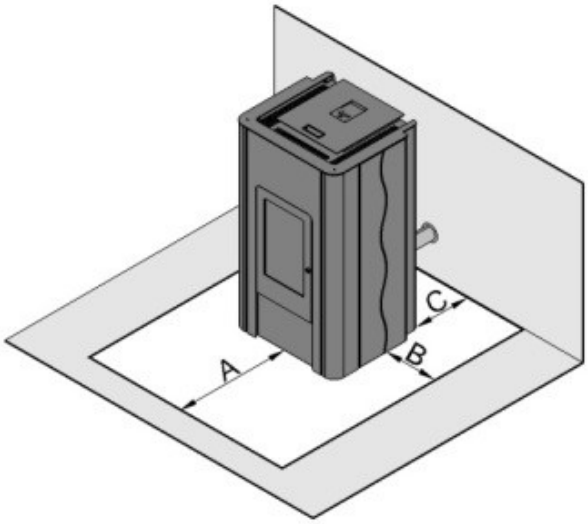


Figure 2: Recommendation for floor protection:

A	30 cm – at the front
B	10 cm – at the sides
C	up to the back wall

WARNING

It is forbidden to put down or to install things which are not fireproof upon the stove or in its vicinity!

5.2. Combustion air supply

Note

It must be ensured that there is sufficient fresh air at the place of installation.

GB

5.3. Operation of the stove depending on the air from the room:

The pellet stove has been tested as gas-tight according to the EN 14785 standard and can be operated with or without external air supply (the stove then consumes air from the room). In this case, during the simultaneous operation of the stove and the ventilation installation (e.g. controlled ventilation systems, hoods, etc.), the unit must be protected against a drop in room air pressure (e.g. by a differential pressure switch). Furthermore, a minimum of 20 m3/h of air must be supplied into the room.
Follow your local regulations and the advice of your chimney sweep.

5.3.1. Operation of the stove independent of the air from the room (RLU):

The required combustion air is supplied to the stove through sealed pipes from the outside or from an approved chimney system (e. g. LAS system), then the stove does not draw air from the room where it is installed. This allows the stove to be operated in low-energy or passive houses, or in houses equipped with mechanical ventilation systems.

5.4. Outside air connection

Note

We recommend using the outside air connection for the supply of combustion air in order not to use up the valuable indoor air when heating.

- To do this, connect the air intake elbow located on the back to a hose or a similar, suitable air duct or to a chimney system designed for this purpose. The diameter of the air duct must be at least the diameter of the outdoor air connection on the stove.
- The end of the air duct must be located outside or in a well ventilated area (basement).

WARNING

It is not recommended to feed the cold air into the room from outside via a direct duct, as this can lead to the build-up of condensation.

- In order to guarantee a sufficient supply of air, the duct should not be longer than approx. 3 m and not have too many bends.
- If the duct leads outside, it must end with a 90° bend facing down or a wind protection device (see Figure 3).

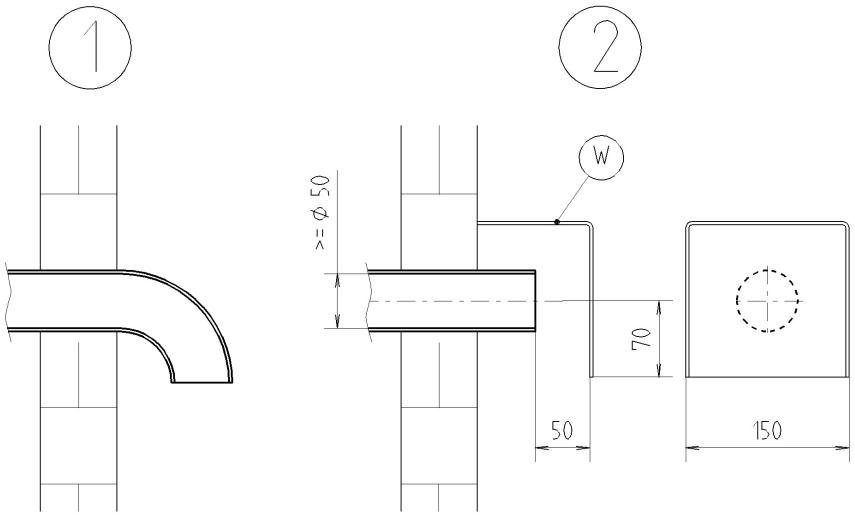


Figure 3: Wind protection of air supply duct

WARNING

For operation independent of indoor air with RLU certified appliances, the outside air connection must be connected.

For the dimensions of the air supply duct:

Air supply duct diameter	Maximum length	Max. number of 90° bends
50 mm	0,5 m	1
100 mm	3 m	3

Note

If the dimensions are lower than specified, then it is not possible to operate the fireplace properly and it will lead to increased contamination of the burner and inspection window.

GB

5.4.1. Outside air connection (RLU)

To operate the stove independently of the air from the room, the combustion air must be supplied from the outside or from an approved chimney system (e.g. LAS system).

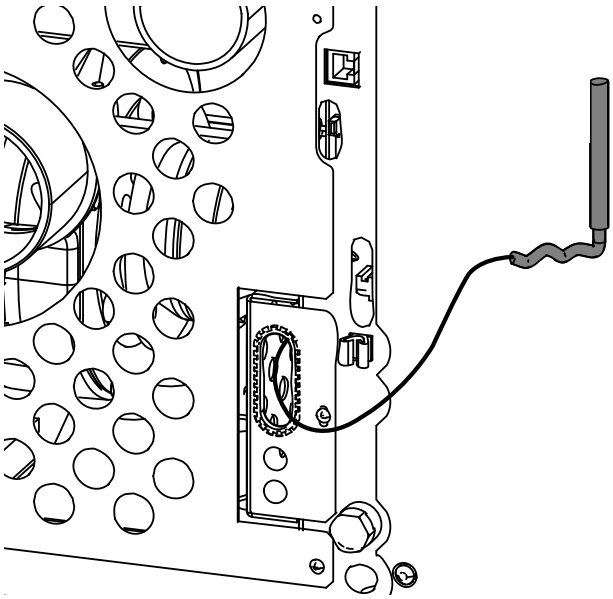
5.5. Room temperature sensor

Note

A room temperature sensor is installed on the back of the stove. In the box there is about 0.8 m long cable, so the sensor can be placed farther away from the stove - this eliminates a possible error of temperature measurement caused by the proximity of the flue.

