Art. No. 0530208009031
V10 B16

Eco-Pellet Stove 302.07C/302.06C/302.08/309.06/310.06

Installation- and Operating Manual

! Important Manufacturer Information!

We request that you observe the following information:

Quality of wood pellets:

Depending on manufacturer, there are light, dark, short or long pellets. Even different deliveries from the same suppliers can mean different qualities. The standards for wood pellets are becoming more and more stricter, nevertheless: wood remains wood and has its attributes with regard to ash and cinders.

Your HAAS+SOHN Stove:

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Cleaning Requirement:

As soon as you determine ash- and cinder deposits in the cold burner pot, this must be cleaned. **See Operating Manual!** If this is not done, the cinders continue to develop more and more. As a result the device can no longer ignite correctly. Pellets can stack up in the burner pot. In extreme cases, these can then stretch back into the pellet chute. One possible consequence would be a fire burning back into the pellet container and a smoldering fire in the pellet tank. **This destroys your device and is not covered by the warranty.**

For maximum service life:

- Have the commissioning performed by your trained stove supplier.
- Observe the daily check as described and more intensely if you have received new pellet deliveries or if the device is set into operation again after the summer.
- Read through the operating manual carefully and completely and keep it in a safe place.

Space for Model- and Production Number:

Model Number:

Production Number:

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Congratulations! You are the owner of a HAAS + SOHN Pellet-Stove, a quality product. Please read through this manual carefully. In it, you will be informed about the function and handling of this stove, as a result you increase the used value of the device and extend its service life. In addition, by heating correctly you can save fuel and preserve the environment.

We can only then provide a guarantee on our products if you observe the following guidelines of this installation- and operating manual. In addition, the stove must be installed professionally in order to avoid possible accidents.

Safeguard this manual well, then you can familiarize yourself again with the proper operation of your stove at the beginning of every heating period.

Information:
The installation- and operating regulations specified in this manual may deviate completely or partially from official regulations. In this case the official specifications are always applicable! The drawings in this manual are not true to scale and serve only for the purpose of illustration.

1. Description

Pellet stoves are excellently suited for the continuous heating of living- and work-rooms. Functionally, the HAAS+SOHN ECO-Pellet stove is equipped for a fully automatic operation, whereby one can select between 2 operating modes („Heating“ or „Auto“ with weekly program).

Depending on the room temperature, a quantity of fuel for a maximum of approx. **50** hours continuous operation can be stored in the integrated storage tank. The fuel is conveyed fully automatic from the pellet tank to the burner tray by means of a screw conveyor, whereby the quantity of fuel is adapted automatically to the respective heating output.

The internal controller regulates the start phase, the heating phase as well as the cooling phase and thus ensures a safe operation of the pellet stove. The control unit, consisting of the display and four function keys, is integrated in the pellet-tank cover.

On the information page on the display, the user can read off the operating state that the stove is presently in, which is displayed as text. Possible error messages are represented on the display as text, provided with date and time.

The heating of the room air and the creation of a comfortable living environment is essentially achieved through convection heat. As a result, you can quickly warm up even cool rooms that have not been heated for a long time. The cooler room air enters the stove through the lower area of the paneling. With the convection air fan, this is conveyed upwards through the convection duct. The air heated by this flows out again above in the area of the fins. The proportion of radiant heat is produced through heat radiation near the inspection window of the furnace door and by the metal surfaces of the stove.

2. General Information, Safety Information

- Before commissioning the pellet stove, read through the entire installation- and operating manual thoroughly.

- For the transport of your device, only approved transport devices with sufficient carrying capacity may be used.

- Your heating device is not suitable for use as a ladder or standing platform.

- For the installation of your stove, the official fire-protection regulations or the binding provincial building ordinance at the place of installation respectively is/are to be observed, as well as consultation held with the responsible regional master chimney sweep (district master chimney sweep, district chimney sweep). This person also checks the connection of the device to the chimney in conformity with regulations.

- For your stove, all inspections ordered by the legislator have been carried out. The prescribed characteristic values with

regard to fuel-engineering efficiency and flue-gas emissions are observed.

- The pellet-stove may be connected to a chimney supporting multiple connections, if the chimney dimensions according to DIN 4705 Part 2 permit this.**Please note that the minimum feed pressure must be 6 Pascal and maximum feed pressure should be maximum 20 Pascal !!**
- The furnace door may only be opened for cleaning and maintenance during the operating state „Off“. Otherwise – even when the stove is not operated - this is to be kept **closed**, in order to avoid an impairment of other fireplaces and thereby associated dangers.

- A sufficient supply of fresh air to the installation room must be ensured. The pellet stove however offers you the possibility to be connected directly with outside air via a suitable air duct. With that, an operation independent of room air is possible (see chapter 3 „Installation of the Pellet Stove and Connection to the Chimney“).

- **Attention! The pellet stove may not be set into operation during the joint operation of domestic aeration- and ventilation systems.**

- The chimney (chimney or flue resp.) must be designed from stainless steel or ceramic (glazed inside) and be suitable for low waste gas temperatures, so that this can not soot up.

- The pellet stove may first be connected to the power network after proper professional connection to the chimney.

- Attention! The mains cable plug must remain freely accessible after the installation.

- The pellet stove may only be operated with standardized wood pellets (6 mm diameter) (see chapter 6.1 „Fuel“).

- The protective grating located in the pellet container must not be removed.

- The placing of non-heat-resistant materials and objects on the stove or within the prescribed minimum distances is forbidden. Please take note in particular thereby, that during the operating state „Standby“, after cooling down to the required room temperature, the stove can begin its heating operation unexpectedly and unobserved.

- Never use liquid fuels to set the pellet stove into operation or to refresh the existing embers.

- Through the burning of combustible material, thermal energy is released which leads to the surfaces of the heating device heating up greatly (e.g. doors, door- and operating handles, inspection window panes, side walls, front wall, flue pipes). Contact with these parts without suitable heat-protection gloves or a tool is to be avoided!

- The device starts automatically in "Standby-Mode". Due to the development of heat on the panel, it is to be ensured, that there are no unsupervised persons in the place of installation who are not familiarized with the pellet stove.

- Make your children and guests aware of these dangers!

- Possibly existing cleaning personnel are to be especially informed, instructed respectively with regard to the possible unexpected heating up of the stove.

- The placing of non-heat-resistant objects on the heating device or close to it (even when cold, since the stove can start automatically) is forbidden!

- Do not place items of laundry on the stove to dry!

- Stands for drying clothes or the like must be set up at an adequate distance from the heating device – danger of fire!

- When operating your heating device, the processing of lightly combustible and

explosive substances in the same or adjacent rooms is forbidden!

3. Installation of the pellet stove and connection to the chimney

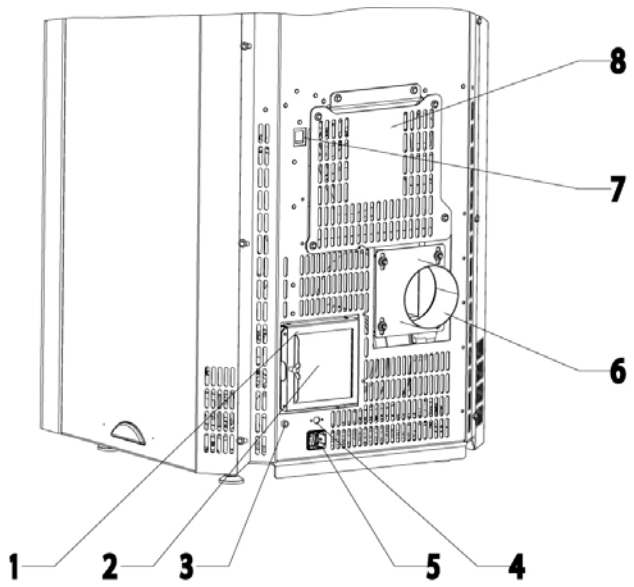
The packaging of your new pellet stove optimally protects it against damage. Nevertheless, damage to the stove or the accessories could however have occurred during transport. Therefore after unpacking, please check your stove for damage and completeness! Notify defects immediately to your specialist stove dealer!

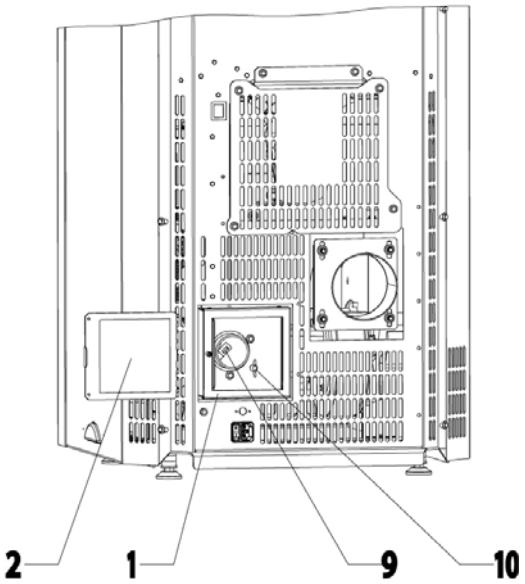
Remark: Furnace linings or the like that are loose or have slipped from the anchoring are not defects (see chapter 7.2. „Initial Commissioning of the Pellet Stove").

The packaging of your stove is largely environmentally neutral. The wood of the packaging is not untreated. The wood, the cardboard and the foils can be delivered to the communal waste recycling without problems.

For the proper operation of the pellet stove, it is important that it stands <u>horizontally</u>.

Room temperature sensor:
The room temperature sensor, which is located on the rear panel, has a length of approx. 1.5 m and can be positioned in the area of the living room.





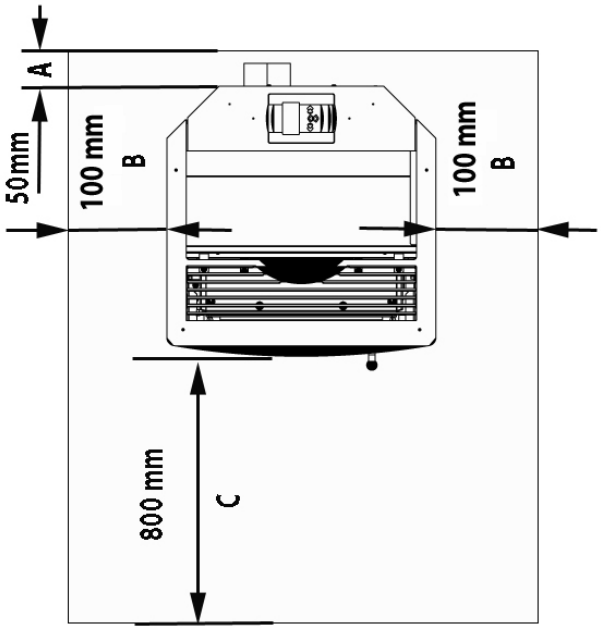
Picture 1: Rear connections
1 = Air filter housing
2 = Air filter
3 = STB safety temperature limiter
4 = Room temperature sensor output
5 = Mains connection / main switch On/Off
6 = Flue gas connection piece
7 = Modem/Service connection
8 = Worm motor cover
9 = Air volume sensor
10 = Screw fitting filter housing

Floor protection:
The floor is to be protected against radiated heat from the area of the inspection panel (furnace door). Apart from this, for the cleaning, from a practical perspective it is advisable to stand your pellet stove on a fire-resistant floor plate, which projects beyond the device at least 5 cm at the back and at the sides and at least 50 cm at the front. We have floor protection plates (underlay plates or U-plates) in our catalogue of accessories. If required, you can order these from your specialist stove retailer. As an alternative to this, of course a tiled- or stone floor is perfectly suited.

<u>Safety distances (minimum distances):</u>
For the installation of the stove, <u>as a matter of principle</u> the officially stipulated fire-protection provisions must be adhered to. In this regard, consult your regional master chimney sweep or district master fireplace sweep.

The following must be adhered to as minimum distance from combustible or temperature-sensitive materials (e.g. furniture, wallpaper, wood paneling) or from supporting walls respectively (see drawing):

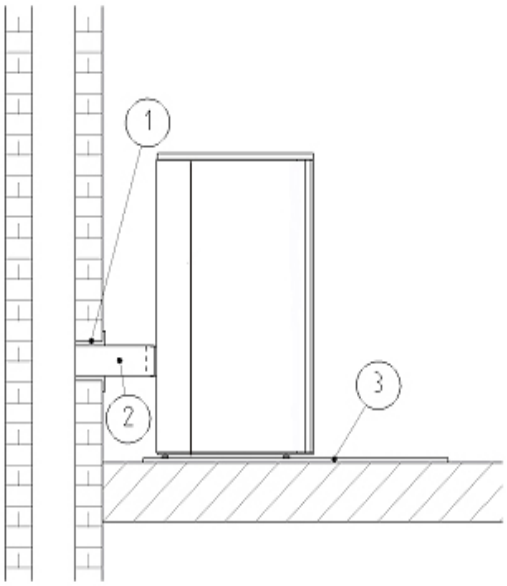
A 5 cm to the rear wall,
B 10 cm to the side walls and
C 80 cm in the radiation range.



Picture 2: Safety distances

The chimney (chimney or flue) must be designed e.g. from stainless steel or ceramic (glazed inside), so that this cannot soot up. This is necessary due to the low waste gas temperature of your pellet stove.

For the connection to the flue, common smoke tubes can be used. Approved flexible steel tubes are also suitable.
Since, as a result of the method of operation of the pellet stove with induced draught ventilator, overpressure can develop at the flue-gas outlet, all flue-gas lines up to the chimney entry must be designed gas-tight. It is also absolutely necessary to ensure, that the smoke tube does not project into the free cross-section of the chimney. For the introduction into the chimney, the use of a wall padding is recommended (see Picture 3).
For longer waste gas conduction, horizontal sections and bottlenecks must be avoided and special insulated smoke tubes should be used; piping ascending towards the chimney is recommended.



Picture 3: Chimney connection

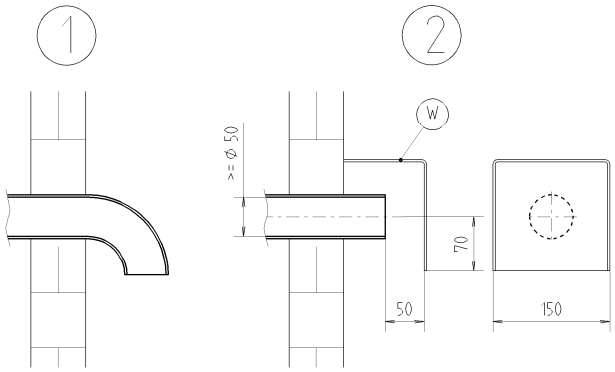
1 = Wall padding

2 = Gas-tight piping

3 = Underlay plate

External air supply:

In air-tight buildings, during the operation of the pellet stove a reduction in the oxygen content in the installation room can occur, therefore adequate ventilation must be ensured. For this, the pellet stove offers you the possibility of being able to be operated independent of the room air. For this, connect the air-intake connection piece situated at the back (diameter: 50 mm, see Picture 1) with a hose or similar, suitable air duct. The end of the air duct must be located in the open air or a well-ventilated room inside the building. For the installation of the pellet stove in combination with a controlled living-room ventilation, the end of the incoming-air duct must not be located in a room connected to the air-network system. To guarantee an adequate air supply, the line should not be longer than approx. 3 m and not have too many bends. This line should have a minimum diameter of 5 cm (the more the better). If the line is conducted into the open air, it must end with a 90°-bend downwards or with a windbreak (see Picture 4).



Picture 4: Windbreak of the air-intake line

The following table is applicable for the dimensioning of the air intake:

Diameter Intake tube*	Maximum length*	Max. number of 90° bends
50mm	0.5 m	1
70mm	1 m	1
100mm	3 m	3

*The respective specifications are independently applicable. The cross-section is to be chosen accordingly when using a flat duct or the like.

If the dimensions fall below, it can happen, that the quantity of combustion air is insufficient. As a result, an increased formation of slag occurs in the burner tray and consequently safety shutdowns.

Connection to the power supply:

Connect the stove to the power supply with the supplied mains cable (see Picture 1).

4. The functional features of the pellet stove

The functioning method of your pellet stove is designed for the maintaining of a constant, comfortable room temperature. The generation of heat in the stove is therefore governed automatically according to the required room temperature set by the operator (target temperature). Depending on the difference in temperature between target- and current room temperature (actual temperature), in a modular fashion the controller selects the output or the „Standby“-operation. As a result, the pellet stove ensures a greatest possible adaptation of the burning behavior to the situation in the room of installation, without constant manual corrections.

5. Operating states of the pellet stove:

The function of the pellet stove is characterized by eight operating states:

5.1. Measurement – degree of soiling of burner tray before the start phase

The start phase begins when the current room temperature falls below the set target temperature by 1°C and the stove has cooled to a temperature of less than 80 C°.
Before the beginning of the start phase, a measurement of the degree of soiling of the burner tray is performed.

During this measurement, the components are switches as follows:

Induced draught blower – ON

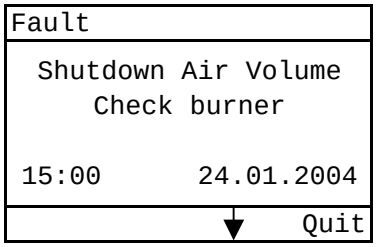
Convection air blower – OFF

Screw conveyor – OFF

Ignition – OFF

If the „Burner test“ concludes successfully, i.e. the burner tray is not or only slightly soiled, then transition to the operating state Start Phase takes place.

If the „Measurement – Burner tray soiling“ is not concluded successfully, i.e. the burner tray is more heavily soiled than is permitted, then transition to the operating state Safety Shutdown takes place and the following error message appears on the display of the control unit.



Picture 5: Error message

5.2. Start phase

After successfully concluded „Measurement – Burner tray soiling“, transition to the operating state Start Phase takes place.

In the „Start phase“, the burner tray is filled with a precisely defined quantity of fuel and

this quantity of fuel is ignited by means of an igniter.

The „Start phase“, which is divided into 10 zones, is ended after a precisely defined temperature is reached on the „Temperature sensor – waste gas“ and the controller switches over to the operating state „Heating“.

After completion of the start phase the igniter is switched off.

The switchover from the „Start phase“ to the operating state „Heating“ is only dependent on the temperature measured at the „Temperature sensor – waste gas“, i.e. the completion and thus the duration of the „Start phase“ can differ with regard to time.

The length of the start phase is however limited with a time of 20 minutes.

If no flame formation can be achieved during this 20 minutes or the required temperature on the „Temperature sensor – waste gas“ cannot be reached, then a safety shutdown is initiated.

During the start phase, the volume of air and speed of the induced draught blower is measured and monitored by means of rotational speed feedback.

5.3. Heating Mode

After the positive conclusion of the „Start phase“, the stove switches automatically to the operating state „Heating“.

In the operating state „Heating“, the heating output of the stove is adapted modular to the room temperature, respectively to the difference between actual room temperature and target room temperature.

If the different between target room temperature and actual room temperature is great, then the stove heats with a greater heating output (maximum with 8 KW).

The more the actual room temperature approaches the target room temperature, the more the heating output of the stove is reduced (minimum heating output = 2.5 kW).

According to the required heating output, the respective quantity of fuel is conveyed by the screw conveyor in cycles over the pellet chute into the burner tray.

During the operating state „Heating“ the flame- or furnace temperature just above the flame is measured using a special temperature sensor, whose signals are processed in the controller and are the basis for the relationship „Energy content in the burner tray“ and supplied volume of combustion air, through which an „ideal combustion“, respectively a high degree of efficiency, is ensured.

The supplied volume of air is measured using a special air-flow measuring device and checked by means of a continual target/actual comparison.

After reaching a waste gas temperature of about 130°C, the convection air blower is also switched on and its speed adapted modular to the respective waste gas temperature and thus to the respective heating output.

During the operating state „Heating“, the speeds of the components, induced draught blower and convection air blower, are monitored by means of rotational speed feedback and a continual comparison between target- and actual speed is performed.

With a greater difference of the actual speed compared to the target speed, a safety shutdown is initiated and an error message displayed on the display of the control unit.

During the operating state „Heating“, the maximum and minimum heating output is limited by the respective safety limit values (maximum and minimum waste gas temperature), i.e. if the maximum waste gas temperature is exceeded during the operating state „Heating“, or the minimum waste gas temperature is undershot, then a safety shutdown is initiated.

5.4. Measurement – Degree of soiling of burner tray during the heating operation

During the operating state „Heating“, the measurement of the degree of soiling of the burner tray is performed every 30 minutes.

This measurement is performed independent of the heating output stage, in which the stove is presently in.

The duration of this procedure is approx. 2 minutes.

The values thereby measured are the basis for whether or not the device can continue its operation and which LED's light up for the „optical visualization of the burner soiling".

5.5. Cooling

If the set target room temperature is reached, i.e. actual room temperature and target room temperature match, then the controller switches over to the operating state „Cooling".

The conveying of the fuel is terminated, i.e. the screw conveyor which is located in the worm tube stops, the speed of the induced draught blower is regulated to a precisely defined speed and the fuel, which is still in the burner tray, is burned.

The convection air blower is regulated to a precisely defined speed.

The cooling phase is limited time-controlled. (duration approx. 15 minutes)

After completion of the operating state „Cooling", the device switches to the operating state „Standby".

5.6. Standby

In this operating state, no combustion operation takes place, all components, induced draught blower, convection air blower and screw conveyor are stationary, the ignition is switched off, the device is in „Standby position".

Before the stove can switch from the operating state „Standby" to the operating state „Start phase" again, two starting conditions must be fulfilled:

1. The set target room temperature must be undershot by at least 1.0 °C
2. The waste gas temperature measured with the waste-gas temperature sensor must be less than 70 °C

Only when both starting conditions are fulfilled does the device switch from the operating state „Standby" back to the operating state „Start phase".

Attention!

In „Standby-mode" the device starts automatically. Due to the development of heat on the panel, it must be ensured, that no unsupervised persons who are not familiar with the operation of the pellet stove remain in the room of installation.
The placing of non-heat-resistant materials and objects on the stove and within the prescribed minimum distances is forbidden.

5.7. Safety shutdown

If a fault occurs, regardless in which operating state and during which mode, then a safety shutdown is initiated.

The sequence of the safety shutdown is precisely defined.

During the safety shutdown, the components are switched as follows:

Induced draught blower – ON

Convection air blower - ON

Screw conveyor – OFF

Ignition – OFF

The end of the safety shutdown is temperature-dependent, i.e. the operating state „Safety shutdown" is retained so long until the stove has cooled to a waste-gas temperature of less than 80 °C.

After conclusion of the safety shutdown, the controller switches over to the operating state „Fault".

5.8. Fault

The stove can no longer be operated automatically.

The operator can read off the fault on the display.

After proper remedy of the fault and acknowledgement of the error message on the control unit, the stove can be set into operation again.

5.9. Shutdown – Operating State OFF

Method of procedure:

Press the left key on the control unit until the information page appears.
Press right key (menu), then with the two middle keys, set the cursor to Mode – press right key (select) – with the two middle keys, set the cursor to Mode „OFF“ – press right key (Save).
The stove initiates the operating state Cooling and can no longer start the heating operation automatically, not even with undershooting of the set room temperature.
During the operating state OFF, the control unit and parts of the controller continue to be supplied with power (approx. 9 Watt per hour).

5.10. Power failure

The control unit has a buffer battery, so that the data are retained during the power failure.

Differentiation is made between a short-term and a long-term power failure.

Short-term power failure – duration of the power failure shorter than 30 seconds:

After the power supply is returned, the stove resumes its operation from that point in which it was before the power failure.

Long-term power failure – duration of the power failure longer than 30 seconds

After the power supply is returned, the stove switches to the operating state Safety Shutdown.

With a power failure, a small quantity of flue gas can possibly escape.

5.11. Overheating

If the maximum permissible waste-gas temperature is exceeded, then a safety shutdown is initiated and the following error message appears on the display:
„Shutdown waste-gas temperature heating operation too high“
The stove can only resume its heating operation when the error message on the control unit has been acknowledged and the required operating mode has been set again.