CAUTION

The sensor itself (metal part) must not touch the floor or wall - this could distort the temperature measurement!



5.6. Hydraulic connection to heating circuit

GB

CAUTION

The connection of a pellet stove with heat exchanger to the heating system must be carried out solely by an authorised professional firm, in order to secure a trouble-free operation in technical respects. For the proper mounting, there is responsible the installing firm or the user provided he carried it out himself.

- The pellet stove with heat exchanger without H+S hydraulic module may be connected solely to a safe and properly devised heating system.

CAUTION

- Ultimate water pressure in the heating system: 200 kPa (2 bar)
- Minimum water pressure in the heating system: 80 kPa (0,8 bar)

WARNING

For the connection of a pellet hot-water stove, the heating system must include a three-way valve unconditionally.

WARNING

The temperature of the reverse run on the input to the pellet stove with heat exchanger must be 55° C at least.

WARNING

The pellet stove is not allowed to run without heating water!

WARNING

The stove may be operated solely in a system equipped with an Water parameters.

6. General function of pellet stove with heat exchanger

Pellet stove with heat exchanger equipped with two different mode settings (functions):

6.1. Operating setting "Room Temperature Yes"

In the "Room Temperature Yes" mode, set at the factory, the heating behavior of the stove adjusts to the required set room temperature.
Once started, the stove automatically ignites in the start-up phase. After completing the start-up phase, it switches to the Heating mode. After reaching the Target room temperature, the stove switches to cool mode and then to the standby mode.
When the room cools down, the heating system automatically starts the Heating mode again.

6.2. Operating setting "Room Temperature No"

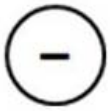
When the stove is operated in the "Room Temperature No" mode, the heating behavior of the stove is adjusted to its inlet temperature.
After starting, the stove will automatically ignite in the start-up phase. After completing the start-up phase, it switches to the Heating mode. After reaching the set inlet temperature, the stove switches to the cooling mode and then to the standby mode.
When the entry temperature of the stove drops below the set value, the stove automatically re-starts the Heating mode.
In "Room Temperature No" mode, the temperature in the room is not taken into account.

7. Operator console functions

7.1. Buttons

"On/Off" button

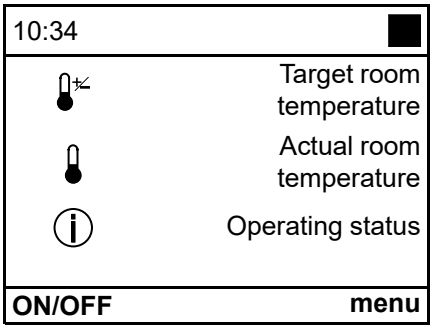
"Plus" button



"Minus" button

"OK" button

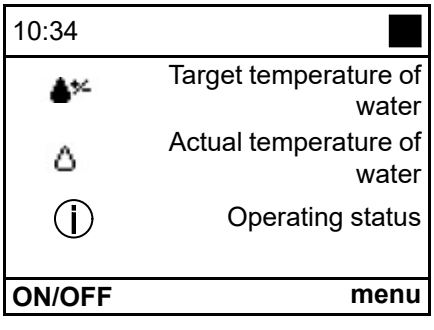
7.1.1. Symbols on the display (operating setting "Room Temperature Yes")



➡ Symbol ■ : Stove is WLAN capable

➡ Function of the buttons

7.1.2. Symbols on the display (operating setting "Room Temperature No")



➡ Symbol ■ : Stove is WLAN capable

➡ Function of the buttons

GB

8. Operating the pellet stove

8.1. Suitable fuels

- Pellets with 6mm diameter
- **Identification: DINplus, ÖNorm M 7135, ENplus-A1**

8.2. Unsuitable fuels

- The use of lower-quality or unauthorised fuel adversely affects the operation of your pellet stove and may lead to the lapse of the guarantee.
- Burning wood pellets of a poor quality leads to cleaning intervals becoming shorter and more fuel being consumed.

Note

Unauthorised fuels are, for example

- wood chips
- straw
- maize
- firewood
- etc.

8.3. Using for the first time

8.3.1. General:

Before using for the first time

- Remove any stickers.
- Remove all accessories from the pellet tank and the combustion chamber.
- Check whether the combustion chamber cladding (see appliance sheet) is attached to its fastenings. This could have slipped out of its position as a result of the transportation or installation of the stove.
- Check that the burner fits perfectly in its mounting.
- Close the combustion chamber door.
- Fill the storage container with pellets.
- Plug in mains cable.

Note

Only when **using for the first time**, place approx. 30 pellets in the burner. This speeds up the ignition process.
Due to the different expansion of the materials used, the stove may make sounds resembling **ticking or banging** when heated or cooled.
In principle, these sounds cannot be eliminated during operation. Due to the different expansion of the materials used and the sounds from the motor, fan, etc., sound effects with low noise levels may occur.

These sounds are due to factors that are out of control and therefore should not be considered a reason for claims.

WARNING

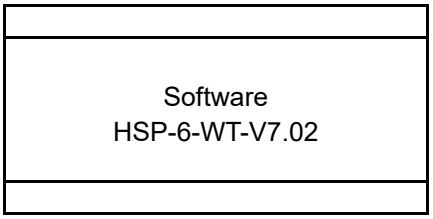
Only our contractually-bound professional service partners may install and set the heater into operation for the first time.

8.3.2. Connection of the WLAN module to the pellet stove

The WLAN module can only be connected to the stove using the RJ 45 cable supplied with the WLAN module; see the WLAN module manual.
LAN connection to your home network (modem or router) is not permitted, as this could damage the stove control unit.