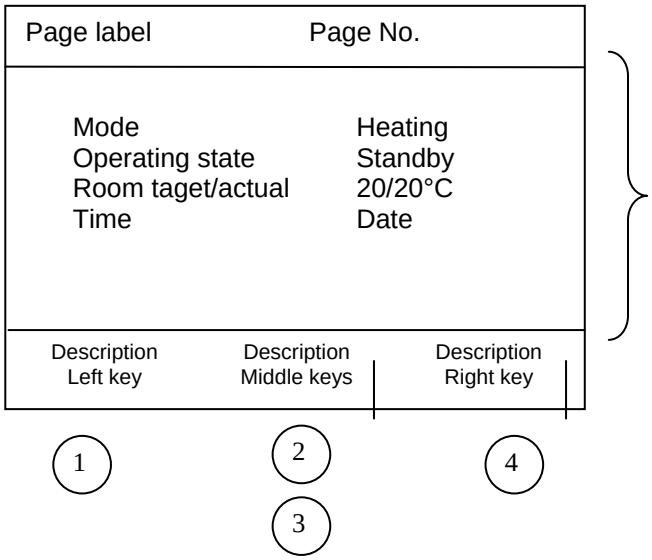
5.12. Low-temperature shutdown

If, during the operating state Heating, the stove cools below a minimum temperature, then a safety shutdown is initiated and the following error message is indicated on the display:
„Shutdown waste-gas temperature heating operation too low“
The stove can only resume its heating operation when the error message on the control unit has been acknowledged and the required operating mode has been set again.

6. Description of keys on the control unit

6.1. Control unit

As shown in the picture, the display is divided into five areas.



The page label contains the name of the respective page in which the operator is presently in. In the same row, the page number is indicated right-aligned.
In the menu- / Info area, there are four rows each with 21 characters available for the text display.

In the information pages, the operator switches between the individual information pages with the keys 2 and 3.
If the operator is in the selection menu, then at the same time he is shown 4 submenu items. With the keys 2 and 3, he can select between the individual menu items, whereby the menu item currently selected is highlighted with a black bar. If after the selection of the 4th menu item, the key 3 is

pressed again, then the operator arrives at further selection items (Scrolldown menu).

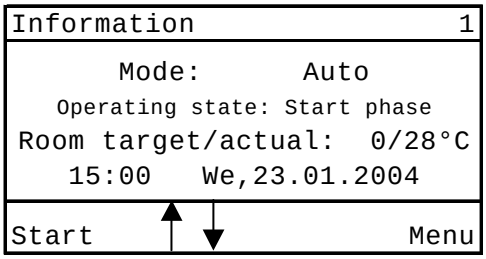
With the key 4, the operator selects a menu item and then arrives in the respective submenu, or, with the selection of a parameter, in the corresponding window in which the parameter can be adjusted.

Non-active menu items and information:
Non-active menu items are not displayed in the selection menu.
In the information pages and in the Values Info, by means of the respective configuration, non-active measured values are also not displayed.

6.2. Information pages

6.2.1 Info page 1 (default page)

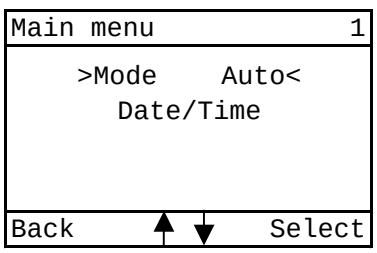
This page is always displayed after switching on.



Function of the keys:
Left: Start the heating operation immediately.
Middle up: Display of the error window on error, key otherwise inactive
Middle down: Parameter setting of the weekly program or the target room temperature, depending on operating mode.
Right: Display of the main menu

6.2.2 Main menu

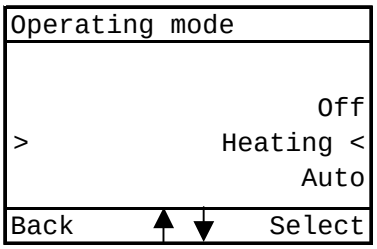
This menu is represented as scrolldown menu.



It contains the entries:
- Operating mode (here the operating mode can be changed: Off, Heating, Automatic)
- Date/Time (here the data and time of the controller can be set)
- factory settings = “Werkseinstellung” in German

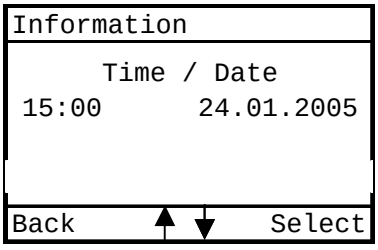
Function of the keys:
Left: Display of Info page 1
Middle up: Selection arrow up
Middle down: Selection arrow down
Right: Entry in the selected menu item

6.2.3 Setting the Mode



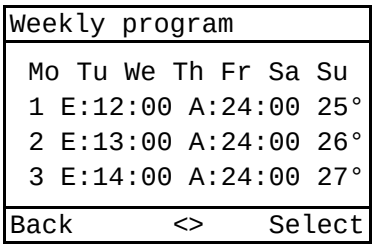
Function of the keys:
Left: Display of Info page 1
Middle up: Select up
Middle down: Select down
Right: Save the selected operating state

6.2.4 Setting the time and date



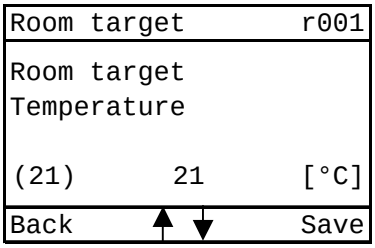
Function of the keys:
Left: Display of Info page 1
Middle up: Select up
Middle down: Select down
Right: Save the selected time

6.2.5 Setting the times and target room temperatures for automatic mode



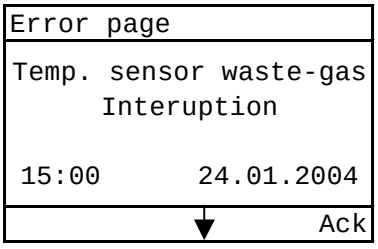
Function of the keys:
Left: Display of Info page 1
Middle up: Weekday setting or time setting resp.
Middle down: Weekday setting or time setting resp.
Right: Jump between the times

6.2.6 Setting the target room temperature for heating mode



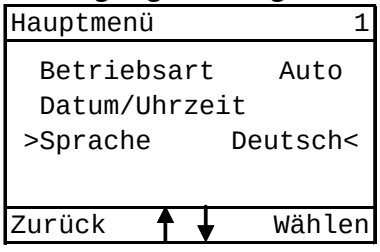
Function of the keys:
Left: Display of Info page 1
Middle up: Increase target room temp.
Middle down: Decrease target room temp.
Right: Save the selected target room temperature

6.2.7 Fault page



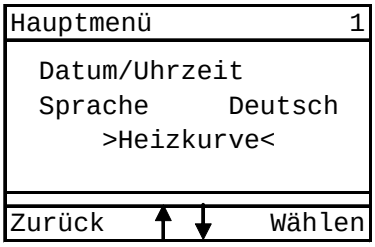
Function of the keys:
Left: Key inactive
Middle up: Key inactive
Middle down: Display of Info page 1
Right: Acknowledgement of the error in the display

6.3 Language Setting



For all devices the language „German“ (=Deutsch) is set in the works setting.
If you wish to set another language, then proceed as follows:
In the main menu, set the cursor to „Language“.
Press the right key „Select“
With the two middle keys select the required language.
Then press the right key „Save“.
If you wish to exit the page without saving, press the left key „Back“.
After saving, switch the main switch off and then on again. Only now are the texts displayed in the newly selected language.

6.4 Description – Heating Curve

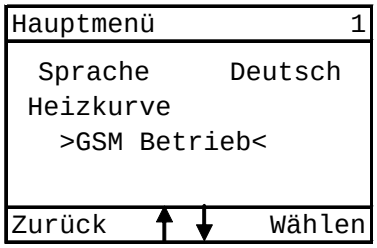


Setting range from 80 to 600
Works setting: 80
The value to be set is governed by the size of the room to be heated.
Approximate values:

- Room size 20m² - value 80
- Room 25m² - value 200
- Room 30m² - value 400
- Room greater than 30m² - value 600

With older chimneys a greater value (greater than 400) should also be set – as a result an excessive formation of condensate in the chimney is prevented.
The value of the heating curve is set as follows:
In the main menu, set the cursor to „Heating Curve“.
Press the right key „Select“.
Adjust the value with the two middle keys.
Then press the right key „Save“.
If you wish to exit this menu page without saving, then press the left key „Back“.

6.5 Description - GSM Operation



In the works setting, „No“ is set in this menu item.
If you wish to operate the pellet stove in combination with a GSM module, then after

connecting the GSM module you must set this menu item „GSM Operation“ to „Yes“.
To do this proceed as follows:
In the main menu, set the cursor to „GSM Operation“
Press the right key „Select“.
Set the cursor to „Yes“ with the two middle keys.
Then press the right key „Save“.
If you wish to exit this menu page without saving, then press the left key „Back“.

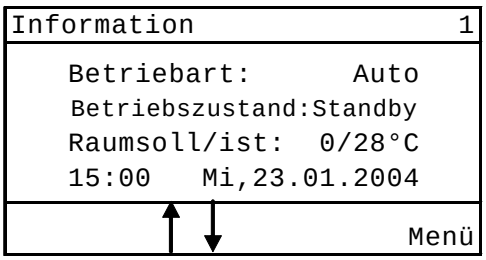
6.5.1 Description – Operator Telephone Number

This menu item only appears if the parameter GSM Operation is set to „Yes“.
In this menu item the telephone number of the mobile phone is input, from which the stove is to be operated. The stove then sends all necessary SMS messages to this telephone number.
The setting of the telephone number is performed as follows:
In the main menu set the cursor to the menu item „Operator telephone number“.
Press the right key „Select“.
Enter the first digit of the telephone number with the two middle keys.
Then press the right key „arrow symbol“ – the second place of the telephone number to be entered appears – the entry of the rest of the telephone number is performed in the same manner.
After entering the complete telephone number, press the right key „Save“.
If you wish to exit this menu page without saving, then press the left key „Back“.

6.5.2 Description - GSM Info Page

This menu item only appears if the parameter GSM Operation is set to „Yes“.
This information consists of two pages.
At the top right on the first page („GSM Reception“) the reception strength of the mobile telephone network is indicated.
In the middle of this first page the last SMS received by the stove is displayed with date and time.
To reach the second page of the information you must press the lower middle key if you are on the first GSM info page (the second info page „GSM Transmission“ then appears)
On this second page the last SMS transmitted (SMS from stove to the mobile phone of the operator) is displayed with date and time.

6.6 Description – Key Lock (child safety device)



In the information page 1 a key lock can be activated.
Activation of the key lock:

- Keep the Menu key depressed and press the lower middle key (Down) 6 times until „Key lock activated“ appears on the display.

Deactivation of the key lock:

- Keep the Menu key depressed and press the lower middle key (Down) 6 times until „Key lock activated“ no longer appears on the display.

7. Operation of the pellet stove

The pellet stove may only be heated by adults. Ensure that children are never left unsupervised near the pellet stove (do not leave the pellet stove unsupervised for longer periods). The pellet stove may only be utilized in accordance with these operating instructions.

Please observe the safety notices shown in chapter 2.

7.1. Fuel

The pellet stove may only be operated with the fuel „Pellet“. With this fuel, you have decided in favor for the CO_2-neutral heating of your home.

Pellets are manufactured from waste wood from sawing and planing works as well as from brash from forestry operations. These raw materials are also of 100% natural origin and are pulverized, dried and compressed without the addition of bonding agents to form the „Pellet“ fuel. This fuel is standardized (e.g. DIN 51731, ÖNorm M 7135).

Important: Your HAAS+SOHN ECO-Pellet Stove may only be operated with standardized wood pellets with **6 mm Diameter**.

One can optically detect good quality wood pellets by: smooth, shiny surface, constant length, little dust. Poor quality wood pellets are distinguished by: lengthwise and lateral cracks, high dust

content, different lengths. Precise quality features can however only be determined with suitable technical analysis equipment.
A simple quality test: Put a few pellets in a glass of water:
Good quality: Pellets sink
Poor quality: Pellets float.

The use of poor quality or impermissible fuel impairs the function of your pellet stove and in addition can lead to the expiry of the guarantee and the thereby associated product liability. Impermissible fuels are e.g. also chippings, straw or maize. The burning of wood pellets of poor quality leads to the cleaning intervals becoming shorter and more fuel being consumed, as a result however the pellet tank must also be filled more frequently.