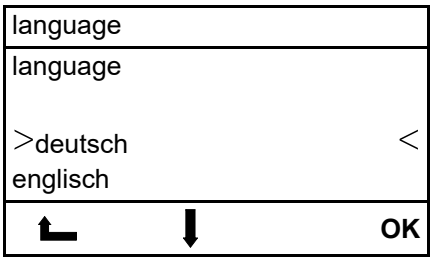
8.3.3. Operating console:

8.3.3.1. Software version



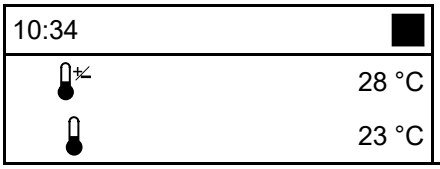
As soon as the mains plug is connected, the software version appears on the display for approx. 7 seconds, E.g.:

8.3.3.2. Language selection

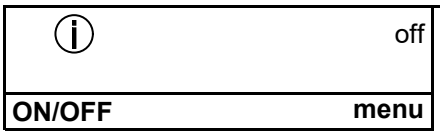


After that you can select your required language.
Procedure:
The required language is selected with the **"Plus"** or **"Minus"** buttons and confirmed with **"OK"**.

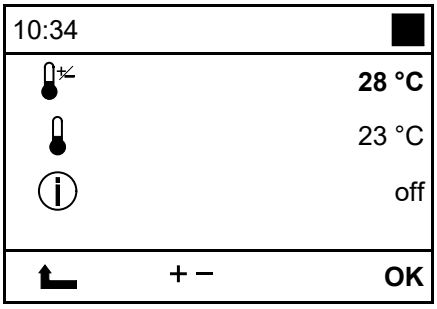
8.3.3.3. Welcome page



GB

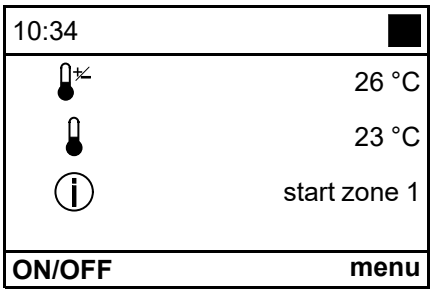


8.3.3.4. Setting Target room temperature (required room temperature)



Procedure:
(at the factory setup **Room Temperature Yes**)
The "Target room temperature" is set with the **"Plus"** or **"Minus"** buttons.
The "Target room temperature" can be changed at any time as often as you want during operation with the **"Plus"** or **"Minus"** buttons.
Prerequisite: The welcome page must be shown on the display.

8.3.3.5. Starting the pellet stove at the operating setup "Room Temperature Yes"



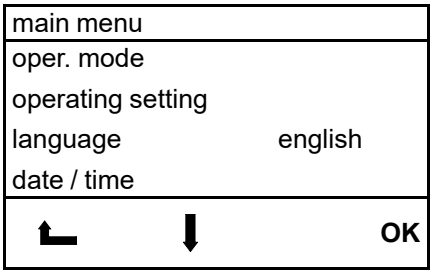
Procedure:
On the standard screen, press the **"On/Off"** button to get the stove started.
Start zone 1 now appears under **"Operating status"** and the start process begins.

Note

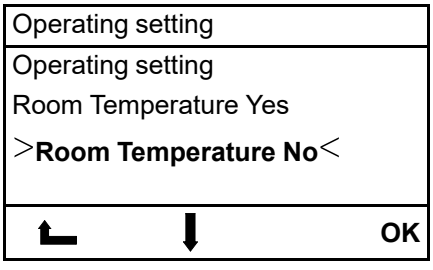
By pressing the **"On/Off"** button again, the stove is switched back off. **OFF** then appears under **"Operating status"**.
The stove performs the ENTIRE start zone, however, until it reaches the necessary flame temperature and only then switches to the cooling Operating status and then OFF.

GB

8.3.4. "Room Temperature No" setting

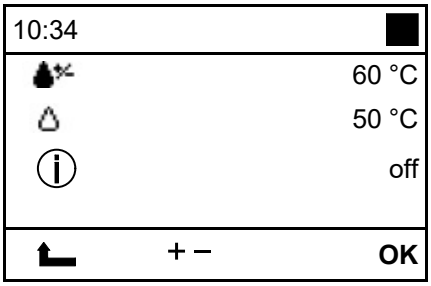


Precondition: The initial page is displayed.
Pressing the push-button **"OK"**, there appears the page **Main menu**.
This menu is displayed as a pull-down menu.
Procedure:
Choose the function **"Operating setting"** by means of push-buttons **"Plus"** or **"Minus"**. Pressing the button **"OK"**, the file opens.



Pressing repeatedly the push-buttons **"Plus"** or **"Minus"**, you choose the Operating setting **"Room Temperature No"** and confirm it by the button **"OK"**.
Pressing the L.H. push-button **"On/Off"** twice, you get to the initial page.

8.3.4.1. "Target temperature of water" setting (TVL soll)



Precondition: The initial page is displayed.
By means of push-buttons **"Plus"** or **"Minus"**, you carry out the adjustment of **"Target temperature of water"**.
Pressing the push-button **"OK"**, the adjusted value gets stored in the memory.
During the operation, the **"Target temperature of water"** can be altered any time and as often as you wish by means of push-buttons **"Plus"** or **"Minus"**.

8.3.4.2. Switching on of the pellet stove in Operating setting "Room Temperature No"

Procedure:
Press the push-button **"On/Off"** in the initial page; the stove is brought in operation.
In the field **"Operating status"**, there appears now the message **"start zone 1"**, and the starting procedure is initiated.

Note

By pressing the push-button **"On/Off"** again, the stove is disengaged. In the field **"Operating status"**, there appears now **Off**.
The stove performs the ENTIRE start zone, however, until it reaches the necessary flame temperature and only then switches to the cooling Operating status and then OFF.

WARNING

During the first use, odours may build up for a short time. Please ensure that there is adequate ventilation in the installation room during this time and avoid inhaling directly!

The varnish is prone to scratches and damage before commissioning, but hardens after repeated heating.