Wood pellets are packed in plastic- or paper sacks. To ensure trouble-free burning of the wood pellets it is necessary to transport and store the fuel as dry as possible and free of dirt. When in contact with moisture, the pellets swell up greatly.

Take care when filling wood pellets in the storage container that the pellet sacks do not come into contact with the hot surfaces of the stove.

Two kilograms of wood pellets have about the same energy content as one liter of „Heating Oil Extra Light“. Observed 3-dimensionally, 3 m^3 of wood pellets corresponds to approx. 1,000 liters of heating oil. Different heating outputs of the pellet stove are not only caused by the quality of the pellets, but also by the raw material wood (type of wood).

7.2. First commissioning of your pellet stove

The materials of the pellet stove must slowly get used to the development of heat. Through careful heating you avoid cracks in the furnace plates, enamel damage and material distortion. Therefore do not set the target temperature on the control unit too high (about 1.5°C to 2°C higher than the momentary room temperature).

- Before the first commissioning, possibly existing stickers are to be removed as well as all accessory parts withdrawn from the ash tray, respectively the furnace, this also applies to possibly existing transport safety devices.
- Please check, whether the furnace lining is engaged in its anchoring (this could have slipped out of its position through transport or during the installation of the stove).
- Check whether the burner pot is fitting perfectly in its mounting.
- Close the furnace door.
- Fill the storage container with standardized pellets (Ø 6 mm).
- Plug in mains cable
- Set the On/Off toggle switch to „1“.
- After the toggle switch is set to ON, the controller begins with the initialization. This procedure takes a few seconds.
- After the initialization, the information page appears – press right key (menu) – set cursor to operating mode – press right key (select) – select the required mode of operation with the cursor – press right key (Save)
- Stove starts with the burner test – duration approx. 2 minutes – measurement of the burner soiling.
- After the burner test, the start phase begins.

Tip!!
For the first commissioning, place approx. 30 pellets on the burner. This accelerates the starting operation.

General:
If the start phase could not be successfully concluded, i.e. no development of flames or the required temperature on the temperature sensor not reached, than a safety shutdown is initiated and an error message tripped („Start phase waste-gas target temp. not reached – check burner – Date and Time“).

Remedying the fault:
After the stove has cooled down, the burner is to be emptied and if necessary cleaned. Caution! There may still be glowing cinders in the ash! Then press the left key on the control unit continuously until the fault message appears – then press the right key of the control unit (Ack.) – the information page now appears – press right key (menu) – set cursor to operating mode and press right key (select) – that page appears in which the operating mode can be selected – select required operating mode with the cursor and press right key (Save) – the stove begins with the burner test (duration approx. 2 minutes) and then the start phase is initiated.

Note: A possible smell developing due to the burning-in of the protective enameling disappears after a short time. Please ventilate the installation room well. The enameling does not however contain any toxic vapors.

7.3. Selection of operating mode

The controller enables a simple selection of the modes „Heating“ and „Auto“ (weekly program).

7.3.1 *Mode „Heating“*

The keys on the control unit are described in chapter 6.
In this mode, the operator can set the required target room temperature (between 10°C and 30°C) using the four control keys on the control unit.

In each case, the stove warms the room to the required target room temperature and on reaching this and running through the cooling program, switches to the operating state „Standby“.

While the stove is operated in this mode, the room is heated again and again to the set target room temperature, day and night, i.e. during this mode, with regard to the required room temperature no differentiation is made between day and night or other periods.

7.3.2 Setting the target room temperature in mode „Heating“

Continue to press the left key until the information page appears.
Then press the lower middle key
Now the programming window is opened, in which the required target room temperature is set.
The explanation of the keys or their functions is indicated in the bottom row in this programming window.
With the middle up key, the required target room temperature is increased in „1°C steps“. With the middle down key, the required target room temperature is decreased in „1°C steps“.
With the left key, the programming window is closed, without a new target room temperature being saved.
With the right key, this programming window is closed and the new input target room temperature is saved.

7.3.3 Mode „Auto“ (Weekly program)

In this mode the operator can freely select three ON- and OFF times per day (per 24 hours) for each of the seven weekdays, in each case with the associated target room temperatures (between 10°C and 30°C) required by the operator.

7.3.3.1 Setting date and time

Before operation with the weekly program, the date and time is to be set.
Method:

- Continue to press the left key until the information page appears
- In the information page, press the right key (menu)
- The main menu now appears
- In the main menu, with the two middle keys position the cursor on Date / Time
- Press right key (select)
- Now the programming window for date and time appears
- In the programming window, press the right key (change)
- Now the programming is activated – with the right key (arrow) select the field to be changed
- With the two middle keys (+ / -) perform the change
- Run through the programming window with the right key (arrow) until the function „Save“ appears in the bottom text row
- Press right key (Save) – the change is saved
- Press left key (back) – main menu appears

7.3.3.2 Mode „Auto“ (Weekly program)

With this mode, the programming must be performed for each weekday.
The stove heats the room to the respective required target room temperature and on reaching this and running through the cooling program, switches to the operating state „Standby“
This mode enables an adaptation of the target room temperature to the personal heating requirement.

7.3.3.3 Setting the target room temperature in mode „Auto“ (weekly program)

Continue to press the left key until the information page appears.
Then press the lower middle key.
Now the programming window is opened, in which the weekdays can be selected.
With the two middle keys, the weekday can be selected in the second row with the cursor (the selected day is that one which is underlined with the cursor).
After successful selection with the cursor, press the right key (change)
Now the programming window for the selected day appears
In the first column are the position numbers 1, 2 and 3

- In the second column the switch-ON times (identified with the letter E) are programmed with the two middle keys in 15 minute steps.
- With the right key (arrow), one can switch columns from left to right.
- In the third column the switch-OFF times (identified with the letter A) are programmed with the two middle keys in 15 minute steps.
- In the fourth column, that period which lies between the respective ON- and OFF time is assigned the required target room temperature.
- After the complete programming of the weekday, by pressing the left key (Back), the programming window for this weekday can be saved and exited.
- The other days must also be programmed in the same manner.

7.3.3.4 Programming example for the weekday „Monday“

- Continue to press the left key until the information page appears.
- Then press the lower middle key.
- Now that page appears, in which the weekdays can be selected.
- With the two middle keys, move the cursor so that the field Mo (Mo – means Monday) is underlined with the cursor.
- Then press the right key (change).
- Now the programming window for the weekday „Monday“ opens.
- In the first column are the position numbers 1, 2 and 3
- In the second column the switch-ON times (identified with the letter E) are programmed with the two middle keys in 15-minute steps.
- With the right key (arrow), one can switch columns from left to right.
- In the third column the switch-OFF times (identified with the letter A) are programmed with the two middle keys in 15-minute steps.
- In the fourth column, that period which lies between the respective ON- and OFF time is assigned the required target room temperature.
- After the complete programming of the weekday, by pressing the left key (Back), the programming window for this weekday can be saved and exited.

8. Cleaning and maintenance work

Due to the accumulation of ash resulting from the burning of wood pellets, constant recurring cleaning- and maintenance work is to be carried out. With this as trouble-free an operation as possible is effected.

As soon as you detect ash- and slag deposits in the cold burner pot, this must be cleaned. **See operating instructions!** If this is not done, the slag will develop more and more. As a result, the device can no longer ignite correctly. Pellets can stack up in the burner pot. In extreme cases, this can then extend back into the pellet chute. One possible consequence would be a fire burning back into the pellet container and a smoldering fire in the pellet tank.

We therefore recommend to also inspect and clean the cleaning opening below (see Pic. 10a+c) at the latest after 1000 kg of pellets.

Attention!

Devices that are not serviced in accordance with our instructions may not be operated. With non-observance all warranty claims expire.

This destroys your device and is not covered by the warranty.

Attention!

Before beginning cleaning work, the stove must have cooled down, the ON/OFF-toggle switch must be in the position "0" as well as the mains cable unplugged!

On completion of the cleaning work, the proper operating condition of the device must be restored: Insert burner pot correctly, close furnace door.

8.1 Cleaning the top surface

Dirt on the top surface of the stove can be cleaned with water or if necessary with a mild soap solution. You are advised against using aggressive cleaning agents or solvents, since these can lead to damage to the top surface.

8.2 Cleaning the glass panel

To clean the inspection panel, first the furnace door must be opened. Impurities on the glass panel can be removed with a glass cleaner or with a moist sponge, on which you put available wood ash (environmentally friendly).

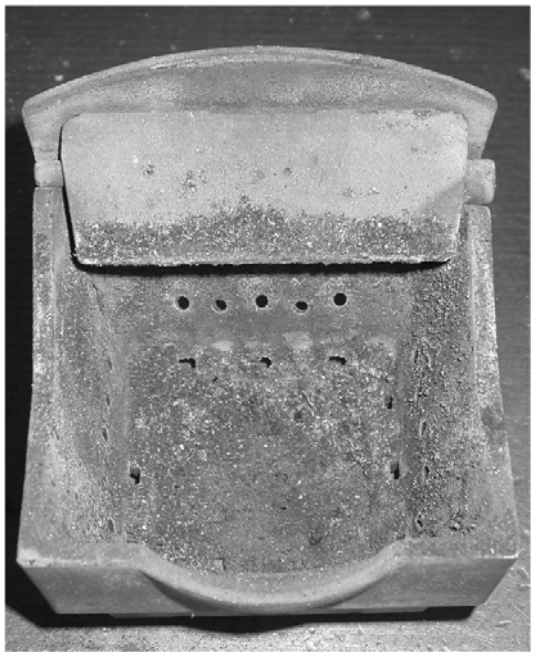
The cleaning of the glass panel may only be carried out with the stove cooled down and in the operating state OFF.

8.3 Cleaning the burner pot

During operation, deposits can form in the burner pot. How fast the burner pot becomes soiled is dependent solely on the quality of the fuel. The deposits or incrustations must be removed from time to time.

The cleaning of the burner pot may only be performed with the stove cooled down and in the operating state „OFF“, otherwise the danger of burning exists!
For this, the burner pot must be removed from the stove and the burner wedge withdrawn. After removing the burner pot, possible ash residues in the stove below the burner pot can also be removed.
After cleaning, the burner pot is to be replaced in the burner seating in the correct position and the burner wedge reinserted in the burner pot. Check again the correct seating of the burner pot in order to avoid leaks.
The LED-display, which is located below right on the front panel, also provides assistance with regard to the cleaning interval. The following indication possibilities exist:
LED-display lights up green – Burner is clean.
LED-display lights up yellow – Burner is slightly soiled and should be cleaned.
LED-display lights up red – Burner is so greatly soiled that a safety shutdown will be initiated.

Attention!!!
This LED-display is only used for better visualization of the burner soiling and as assistance for the operator (similar to the lamp for oil level in a car).
A visual inspection by the operator with regard to the soiling of the burner and the soiling of the furnace through ash and burned waste must nevertheless be carried out at regular intervals, depending on the quality of fuel!!!



Picture 6: Burner pot dirty

Picture 7: Burner pot clean

The cleaning intervals for the burner pot and the glass panel are directly related to the quality of the wood pellets and can range from a few hours of burning up to several days.

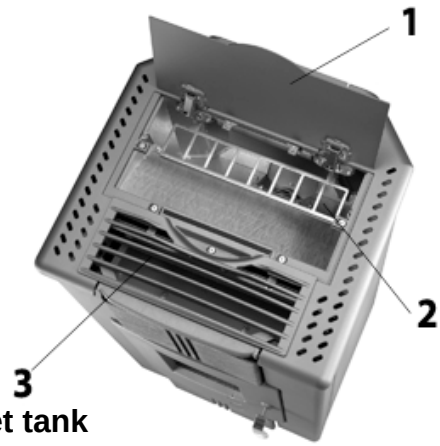
8.4 Removing ash from the furnace

To thoroughly clean the ash from the burner pot and the furnace, the pellet stove must be in a cooled-down state and in the operating mode OFF.
Method:
Press the left key on the control unit repeatedly until the information page appears – then press right key (menu) – with the two middle keys, set the cursor to operating modes – press right key (select) – with the two middle keys, set the cursor to OFF – press right key (Save) – stove begins to cool down.
After the stove has cooled down completely, the cleaning work can begin.
Attention!!
The cooling program of the stove is completed after approx. 10 minutes, however the stove may still be hot after the cooling phase has finished.
Only start to clean the stove when it has cooled down completely!!