Note

If the start zone could not be successfully completed i. e. no flame generation or the required temperature could not be reached at the flue gas thermosensor, then a safety shutdown is initiated and an error message generated ("Error 2 – Date and time"). Before starting again, empty the burner and replace it.

GB

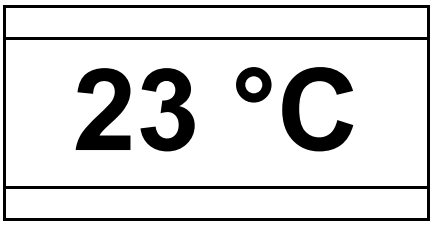
9. Additional operator console functions

9.1. Backlighting

The backlighting of the display is switched off 5 minutes after the operator console was last operated and switches to energy saving mode.

The backlighting is switched on by pressing on button. The function buttons are only active once the backlighting has been activated. The backlighting is also activated by an error message being triggered.

9.2. Energy saving mode - Actual room temperature display

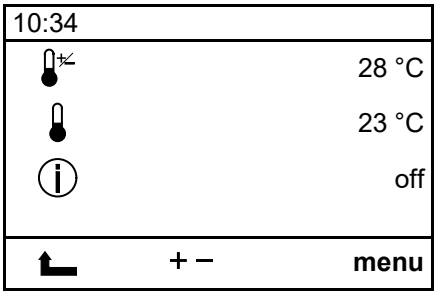


The display energy saving mode is automatically activated after a few minutes. The display shows Actual room temperature.

Note

Pressing any button makes the welcome page appear again on the display after approx. 3 seconds.

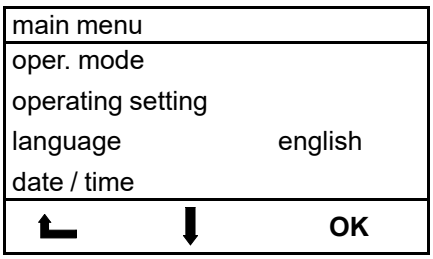
9.3. Button lock (child safety device)



Procedure:
Activation:
Hold the **Menu** button down for approx. 10 seconds until "Button block activated" appears on the display.
Deactivation:
Hold the **Menu** button down for approx. 10 seconds until "Button block activated" no longer appears on the display.

10. Functions in the main menu

10.1. Main menu – Select functions



Prerequisite: Welcome page is displayed.
The Main menu page appears by pressing the "OK" button.
This menu is shown as a scroll down menu.
Procedure:
The functions can be selected with the **"Plus"** or **"Minus"** buttons.
The function is chosen by pressing the **"OK"** button.

The following functions are found in the main menu:

- Oper. mode
- Operating setting
- Language
- Date/Time
- Heating curve (it can be chosen only at the Operating setting **"Room Temperature Yes"**)
- ECO-Mode

GB

- Network (can only be seen as an option when WLAN module is connected)
- Water parameters
- Record of defects
- Contrast
- Operating hours
- Info Software
- Test setting

10.1.1. Type of operation "Weekly program" - in the mode: "Room Temperature Yes"

oper. mode	b001
>off	<
on	
weekly prog.	
back	
ON/OFF	↓

Procedure:
The week program function is selected with the **"Plus"** or **"Minus"** buttons.
The week program function is chosen by pressing the **"OK"** button.

weekly prog.						
mo	tu	we	th	fr	sa	su
1 E	00:00		A	06:00		25°
2 E	06:00		A	18:00		23°
3 E	18:00		A	24:00		26°
			<>			**change**

The respective **week day** can be selected with the **"Plus"** or **"Minus"** buttons.

- The day is chosen by pressing the **"OK"** button.

- Setting heating zones:
- The required **switch-on time** can now be set with the **"Plus"** or **"Minus"** buttons.
- The **shut down time** on the respective week day can be programmed by pressing the right-hand arrow button.
- The **Target room temperature** is selected by pressing the right-hand arrow button again.
- This procedure can be used to set 3 heating zones for each day with the respective room temperature.
- Adjust the temperature in the room

Note

At the operating setting **"Room Temperature No"**, it is not possible preselect room temperatures in the weekly program!

- Week program symbol active: 1

10:34	
	28 °C
1	23 °C
	standby

To exit the function, press the **"On/Off"** button.

Note

Early start: If the stove is on standby between heating zones, it is possible to start the stove early by pressing the **"On/Off"** button. The next heating zone is selected directly for this.

menu

Note

Early stop: It is also possible to activate an early stop in the week program heating mode by pressing the **"On/Off"** button, in order to end this one heating zone before time. The next heating zone will start again as previously determined.

10.1.2. Operating setting – regulation of the room temperature "Yes-No"

Operating setting	
Operating setting	
Room Temperature Yes	
>Room Temperature No<	
↵	↓ OK

Procedure:
By means of the push-buttons **"Plus"** or **"Minus"**, there are chosen the functions Room Temperature **"Yes"** or **"No"**.
By pressing the push-button **"OK"**, there is chosen the function regulation of the room temperature.

Note

When "YES" is set, the pellet stove is only regulated by the room temperature.
When the setting is "NO", the pellet stove is controlled only by the inlet temperature.

10.1.3. Setting the language

main menu	I001
language	
>deutsch	
englisch	
↵	↓ OK

Procedure:
The required language can be set with the **"Plus"** or **"Minus"** buttons.
The setting is saved by pressing the **"OK"** button.
To exit the function, press the **"On/Off"** button.

GB

10.1.4. Setting the time and date

date/time	
fr, 15.09.2018	
14:39:28	
↵	+ – change

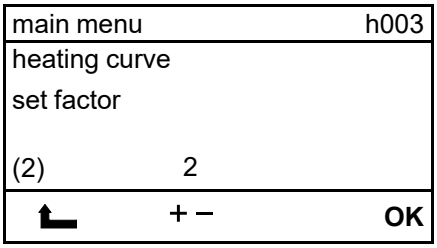
Procedure:
By pressing the **"OK"** button on the right, the required date and time are set with the **"Plus"** and **"Minus"** buttons in the middle.
The **"OK"** button is used to switch from the date to the time setting.
The setting is saved by pressing the **"OK"** button.