To empty the ash tray, withdraw it forwards with the handle.
The frequency of ash emptying is directly related to the quality of the wood pellets used.

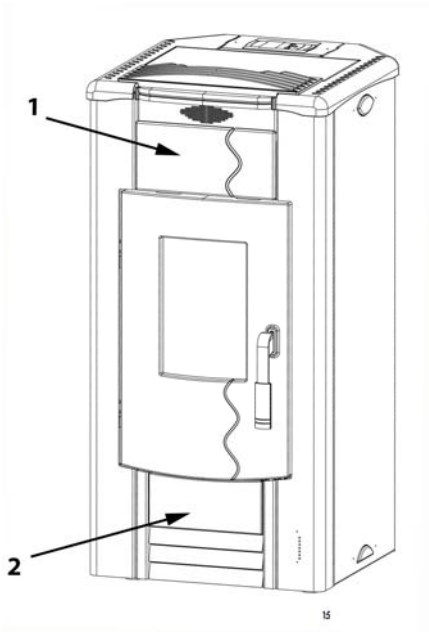
8.5 Cleaning the pellet tank

Heat the pellet stove until the storage tank has been completely emptied. After that, the protective grating in the pellet tank can be removed. Then clean the tank and the entrance of the screw conveyor casing with a vacuum cleaner. After cleaning, the protective grating must definitely be refitted. To prevent subsequent damage to the screw conveyor, ensure thereby that no screws fall into the pellet tank.



Picture 8: Pellet tank
1 = Pellet tank cover
2 = Protective grating
3 = Convection air grating

8.6 Cleaning the flue-gas draughts and the smoke pipes

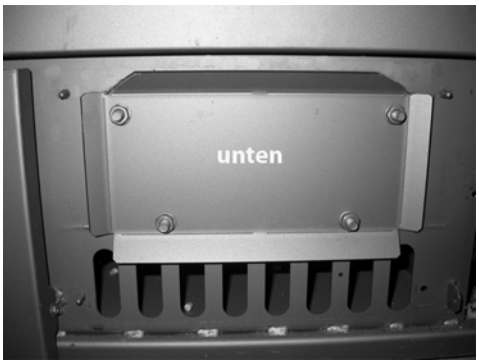


Picture 9a: Disassembling

Normally it is sufficient for the flue-gas draughts and the smoke pipes to be cleaned once per year. First pull the stove away from the wall, so that there is adequate room provided at the back to work.

To clean the waste-gas flues, proceed as follows: Remove the top frame. This is secured with 4 screws. Then remove the top panel by loosening the four wing nuts. In addition also the bottom panel. This is only placed on and is removed by pulling it off (see Pic. 9a). Behind the top and bottom panels are the cleaning openings for the flue-gas draughts. Loosen the nuts and remove the two covers of the openings. Now you can clean the exposed interiors and the side smoke-pipe flues (see Picture 9b+c).

After cleaning is completed, ensure that with the assembly of the covers, the seals sit on the right places. Defective seals are definitely to be replaced.

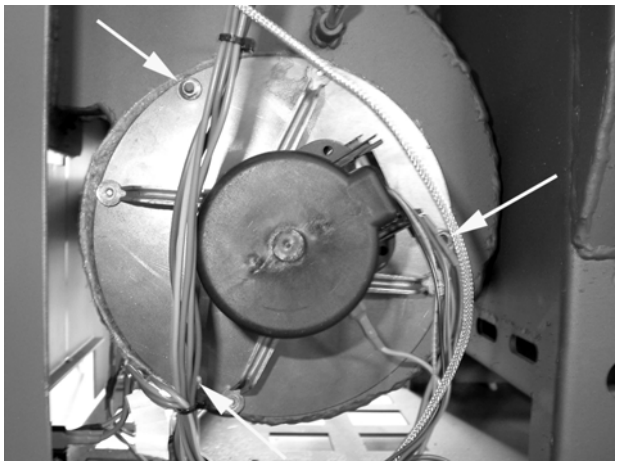


Picture 9 b+c: Cleaning covers above/below

8.7 Cleaning the flue-gas housing and ventilator

This housing is made accessible for cleaning by removing the 3 nuts shown in Picture 10 (see arrows).
Dismantle the flue-gas blower motor by levering it off. Now clean the flue-gas draughts, the flue-gas ventilator and the smoke pipes with a sweeping brush and an ash sucker.
Then reassemble the components in the reverse order. Ensure that the seal again sits in the right place. Defective seals are definitely to be replaced.

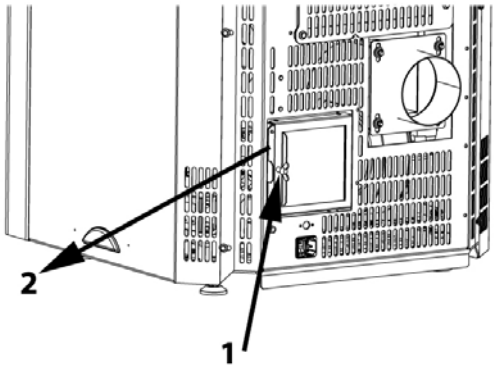
Pay attention to the electrical connections on the blower motor and their correct seating.



Picture 10: Waste-gas ventilator

8.8 Cleaning the air filter

For the combustion, air is required which is drawn in and controlled over the air filter housing and the air volume sensor located behind it respectively.
To prevent soiling of the air volume sensor an air filter has been installed. This should be inspected and cleaned at intervals of 6-8 weeks. By loosening the wing nut (1) the filter (2) can be easily withdrawn and cleaned comfortably. Operation without air filter is not permitted and can lead to fault signals of the air volume sensor.



Picture 11: Air filter

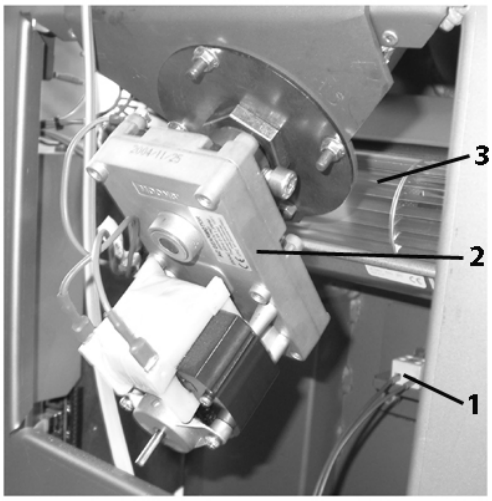
9. Description of the components

9.1 Storage container (Pellet tank)

In the storage container, up to 30 kg of wood pellets can be stored. This quantity enables a continuous operation of up to 50 hours.

9.2 Worm motor / Screw conveyor

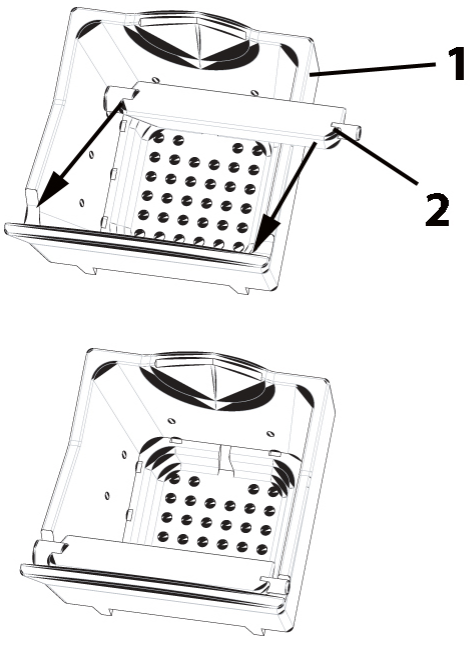
The worm motor drives the screw conveyor. As a result, the wood pellets are conveyed from the storage container into the furnace (burner pot). The worm motor is speed-controlled and thus adapts the necessary conveyed quantity to the modular heating output (2.5KW to 8KW).
In the event that the screw conveyor blocks due to foreign bodies in the wood pellets or excessive fine content, this can often be remedied by simply moving the work motor housing to and fro. A fault on the worm motor is detected by the controller and as a result the cooling phase is initiated



Picture 12: Worm motor
1 = Ignition
2 = Worm motor
3 = Convection air blower

9.3 Burner pot with burner wedge:

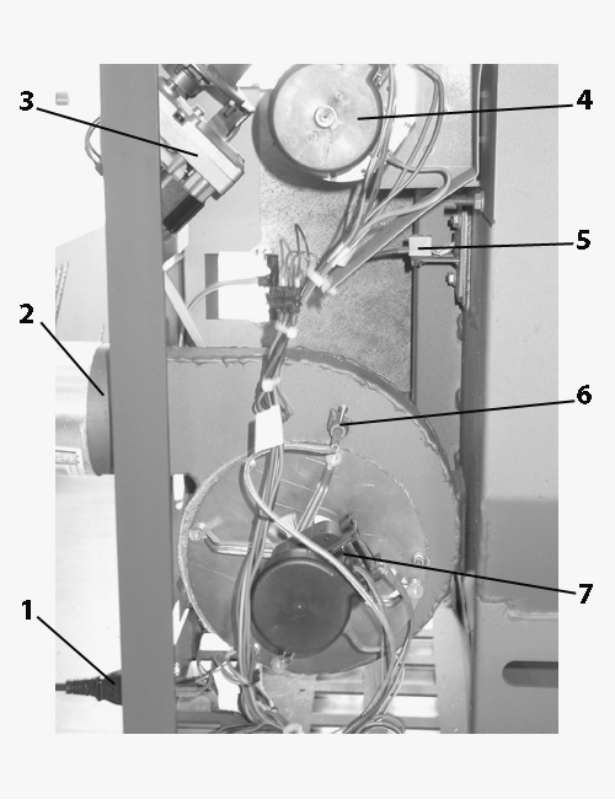
The burner pot is made from high-grade cast-iron. In this burner pot (1) the burner wedge (2) is inserted, which is also made from cast-iron. Due to the special design of the burner pot, a clean and extremely efficient burning of the wood pellets is guaranteed.



Picture 13: Burner pot and burner wedge

9.4 Electrical ignition

The integrated electrical ignition consists of a ceramic igniter (see Pictures 12 + 29,30) and generates the ignition temperature necessary to kindle the wood pellets. The duration in which the ignition is activated is dependent on how fast the waste-gas temperature necessary is reached, in order to be able to switch over from the start phase to the heating operation. The average glow time of the ignition is 10 to 12 minutes (is dependent on the wood pellet quality). The start phase is limited with a maximum time of 20 minutes and consequently the maximum glow time of the ignition is also limited with 20 minutes. Depending on the quality of the fuel, the development of flames should take place between 3 minutes and 7 minutes.



Picture 14:
1 = Mains connection
2 = Flue-gas connection piece
3 = Worm motor
4 = Convection air blower with rotational speed feedback
5 = Ignition
6 = Temperature sensor for waste-gas with rotational speed feedback
7 = Induced air blower

9.5 Ash tray

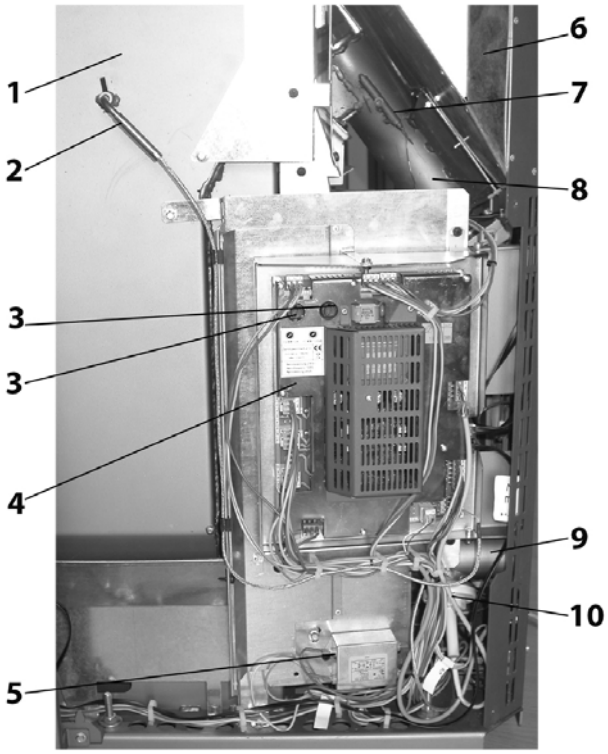
The ash tray is designed generously and enables emptying intervals of up to several days.