To exit the function, press the **"On/Off"** button.

Note

Summer and winter time are not automatically detected.

10.1.5. Heating curve – at the Operating setting: "Room Temperature Yes"



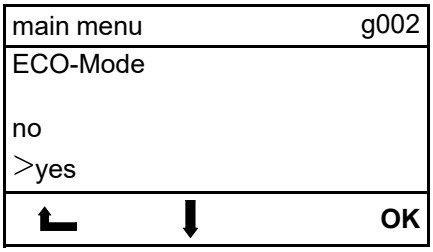
Setting range of the heating curve from **1** to **4**. Factory setting: **2**
The value to be set is based on the size of the room being heated.
Guide values:

- Room size 20 m² - Wert 1
- Room 25 m² - Wert 2
- Room 30 m² - Wert 3
- Room bigger than 30 m² - Wert 4

A bigger value (bigger than 3) should also be set with older chimneys – this prevents excess build-up of condensation in the chimney.

Procedure:
The required value can be selected with the **"Plus"** or **"Minus"** buttons.
The setting is saved by pressing the **"OK"** button.
To exit the function, press the **"On/Off"** button.

10.1.6. ECO-Mode



Procedure:
The required line can be selected with the **"Plus"** or **"Minus"** buttons.
The setting is saved by pressing the **"OK"** button.
To exit the function, press the **"On/Off"** button.

10.1.6.1. ECO-Mode at the Operating setting "Room Temperature Yes"

When the room temperature reaches the desired value, the stove switches to the “ECO-Mode” operating mode when the ECO-Mode function is activated. In this operation state, the stove does not switch off (it does not start to cool), it continues to heat with a reduced flame. However, if the room temperature exceeds the desired value by more than 2 °C or exceeds 30 °C, the stove switches to “Cooling” mode. If then the room temperature drops below the desired value by 1 °C, the stove will start to heat again.
(Prerequisite: Stove is cooled to less than 70 °C)

- The set ECO-Mode operating state remains activated.

10.1.6.2. ECO-Mode at the Operating setting "Room Temperature No"

When the ECO-Mode function is activated, the stove switches to the ECO-Mode operating mode when the desired heating water temperature is reached. In this operating state, the stove does not switch off (it does not start to cool), it continues to heat with a reduced flame until the heating water temperature reaches 73 °C.

Example:
When the desired heating water temperature (desired TVL) is set to 65 °C and the “TVL - hysteresis” parameter is set to 10 °C, the stove switches to ECO-Mode operating mode after reaching the heating water temperature of 65 °C and continues to heat with a reduced flame. When the heating water temperature reaches 73 °C, the stove starts to cool. When heating water is cooled by more than 10 °C during cooling, that is, 65 °C - 10 °C = 55 °C, then the stove switches to heating mode again.
(Prerequisite: Stove is cooled to less than 70 °C)

- The set ECO-Mode operating state remains activated.

10.1.7. Setting the Water parameters

main menu	
date/time	
heating curve	
ECO-Mode	
Water parameters	
↵ ↓	**OK**

Procedure:
Press **"OK"** to open the **"Water parameters"** folder.

10.1.7.1. Setting the water - flow temp. set parameter

main menu	
flow temp. set	**60 °C**
flow temp. hyst.	10 °C
flow temp. pump	55 °C
flow temp. pump hyst.	5 °C
↵ ↓	**OK**

Procedure:
By pressing the push-button **"OK"**, there is opened the file "flow temp. set". By pressing the push-buttons **"Plus"** or **"Minus"** repeatedly, it is possible to set up a value from 55 °C to 70 °C. The adjusted value is confirmed by pressing the push-button **"OK"**.
(Adjustment from the factory: 60 °C)

Note

By means of the parameter **"flow temp. set"**, the required input temperature is adjusted.
If this value is reached during the Heating mode, the stove switches over to the operating setting **"cooling"**, and subsequently, to the operating setting **"standby"**.

10.1.7.2. Setting the water - flow temp hyst. parameter

main menu	
flow temp. set	60 °C
flow temp. hyst.	**10 °C**
flow temp. pump	55 °C
flow temp. pump hyst.	5 °C
↵ ↓	**OK**

Procedure:
By pressing the push-button **"OK"**, the file "flow temp hyst." is opened. The flow temp hyst. can be adjusted by pressing the push-buttons **"Plus"** or **"Minus"** repeatedly, it is possible to set up a value from 5 °C to 20 °C. The adjusted value is confirmed by pressing the push-button **"OK"**.
(Adjustment from the factory: 10 °C)

Note

By means of the parameter **"flow temp. hyst."** there is adjusted the switching difference between the Shut down of the stove and its switching on again.

Note

The required input temperature (flow temp. set) is set up to 60 °C, and the parameter **"flow temp hyst."** is set up to 10 °C. Henceforth, after reaching the flow temp. set (60 °C), the stove switches over to the operating setting **"cooling"** and subsequently, to the operating setting **"standby"**. If during the operating setting **"standby"**, the input temperature drops down by 10 ° C (i. e. 60 ° C – 10 ° C), the stove – at the input temperature < 50 °C – switches over to the operating condition **"Heating mode"** again.

GB

10.1.7.3. Setting the water - flow temp. pump parameter

main menu	
flow temp. set	60 °C
flow temp. hyst.	10 °C
flow temp. pump	**55 °C**
flow temp. pump hyst.	5 °C
	OK

Procedure:
By pressing the push-button **"OK"**, there is opened the file "flow temp. pump". By pressing the push-buttons **"Plus"** or **"Minus"** repeatedly, it is possible to set up a value from 50 °C to 60 °C. The adjusted value is confirmed by pressing the push-button **"OK"**.
(Adjustment from the factory: 55 °C)

Note

By means of the parameter **"flow temp. pump"** there is set up the input temperature (flow temp. set) at which there will be switched on the circulating pump providing for transport of water.