9.6 Convection air blower with rotational speed feedback

The convection air blower ensures for a faster heating in the living room.
This switches on automatically from a predefined waste-gas temperature. The speed of the convection air blower is adapted modular to the heating output of the stove, i.e. great heating output (e.g. 8kW) = high speed and small heating output (e.g. 2.5 kW) = low speed of the convection air blower.
Through the rotational speed feedback, a possible deviation between the target- and actual operating state can be detected and corrected accordingly, or with greater deviations the stove is shut down (Safety shutdown).

9.7 Controller

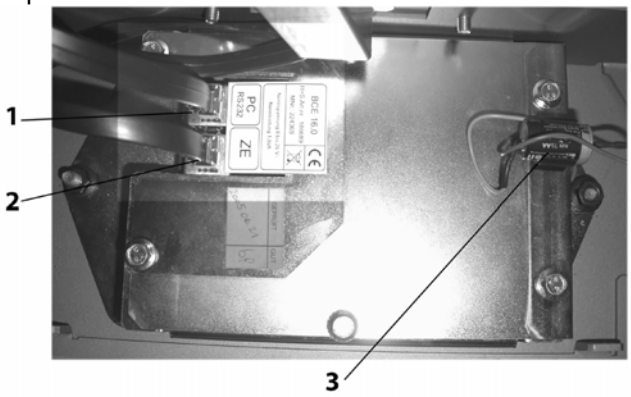
The microprocessor controller ensures the safe and automatic operation of the pellet stove. The controller regulates the interplay between the components, such as e.g. air volume sensor, induced draught blower, flame-temperature sensor, room temperature sensor etc.
The electrical fuses of the pellet stove are integrated in the controller.
To exchange these fuses, the right side panel must be removed.



Picture 15:
1. Heat exchanger
2. Temperature sensor furnace
3. Fuses
4. Controller
5. Mains filter
6. Pellet tank
7. Sensor STB
8. Worm tube
9. Air intake connection piece
10. Air volume sensor

9.8 Control unit

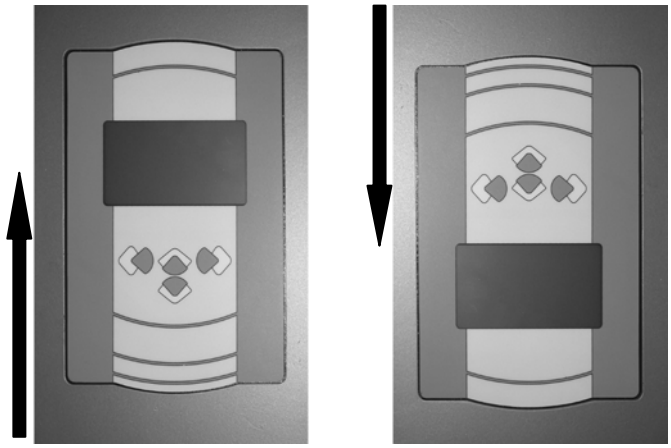
The control unit is integrated at the rear of the pellet tank in such a way, that the display with the four function keys can be easily accessed. Thereby, the possibility also exists of turning the control unit through 180° in order to enable you access from the left or right. However, this should be carried out by a professional.



Picture 16: Control unit below
1 = Connection Service/Modem
2 = Connection central unit
3 = Buffer battery

At this control unit, all parameters necessary for the function of the stove can be set.
The access to these parameters is divided into two levels.
The first level is intended for the user of the stove.
The second level is intended for the customer service and can only be accessed by inputting a special access code.
Description of the first level – the one for the user:
The user can perform the following settings on the control unit or obtain the following information on the display:

- Start the device or set it out of operation
- Set the required target room temperature (during the „Heating“ mode).
- Select between the operating modes „Heating“ and „Auto“
- Program a weekly program in the „Auto“ mode with the required target room temperature and associated On and OFF times
- Read off the respective mode of operation and the respective operating state in which the device is presently in as well as date and time
- Read off every fault message that is represented as text and number
- Perform the language selection for the menu on the control unit.



Picture 17: Control unit access left or right

9.8.1 Background lighting

The background lighting of the display is switched off 5 minutes after the last operation of the control unit.

9.8.2 Activation of the background lighting

The background lighting is activated by pressing any optional key. The functions keys are only active after the background lighting is activated.
The background lighting is also activated through a tripped fault message or by the transmission or reception of an SMS (with the option GSM – Module).

9.9 Induced draught blower with rotational speed feedback

The induced draught blower generates a vacuum in the furnace and thus conveys the volume of air necessary for the combustion into the furnace or through the burner pot respectively.
The induced draught blower has a rotational speed feedback. As a result, a possible deviation between the target and actual operating state can be detected and corrected accordingly or with greater deviations the pellet stove is shut down (Safety shutdown).

9.10 Flame- or furnace temperature sensor (Temperature sensor Furnace)

During the „Heating“ mode, the flame temperature is measured.
The temperature measured is an indicator for the energy content in the burner pot and thus the basis for that volume of air which is necessary for the combustion of the energy content in the burner pot.
Thereby, in combination with the process-controlled controller, the ACTUAL flame temperature is compared with the TARGET flame temperature and the necessary volume of combustion air for the combustion of the energy content which is in the burner pot is drawn in by means of the induced draught blower.

9.11 Air volume sensor – flow measuring transducer

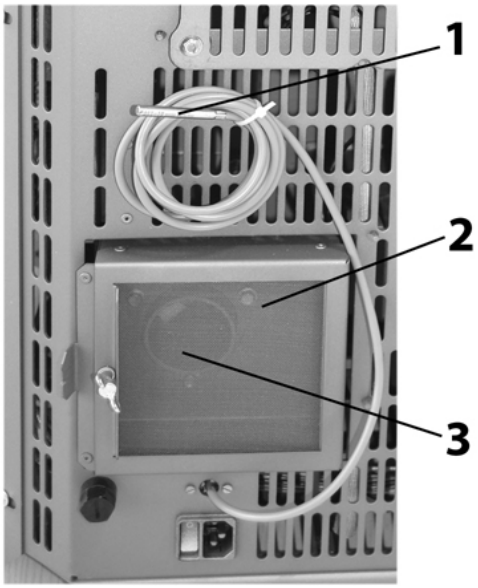
The air volume sensor is integrated in the intake pipe, through which the combustion air is induced. The air volume sensor measures the actual flow speed in the intake pipe.
The speed of the induced air blower is dependent on the volume of air measured by the air volume sensor (respectively flow speed).
If the defined target air volume (or target flow speed), could not be reached for any reason whatever, (e.g. particles of dust in the intake pipe), then this condition triggers an error message. (In the controller, a permanent TARGET/ACTUAL – comparison is performed – if the deviation is too great, then an error message is tripped).

9.12 Temperature sensor Waste-Gas

The waste-gas temperature sensor is positioned on the housing of the induced air blower and protrudes, cross-wise to the direction of flow of the waste gas, into the waste-gas duct, is surrounded directly by the waste gas and thus measures its temperature and temperature characteristic (see Picture 12).
With the temperature sensor the temperature and its characteristic can be measured directly (accurate to approx. 2°C) in the waste gas and as a result utilized for the control and regulation.

9.13 Room temperature sensor

The room temperature sensor measures the ACTUAL room temperature in the area of the stove.
The room temperature sensor is an instrument for the TARGET – ACTUAL comparison between TARGET and ACTUAL room temperature und is thus the basis for the specification of the required heating output for the stove.



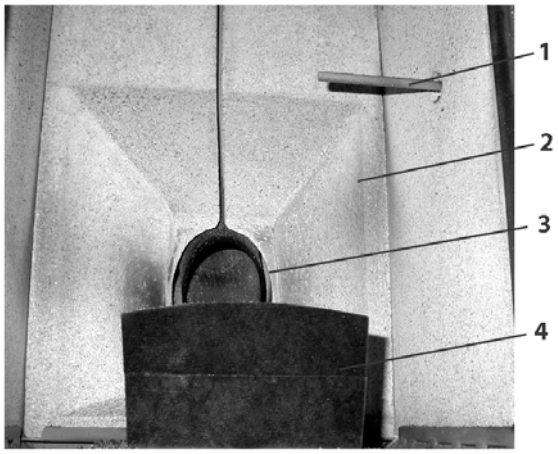
Picture 18:
1 = Room temperature sensor
2 = Air volume sensor
3 = STB

9.14 STB – Safety Temperature Limiter

The sensor of the safety temperature limiter is positioned on the worm tube. On reaching a certain temperature, the STB trips independent of the controller and disconnects the stove from the power supply. (heat protection)

9.15 Furnace lining

The furnace is lined at the three surface areas, left side wall, right side wall and back wall with composite material.

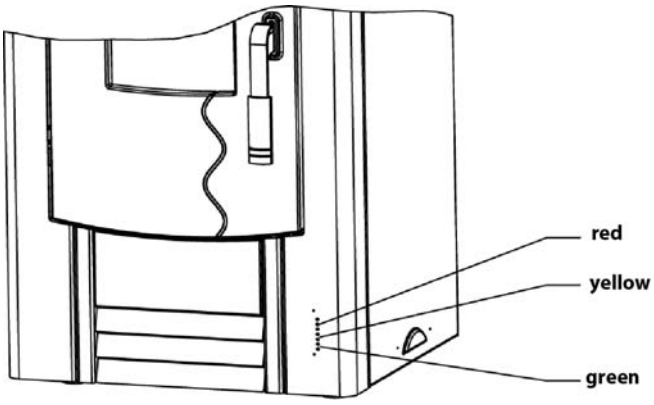


Picture 19 : Furnace
1 = Flame or furnace temperature sensor
2 = Furnace lining
3 = Pellet down-pipe
4 = Burner pot

9.16 Optical visualization of the burner soiling by means of three different-colored light-emitting diodes – similar to a "traffic light control"

The degree of soiling of the burner pot is measured before every ignition operation and also during the operation at regular intervals.
The optical visualization of the soiling in the burner pot takes place by means of LED's, that are positioned near the front panel of the stove and have the colors green, yellow an red (similar to a "traffic light control").
Depending on the degree of soiling determined, either the green, yellow or red LED lights up.

The lighting up of the green LED means:
If the green LED lights up, then that means, that the burner pot is clean and without impurities and the combustion in the burner pot can and is supplied with sufficient combustion air. The stove can continue its operation without restrictions.
The lighting up of the yellow LED means:
If the yellow LED lights up, then that means, that the burner pot is slightly soiled. The lighting up of the yellow LED is an optical request to the user to clean the burner pot.
The lighting up of the red LED means:
If the stove is heated further by the user while the yellow LED is lit and the burner pot is not cleaned, then the soiling of the burner pot will progress further. In further succession, the required volume of air will no longer be able to flow through the burner pot, which has the consequence that the stove will be set out of operation by means of a safety shutdown and the red LED will indicate the fault.



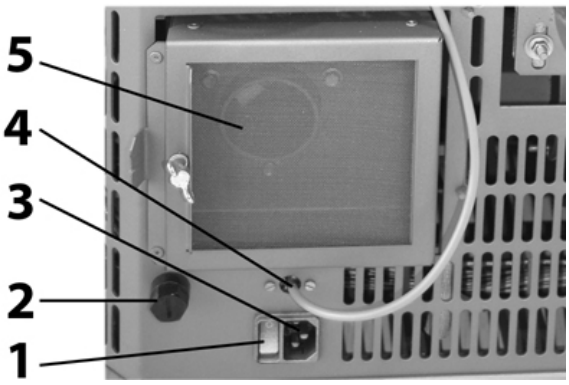
Picture 20: LEDs

9.17 Smoke pipe connection

The diameter of the smoke pipe connection piece is 100mm. The smoke pipe must be connected to the chimney in conformity with official guidelines. For queries in this regard, please contact your local chimney sweep. Due to the functioning method of the pellet stove with combustion air blower, overpressure develops at the flue-gas outlet and possibly in the chimney. That means, that the flue-gas lines must be designed gas-tight up to the entry into the chimney.