10.1.7.4. Setting the water - flow temp. pump hyst. parameter

main menu	
flow temp. set	60 °C
flow temp. hyst.	10 °C
flow temp. pump	55 °C
flow temp. pump hyst.	**5 °C**
	OK

Procedure:
By pressing the push-button **"OK"**, there is opened the file "flow temp. pump hyst.". By pressing the push-buttons **"Plus"** or **"Minus"** repeatedly, it is possible to set up a value from 2 °C to 20 °C. The adjusted value is confirmed by pressing the push-button **"OK"**.
(Adjustment from the factory: 5 °C)

Note

By means of the parameter **"flow temp. pump hyst."** there is adjusted the switching difference between the Shut down of the stove and the Shut down of the circulating pump.

Note

The required input temperature (flow temp. set) is set up to 60 °C, and the parameter **"flow temp. pump hyst."** is set up to 5 °C.
After reaching this temperature flow temp. set (60 °C), the stove switches over to the operating setting **"cooling"** and subsequently, to the operating setting **"standby"**.
The circulating pump providing for transport of water goes on running, an it is switched off only after reaching the input temperature "flow temp. set" minus "flow temp. pump hyst., i.e. the circulating pump gets switched off if the input temperature has dropped to 55 °C.

10.1.8. Record of defects

Record of defects		
F0018	13–07	17:03
F0009	12–07	15:11
F0040	12–07	15:08
F0026	11–06	14:58
		OK

Procedure:
By means of the push-buttons **"Plus"** or **"Minus"**, it is possible to review the existing faults with dates and times.
In the record of faults (memory of faults), there are shown the latest 64 error messages with dates and times.
In order to leave this function, Press the button **"On/Off"**.

10.1.9. Contrast brightness display

main menu	
Record of defects	
contrast	
hours	1496 h
Info Software	
↵ ↓	OK

Procedure:
The required value can be selected with the **"Plus"** or **"Minus"** buttons.
The setting is saved by pressing the **"OK"** button.
To exit the function, press the **"On/Off"** button.

10.1.10. Operating hours

main menu	
Record of defects	
contrast	
hours	1496 h
Info Software	
↵ ↓	OK

The current status of the operating hours is displayed under this item in the Main menu.

10.1.11. Software version information

Info Software
Software: HSP-6-WT-V7.02
test date: 2017–09–15
↵ ↓

Procedure:
To exit the function, press the **"On/Off"** button.

10.1.12. Test setting

Test setting	
accese code	
" * "	
↵	+ – OK

Heating in the test position is only permitted by specialists of various test laboratories!
In this menu, the partial load / nominal load is tested according to EN 14785 standard.
Procedure:
Use the **"Plus"** or **"Minus"** keys to enter the required code.

GB

The code is as follows: **1854**
Pressing the **"OK"** button saves the setting.
The test setting partial load or nominal load is then selected.
Pressing the **"OK"** button activates the **"START"** of the respective test setting.

Typ	Transport pressure at nominal heat output / partial load
HSP 6 WT	12 / 5 Pa

11. Oper. modes

11.1. Start zone 1-20 (start zone)

The start zone begins if:

- the current room temperature falls below the set target temperature by 1 °C
- the stove is cooled down to a temperature below 70 °C

The whole "start zone" can go through up to 20 zones. It finishes after reaching a precisely defined temperature at the "flame temperature sensor" and the control system puts the stove into "Heating mode".

The duration of the "start zone" can therefore vary.

If, during the start zone, no flame generation can be achieved or the required temperature at the "flame temperature sensor" cannot be reached, a shut down process is initiated.

11.2. Heating mode

Regulation in the Operating setting **Room Temperature Yes**:

After the positive conclusion of the **"start zone"**, the stove automatically switches to **"Heating mode"**.
In "Heating mode", the heat output of the stove is adjusted in modular fashion to the room temperature or to the difference between the Actual and Target room temperatures.
If the difference between the Actual and Target room temperatures is big, then the stove heats with a bigger heat output.
The nearer the Actual and Target room temperatures get to each other, the more the stove's heat output is reduced.

Note

In "Room Temperature Yes" heating mode, the thermostat function in the storage tank is not activated.

Regulation in the Operating setting **Room Temperature No**:

Once the **"start zone"** has been completed, the stove switches over to operating condition **"Heating mode"** automatically. The heating output of the stove starts being modulated in dependence on the adjustment of the Water parameters. The stove now carries out the regulation to the adjusted input temperature; in this Operating setting, the room temperature bears no effect upon the regulation of the pellet stove.
Having reached the adjusted "flow temp. set", the stove switches over to the operating setting **"cooling"**, and subsequently, to the regime **"standby"**.
On the display, there is visualised "Cooling of temperature of the water by xx °C".

GB

11.3. Burner test (burner cleaning)

During the "Heating mode" operating status, an automatic burner cleaning process is carried out at regular time intervals (E.G. 30 minutes).
This process takes approx. 2 minutes.

11.4. Cooling down

If the set Setpoint temperature is reached or the "ON/OFF" button is pressed, then the operating status switches to "cooling down". The cooling down phase is restricted by timing control (duration about 15 minutes). After the end of the "Cooling down" operating status, the appliance switches to "standby" operating status or "OFF".

If the adjusted Target temperature of water has been reached, the display visualizes "cooling". If the stove due to the reached "flow temp. set" switches over to the cooling regime, on the display there appears "Cooling of water by xx °C".

11.5. ECO-Mode

ECO-Mode means continuous operation at a low output, if the "Actual room temperature or Actual temperature of water" is higher than the set "Target room temperature or Target temperature of water" i.E. the stove does not switch off but continues to run on a "smaller flame".

If the set "Target room temperature" is exceeded by more than 2 °C or the heating water temperature reaches 73 °C, in ECO-Mode despite a small flame,

- ECO-Mode is automatically switched off and the stove switches to the "cooling down" operating status.
- The ECO-Mode function remains active.

11.6. Standby in the Operating setting "Room Temperature Yes"

The stove is in waiting condition. Before it can be switched over from the operating setting "standby" to the operating setting "Start zones 1 – 20", two conditions for the start are to be fulfilled:

- The “Actual room temperature” must drop under the “Target room temperature” by 1 °C at least
- The temperature of the combustion products measured by temperature sensor must be lower than 70 °C
- Inlet temperature ("flow temp. set") must be cooled to the following temperature: "flow temp. set" minus "flow temp hyst."

11.7. Standby in the Operating setting "Room Temperature No"

The stove is in waiting condition. Before it can be switched over from the operating setting "standby" to the operating setting "start zones 1 – 20", two conditions for the start are to be fulfilled:

- The input temperature (flow temp. set) must be cooled down to the following value: "flow temp. set" minus "flow temp hyst."
- The temperature of the combustion products measured by temperature sensor must be lower than 70 °C

11.8. Shut down

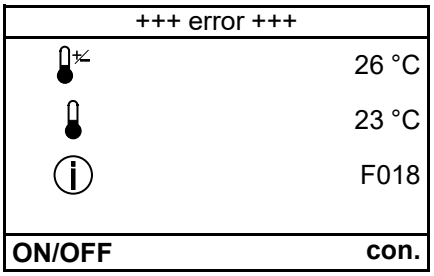
If a fault occurs, then a shut down is initiated. The components are switched on or off as follows:

- Induced draught fan – ON and Screw conveyor – OFF and Ignition – OFF

11.9. Cooling

The end of the shut down process depends on time and temperature.

11.10. Error display - Fault



The stove can no longer be automatically started up.
The operator can see the fault on the display.
Once the fault has been properly corrected and the error message on the operator console has been cleared, the stove can be started up again.
Procedure:
The error is cleared by pressing the **"OK"** button.
Welcome page is displayed.

Note

Otherwise please read the information under Faults, causes, correction.

11.11. OFF

12. Overheating protection

A safety temperature limiter (STL) automatically switches the stove off if it overheats. The error F001 is shown on the console display under operating status. In this case, the appliance must be inspected by a qualified technician!

13. Power cut

The control unit has a backup battery so that data is retained during a power cut.

A distinction is made between a short power cut and a long power cut.
Short power cut – lasts for less than about 30 seconds:

- Once the electricity supply has been restored, the stove continues its operation.

Long power cut – lasts for more than about 30 seconds:

- Once the electricity supply is restored, the stove switches to the Shut down operating status and subsequently to "OFF".

14. Cleaning and maintenance work (see Appliance sheet 3+4.)

15. Faults, causes, correction

You can correct simple operating faults yourself with the following guide. For further information please consult your specialist dealer.

WARNING

If a fault occurs, you will be shown this on the display.
In the event of a fault, do not pull the mains plug out straight away, so that the internal safety functions can continue to operate fully. Only in this way can the flue gases present be extracted via the chimney using the fan. Only pull out the mains plug before starting work on the cold appliance.

15.1. Fault – error code Fxxx

Code	Cause:	Correction:
F001	A. STL triggered due to overheating B. Fuse (F1) in the central unit is defective C. Ignition short circuit	A. If STB has triggered - contact service department B. Fuse F1(3.15 A) defective - contact service department C. Ignition defective - contact service department
F002	A. Burner dirty B. Pellet tank empty C. Ignition defective D. Burner not lying flush E. Flame temperature sensor defective F. Downpipe / screw conveyor blocked G. Screw motor defective	A. Clean burner B. Clean burner - fill pellet tank C. Ignition defective - contact service department D. Clean burner - position burner correctly E. Flame temperature sensor defective - contact service department F. Clean the intake on the screw conveyor housing with a vacuum cleaner - clean burner G. Screw motor defective - contact service department
F003	A. Heat exchanger / smoke flues dirty B. Heating curve set too low C. Room temperature sensor is lying on the floor or wall	A. Cleaning the smoke flues - clean burner B. Clean burner - Adjust heating curve as described C. Clean burner - suspend room temperature sensor freely
F005	A. Burner dirty B. Pellet tank empty C. Downpipe / screw conveyor blocked D. Room too airtight – required combustion air cannot flow into the room E. Flue gas temperature sensor defective F. Screw motor defective G. Pellet fuel has too low a calorific value	A. Clean burner B. Clean burner - fill pellet tank C. Clean the intake on the screw conveyor housing with a vacuum cleaner. – Clean burner D. Clean burner - Ensure adequate combustion air E. Flue gas temperature sensor defective - contact service department F. Screw motor defective - contact service department G. Clean burner - switch to high quality pellet type
F006	A. Combustion chamber door open during operation	A. Clean burner - close door B. Clean burner - Adjust damper in front of the door contact switch

GB

	B. Damper in front of the door contact switch not in the right position C. Cable broken in the electric wiring to the door contact switch D. The connector has come out on the door contact switch or on the central unit	C. Cable broken on door contact switch - contact service department D. Contact service department
F007	A. Flue gas temperature sensor defective or not connected	A. Contact service department
F008	A. Flue gas temperature sensor defective	A. Contact service department
F009	A. Note: Combustion chamber door open during "Off or standby"	A. No correction necessary - Close door - Error is automatically cleared
F011	A. Room temperature sensor defective or not connected	A. Contact service department
F012	A. Room temperature sensor defective	A. Contact service department
F013	A. The temperature sensor on the input defective or not connected	A. Contact service department
F014	A. Short-circuit in the temperature sensor on the input	A. Contact service department
F015	A. Induced draught fan defective B. Power supply to the fan motor interrupted	A. Contact service department B. Check cable - contact service department
F018	A. Power cut	A. Clean burner - Clear error 018
F021	A. Burner dirty B. Pellet tank empty C. Downpipe / screw conveyor blocked D. Room too airtight – required combustion air cannot flow into the room E. Flue gas temperature sensor defective F. Screw motor defective G. Pellet fuel has too low a calorific value	A. Clean burner B. Clean burner - fill pellet tank C. Clean the intake on the screw conveyor housing with a vacuum cleaner. – Clean burner D. Clean burner - Ensure adequate combustion air E. Flue gas temperature sensor defective - contact service department F. Screw motor defective - contact service department G. Clean burner - switch to high quality pellet type
F022	A. Flue draught too low B. Flue draught too high C. Burner dirty D. Flue tube pipeline too long (horizontal) E. Flue gas temperature sensor defective	A. Measure flue draught - contact service department B. Measure flue draught - contact service department C. Clean burner D. Change flue tube pipeline- contact service department E. Flue gas temperature sensor defective - contact service engineer
F023	A. Flame temperature sensor defective or not connected	A. Contact service department