9.18 Mains cable and main switch

Important! The power supply to the pellet stove must be available at all times! There must be no timers or other electrical switches used in or before the stove. Otherwise your pellet stove can suffer damage. The main switch for your pellet stove is located next to the mains cable connection.



Picture 21:
1. ***Main switch***
2. ***STB (safety temperature limiter)***
3. ***Mains cable connection***
4. ***Room temperature sensor (output)***
5. ***Air filter***

10. Options

A remote control by means of GSM module can be used as optional accessory.
The future-orientated module (as accessory) using mobile phone requires only one second SIM-card. A fixed line connection is not necessary for this.

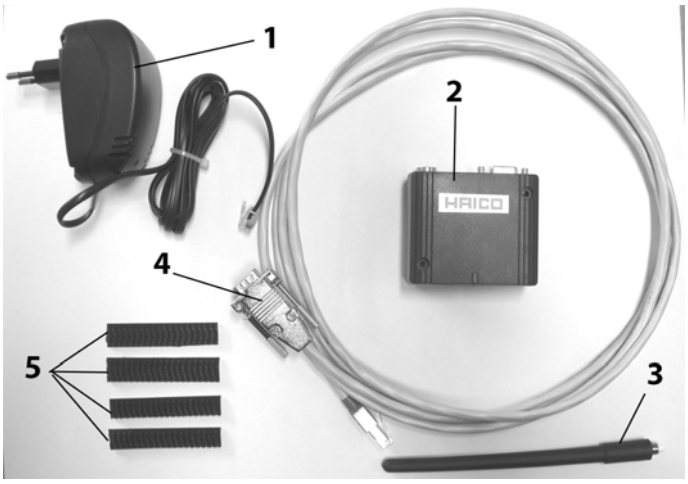
With that you have the possibility of

- Interrogating the operating states,
- Reading off fault messages,
- Changing the operating states e.g. switching ON and OFF,
- Adjusting the room temperature and
- Interrogating the ACTUAL room temperature via SMS.

If a fault should occur, the GSM module of the pellet stove automatically transmits an SMS with the error message to the user's mobile phone.

The remote control via SMS is so secured, that an unintended faulty switching by a third-party mobile phone is impossible, since the remote control is only possible with the user's mobile phone.

10.1 Parts list



Picture 22: Parts list GSM Module

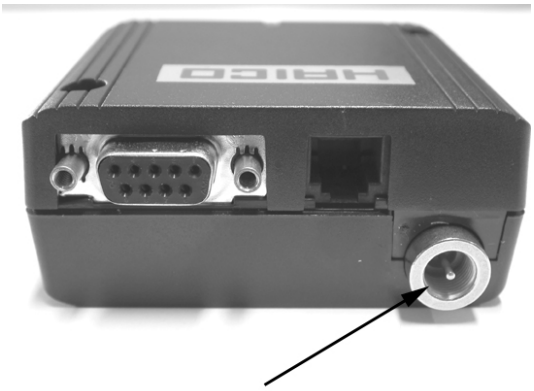
1. Plug-in power unit
2. GSM Terminal TC35
3. Antenna
4. Data cable module pellet stove
5. Velcro fasteners

10.2 Assembly instructions GSM Module

10.2.1 Assembly of the antenna

To ensure perfect radio reception, the position of the antenna should be checked with a mobile phone before the antenna assembly (same network operator as with GSM-transmit module).

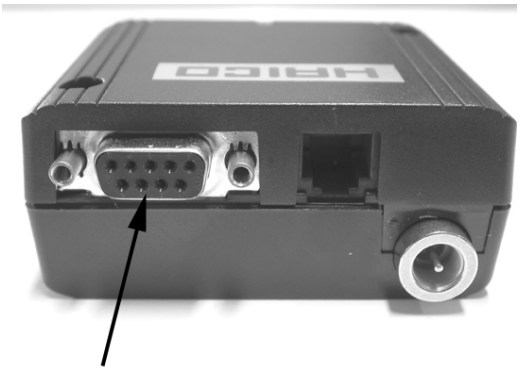
The antenna must be screwed onto the connection provided.



Picture 23: Antenna connection

10.2.2 Connection

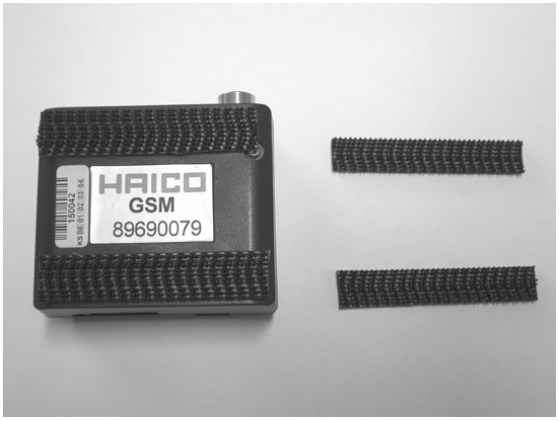
The transmission of data from the controller to the GSM-transmit module takes place over the connection cable (4). Connect the data cable (4) to the GSM Terminal and to the back of the pellet stove (see Pic. 1).



Picture 24: Data cable connection

10.2.3 Assembly of the module

In order to fit the module (2) e.g. on the pellet stove, the self-adhesive Velcro fasteners (5) must be stuck to the back of the module and to the respective surface.



Picture 25: Assembly GSM Module

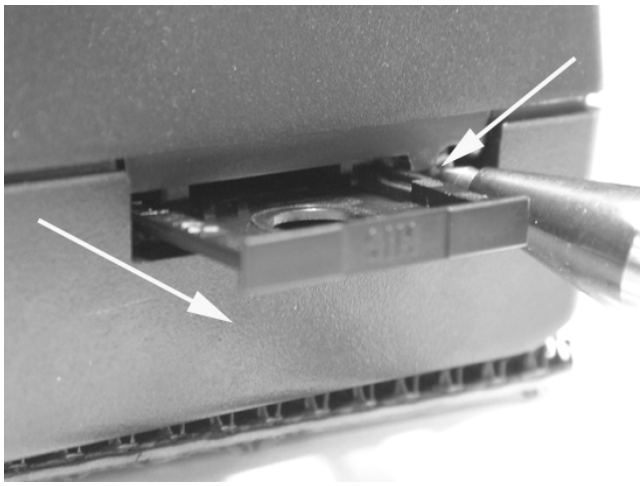
10.3 GSM Module Setup

10.3.1 Preparing the SIM card for operation with the GSM module

Before inserting the SIM-card, the security code for the SIM-card (PIN-code request) must definitely be deactivated!!
This takes place by operating the SIM-card in another mobile phone. All security functions must be deactivated i.e. no security inquiry may appear when the mobile phone is switched on. Only then can the SIM-card be used in the GSM-module.

10.3.2 Inserting the SIM card in the GSM module

If one pushes in the yellow button on the module with a pointed object, the SIM-card holder jumps out of the module. Withdraw the holder, insert the SIM-card and reinsert the holder into the opening on the module.



Picture 26: Inserting SIM-card

10.3.3 Connecting plug-in power unit with GSM module

The connector of the plug-in power unit is to be connected to the connection provided on the GSM-module.

Picture 27: Connection of plug-in power unit

After the plug-in power unit has been connected to the power network, the lamp on the plug-in power unit must light up.
The GSM module begins to search for a mobile radio network. This is signaled by constant flashing of the LED on the GSM-module in a 2 sec. cycle. If a network has been found and the module has registered, then the LED only flashes briefly every 4 sec.

10.3.4 Starting the pellet stove via mobile phone

Overview of the GSM commands (whether the individual characters are input in upper- or lower case is irrelevant):

- *** telnew06761234567#

Set operator telephone number to 06761234567.

- DE: :***baaus
- ENG: ***baoff
- FRA:. ***baarret
- ITA: ***baoff

Set boiler operating mode to OFF.

- DE: ***baheiz
- ENG: ***baheat
- FRA: ***bachauffe
- ITA: ***barisc

Set boiler operating mode to HEATING. It is regulated to the last target room temperature set in the controller.

- ***baheiz-rt25#

Set boiler operating mode to HEATING. Target room temperature is set to 25°C.

- ***baauto

Set boiler operating mode to AUTO. Heating according to the set timer program and respective target temperatures.

- ***¡

An information message is sent to the operator's mobile phone.

In addition all faults are sent to the operator's mobile phone number. These faults can be acknowledged with the command

- ***quit

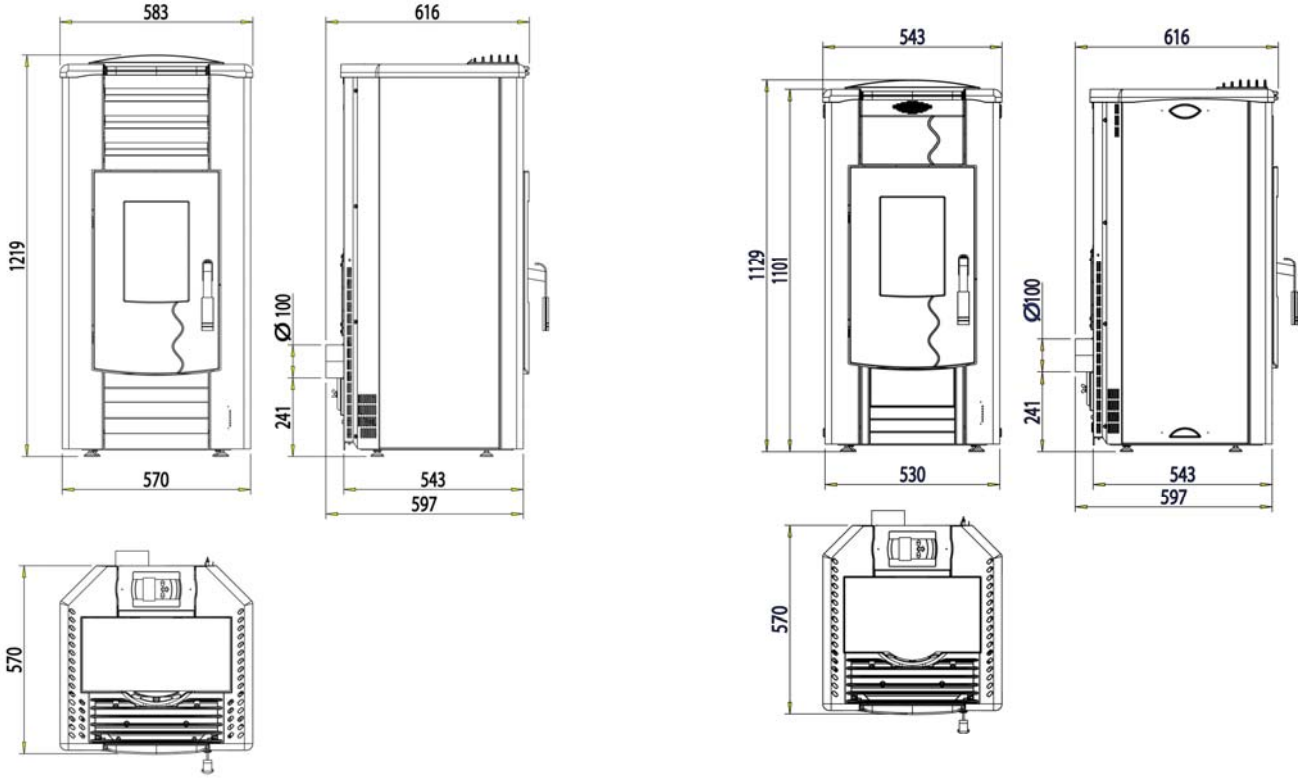
10.4 Technical Specifications of the GSM Module

Main connection voltage: 230VAC
Mains frequency: 50Hz
Housing dimensions TC35 Terminal: 65 x 74 x 33mm
Bus-interface: RS232 for the connection to a PC or Laptop