F024	A. Flame temperature sensor at bottom defective or not connected	A. Contact service department
F026	A. Pellet tank empty B. Burner not lying flush C. Burner dirty D. Pellet fuel has too low a calorific value E. Downpipe / screw conveyor blocked F. Room too airtight – required combustion air cannot flow into the room G. Flame temperature sensor defective H. Screw motor defective	A. Fill pellet tank B. Position burner correctly C. Check burner/ clean burner D. Switch to high quality pellet type E. Clean the intake on the screw conveyor housing with a vacuum cleaner. F. Ensure adequate combustion air - Connect stove with outside air G. Flame temperature sensor defective - contact service department H. Screw motor defective - contact service department
F027	A. Burner dirty B. Burner not lying flush C. Door not sealed properly	A. Clean burner B. Position burner correctly C. Check seal on door
F028	A. Burner / combustion chamber dirty B. Flame temperature sensor at bottom defective	A. Clean burner B. Contact service department
F033	A. No WLAN connection B. WLAN code is incorrect C. No IP address received	A. Check WLAN reception B. Check WLAN code C. Check DHCP settings on the router
F034	A. No internet connection available	A. Check internet connection
F040	A. Combustion chamber not cleaned in specified time interval	A. Clean burner and combustion chamber – the combustion chamber door must be opened in "OFF" operating status. The burner and combustion chamber are carefully cleaned using an ash vacuum cleaner. The combustion chamber door must be opened for longer than 60 seconds here so that the error message is automatically cleared.
F041	A. Maintenance interval exceeded	A. Clean the flues
F050	A. The spare battery empty	A. Replace the battery of the control system (CR 2032)
F060	A. The faults in the factory adjustment have been recorded	A. Contact service department
F1000	A. Restart of the hardware	A. The device is without to power supply - error message in the Record of defects

16. General information / faults

Fault:	Cause:	Correction:
Pellet stove does not start	1. The set Target room temperature is lower than the current Actual room temperature 2. Temperature of water is still too high 3. The temperature of the fumes is too high 4. An error has 5. An error has occurred there is no allocated time zone in the week program	1. Increase Target room temperature 2. Modify the temperature of water or wait until the temperature is lower, if appropriate 3. Let the instrument cool down 4. See error correction, Section 15.1. 5. Adjust week programming, Section 10.1.1.
No display	1. Loose or defective connection cable between operator console and control unit 2. Contrast shifted	1. Contact service department 2. Reset contrast
Noise in the (induced) draught fan	Ashes in the body of the draught fan	Remove the ashes using an ash exhauster
Ticking or banging	1. During heating or cooling due to different expansion of the used materials 2. Noise during burner test	
Keep in mind that these sounds are due to factors that cannot be eliminated.		

Due to the different expansion of the materials used, the stove may make sounds resembling **ticking or banging** when heated or cooled.
In principle, these sounds cannot be eliminated during operation. Due to the different expansion of the materials used and the sounds from the motor, fan, etc., sound effects with low noise levels may occur.

These sounds are due to factors that are out of control and therefore should not be considered a reason for claims.

GB

17. Warranty

HAAS + SOHN gives the purchaser a warranty within the context of the statutory regulations. The two-year guarantee period commences on the date of the Actual handover.

Note

The receipt is to be presented as evidence.

If a defect occurs in your appliance within the warranty period, HAAS + SOHN will correct (repair) this defect in the shortest possible time or optionally replace the defective item. Cancellation of the contract /a reduction in price is excluded in so far as this does not conflict with the statutory regulations. Only replacement parts that are expressly authorised or offered by the manufacturer may be used.

Replacement parts that are covered by the warranty and which the customer can replace himself are provided free of charge during the warranty period. Replacement parts are provided without service intervention. However, if the customer requires assembly of replacement parts by a service technician, this service is charged.

Changes to the item purchased that are connected with normal use, invalidate a warranty. Maintenance or cleaning not performed or performed inadequately, a flue draft that is incorrectly set to the appliance or is

insufficient or too high, improper commissioning, negligence and changes to the appliance, also invalidate a warranty.

WARNING

If any constructional change is made to the stove or if it is not used for the intended purpose, any claim under warranty lapses.

18. Replacement part orders / Service enquiries / Complaints

For ordering replacement parts or making enquiries about repairs and service as well as in the event of any complaints, please get in touch **directly with your Haas +Sohn sales partner** where you purchased the appliance.

Note

So that your enquiry can be dealt with quickly, the following details from the nameplate are essential:

- **Exact type designation** (version of the model)
- **Manufacturer's number**

The nameplate is located on the back of the stove and on the front page of the operating instructions.
Please also take note of the technical drawings and tables on the appliance sheet, where you will find the right designation of the replacement part required.

Subject to dimensional and design changes, technical and optical changes, typing and printing errors.

19. Procedure for end-of-life disposal of the heater

- Disassemble the central unit including the connected electrical components and hand them over for recycling.
- Disassemble the control unit and hand it over for recycling.
- Disassemble the electrical cables and hand them over for recycling as non-ferrous waste – it is not an electronic waste.
- Remove the lining of the combustion chamber and dispose of as construction debris.
- Remove the concrete parts of the fireplace kit and dispose of as construction debris.
- Remove the sealing and silicone residues and dispose of them with household waste.
- The heater body and any steel or cast iron parts are to be recycled as metal waste.
- Disassemble the temperature sensors and hand them over for recycling as metal waste. (for pellet stoves)
- Disassemble the door glass and dispose of with household waste (not to be sorted with glass waste).

All documents such as operating instructions, appliance sheet, test reports etc. and contact details can also be found under:

www.haassohn.com