Radio network: Dual band EGSM900/GSM1800

11. Technical Specifications

	ECO Pellet 302.07C/ 302.08/302.08 ST	Compact Pellet 309.06/310.06* ECO Pellet 302.06 C
Heat output range:	2,9 – 9.3 kW	2,9 – 6,3 kW
Nominal heat output	9,0 kW	6,0 kW
Height:	1189 mm	1129 mm /995 mm
Width:	570 mm	530 mm
Depth:	584 mm	570 mm
Weight:	147/ 150 kg	160 / 147 /140 *kg
Diameter flue-gas connection piece:	100 mm	100 mm
Flue-gas temperature	160°C	160°C
Minimum feed pressure:	6/12 Pa	6/12 Pa
Waste gas mass flow in g/s	3,6/7,2	3,7/5,1
CO_2 – content waste gas (%) (min/max.)	4,5/9,6	3,8/8,8
Efficiency:	91,8/94,5%	91,5/94,5%
CO-content in the flue gas:	74/131 mg/MJ	75/131 mg/MJ
NO_x-content in the flue gas:	54 mg/MJ	54 mg/MJ
OGC-content in the flue gas:	6 mg/MJ	7 mg/MJ
Dust content in the flue gas:	11 mg/MJ	9 mg/MJ
Capacity storage container (Pellet tank):	30kg	20 kg/17 kg
Burning time with one filling (min./max.):	approx. 25 h / 50 h	ca. 14 h / 36 h /30 h*
Permissible fuel: Dust-free wood pellets acc. to ÖNorm M 7135 or DIN 51731	Diameter: 6 mm, Length: max. 30 mm	Diameter: 6 mm, Length: max. 30 mm
Room heating capacity acc. to ÖNorm M 7521:	max. 230 m^3	max. 230 m^3
Room heating capacity acc. to DIN 18893, continuous heating:	250m^3/145m^3/98m^3	170m^3/98m^3/67m^3
Room heating capacity acc. to DIN 18893, timed heating:	165m^3/95m^3/65m^3	108m^3/62m^3/42m^3
Power supply:	230 V (50 Hz)	230 V (50 Hz)
Electrical power consumption (min./max.) In normal operation: Electrical ignition (for max. 15 minutes with start):	 30 to 70 W 550 W	 30 bis 70 W 550 W
Protection of the electronics: (F2)	T 0.63 A, 250 V	T 0,63 A, 250 V
Protection of the ignition, the worm motor, induced draught, convection air blower (F4)	T 2 A, 250 V	T 2 A, 250 V



Picture 28: Dimensions

12. Faults, Causes, Remedy

You can remedy simple operational faults yourself with the following troubleshooting advice. For further information, contact your specialist retailer.

Caution! All devices are equipped with a multitude of safety installations. Should a fault occur this will be brought to your attention on the display.

In the event of a fault, do not pull the power plug so that the internal safety functions are always able to run their course. Pull the power plug only before working on the cold device.

12.1 Fault messages on the display

1. STB triggered, check burner (Fault number 1)

Cause:

- STB was triggered due to overheating
- Or fuse (F4) on the central unit is defective

Remedy:

- Replace fuse (F 4)
- If the STB was triggered, it is imperative to contact the service technician

2. Starting phase set temperature exhaust gas not reached (Error 2) Check burner

Cause:

- The transition temperature from the starting phase to heating mode was not reached.

Remedy:

- Check pellet supply (see Instruction 7.2)
- Check if the down pipe between burner and screw is unobstructed
- Contact service technician

3. Disconnection material correction (3) Check burner

Cause:

- The automatic fuel reduction triggered a safety shutdown

Remedy:

Contact service technician

4. Disconnection excess air (4) Check burner

Cause:

Safety shutdown, triggered through excessive air in the combustion.

Remedy:

Contact service technician

5. Burner dirty - clean burner (Error 25)

Cause:

The airflow measured during the burner test, which is carried out prior to the starting phase, was insufficient

This can be caused by the following:

- Burner is dirty
- Airflow sensor is dirty
- Intake filter dirty
- Vapour extraction hood in the vicinity and in operation
- Room too tight - required combustion air is unable to flow into the room
- Leaks on the pellet oven (door, seals)
- Backpressure in chimney

Remedy:

- Clean burner, intake filter and airflow sensor
- Check to see if a vapour extraction hood is in the vicinity and switched on
- Ensure the supply of required combustion air, e.g. slightly open the window
- Check chimney is not obstructed
- Contact service technician

6. Disconnection exhaust temperature heating mode (5)

Cause:

- Exhaust temperature starts dropping severely for an extended period despite maximum heating output

This can be caused by the following:

- No pellets available
- The screw fails to turn, is jammed, the screw motor is defective or the down pipe is obstructed
- The required combustion air cannot be supplied to the oven, e.g. a vapour extraction hood in the vicinity of the place of installation is switched on.
- Airflow sensor dirty or defective
- Burner dirty
- Intake filter dirty
- Room too tight - required combustion air is unable to flow into the room
- Leaks on the pellet oven (door, seals)
- Flame temperature sensor defective
- Exhaust temperature sensor defective

Remedy:

- Check pellet supply
- Check if the down pipe between pellet tank and burner is unobstructed.
- Clean burner, intake filter and airflow sensor

- Check if there is a vapour extraction hood in operation
- Ensure the supply of necessary combustion air e.g. slightly open the window
- Contact service technician

7. Disconnection exhaust temperature in heating mode insufficient (21)

Cause:

- The operating temperature in heating mode was below minimum temperature

This can be caused by the following:

- No pellets available
- The screw fails to turn, is jammed, the screw motor is defective or the down pipe is obstructed
- The required combustion air cannot be supplied to the oven, e.g. through a vapour extraction hood that is switched on in the vicinity of the place of installation.
- Room too tight - required combustion air is unable to flow into the room
- Airflow sensor dirty or defective
- Intake filter dirty
- Burner dirty
- Leaks on pellet oven (door, seals)
- Flame temperature sensor defective
- Exhaust temperature sensor defective

Remedy:
:

- Check pellet supply
- Check if the down pipe between pellet tank and burner is unobstructed.
- Clean burner, intake filter and airflow sensor
- Check if there is a vapour extraction hood in operation
- Ensure the supply of necessary combustion air e.g. slightly open the window
- Contact service technician

8. Disconnection exhaust temperature in heating mode too high (22)

Cause:

- The maximum permissible exhaust temperature was exceeded

This can be caused by the following:

- Too much fuel is fed into the burner
- Exhaust temperature sensor defective

Remedy:

- Contact service technician

9. Disconnection, combustion chamber door open (6) or (9)

Cause:

- Door is opened for longer than 1 minute during the operation
- The adjusting plate at the bottom of the door is not in the correct position
-
- Electric cable to door contact switch broken
- The connector on the door contact switch or on the central unit has become loose

Remedy:

- Close door
- Put the adjusting plate at the bottom of the door in the correct position so that the switch is actuated with the door closed
- Check door contact switch, cable and connector

10.Exhaust sensor interruption (7)

Cause:

- Exhaust temperature sensor defective or not connected

Remedy:
Contact service technician

11.Exhaust sensor short circuit (8)

Cause:
Exhaust temperature sensor defective

Remedy:
Contact service technician

12.Room temperature sensor interruption (11)

Cause:
Room temperature sensor defective or not connected

Remedy:
Contact service technician

13.Room temperature sensor short circuit (12)

Cause:
Room temperature sensor defective

Remedy:
Contact service technician

14.Airflow sensor interruption (14)

Cause:
Airflow sensor defective or not connected

Remedy:
Contact service technician

15.Airflow sensor short circuit (13)

Cause:
Airflow sensor defective

Remedy:
Contact service technician

16.Sensor flame temperature interruption (23)

Cause:

Flame temperature sensor defective or not connected

Remedy:

Contact service technician

17.Sensor flame temperature short circuit (24)

Cause:

Flame temperature sensor defective

Remedy:

Contact service technician

18.Induced draft blower unable to reach set speed (15)

Cause:

The induced draft blower does not run with the correct speed

This can be caused by the following:

- Induced draft blower defective
- Connecting line from speed pickup (hall sensor) is interrupted or there is poor contact in the connector of this connecting line
- Power supply to blower motor interrupted

Remedy:

- Contact service technician

19.Convection air blower unable to reach set speed (16)

Cause:

The convection air blower does not run with the correct speed.

This can be caused by the following:

- Convection air blower defective
- Connecting line from speed pickup (hall sensor) is interrupted or there is poor contact in the connector of this connecting line
- Power supply line to blower motor interrupted

Remedy:

- Contact service technician

20.No connection to the boiler board – check cable (17)

Cause:

The connection between the central unit and the operating unit is interrupted.

This can be caused by the following:

- Connecting cable is not connected to the operating unit or the central unit
- Connecting cable is damaged

Remedy:

Check if the connecting cable is connected to both units, operating unit and central unit.

Contact service technician

21.Disconnection following power failure (18)

Cause:

- A safety shutdown was initiated through a power failure

Remedy:

- Acknowledge error on the operating unit and restart the device

22.Disconnection - airflow insufficient during cleaning (20)

Cause:

The airflow measured during the burner test conducted during heating mode was insufficient

This can be caused by the following:

- Burner is dirty
- Airflow sensor is dirty
- Intake filter dirty
- Vapour extraction hood switched on in the vicinity
- Room too tight - required combustion air is unable to flow into the room
- Leaks on the pellet oven (door, seals)
- Backpressure in chimney

Remedy:

- Clean burner, intake filter and airflow sensor
- Check if a vapour extraction hood is switched on in the vicinity
- Ensure the supply of the required combustion air, e.g. slightly open the window
- Check chimney is not obstructed
- Contact service technician

23.Set airflow cannot be reached (19)

Cause:

- Insufficient combustion air is supplied to the oven

This can be caused by the following:

- Burner is dirty
- Airflow sensor is dirty
- Intake filter dirty
- Vapour extraction hood switched on in the vicinity
- Room too tight - required combustion air is unable to flow into the room
- Leaks on the pellet oven (door, seals)
- Backpressure in chimney

Remedy:

- Clean burner, intake filter and airflow sensor
- Check if a vapour extraction hood is switched on in the vicinity
- Ensure the supply of the required combustion air, e.g. slightly open the window
- Check chimney is not obstructed
- Contact service technician

24.Errors in parameters Works settings were loaded - error was acknowledged (60)

Cause:

- Program error
- Defective component on the operating unit.

Remedy:

Contact service technician

25.Buffer battery empty

Cause:

- Buffer battery on the operating unit is empty
- Buffer battery not connected

Remedy:

Check connection
Renew buffer battery
Contact service technician

26.LED board not connected (51)

Cause:

- The connection between LED board and central unit is interrupted.

This can be caused by the following:

- Connecting line on the LED board or on the central unit is not connected or defective

Remedy:

Check if the connecting line is connected to the LED board and to the central unit
Contact service technician

27.Error - data transmission IO19 (D3) Check cable (6000)

Cause:

- No connection between operating unit and central unit
- Component error on the central unit

Remedy:

- Check connecting line between operating unit and central unit
- Contact service technician

28.Error - data transmission IO19 (D5) Check cable (6001)

Cause:

- No connection between operating unit and central unit
- Component error on the central unit

Remedy:

- Check connecting line between operating unit and central unit
- Contact service technician

29.Error - data transmission (IO19 (D6) Check cable (6002)

Cause:

- No connection between operating unit and central unit
- Component error on the central unit

Remedy:

- Check connecting line between operating unit and central unit
- Contact service technician

30.Error Amtel version (D3) (6100)

Cause:

- Component error on the central unit

Remedy:

- Contact service technician

31.Error Amtel version (D5) (6101)

Cause:

Component error on the central unit

Remedy:

- Contact service technician

32.Error Amtel version (D6) (6102)

Cause:

Component error on the central unit

Remedy:

- Contact service technician

33.No connection to GSM Module– check cable (30)

Cause:

Connecting line between service connector and the GSM module is interrupted
Connecting line between operating unit and service connector is interrupted or not connected

Remedy:

Check connecting line between operating unit and service connector
Check connecting line between service connector and GSM module
Contact service technician

34.GSM sending error check receiving/SIM card (31)

Cause:
The oven is unable to send an SMS to the operator mobile phone
This can be caused by the following:

SIM card defective
Poor reception, no network available
The pin code of the SIM card is not deactivated

Remedy:

Check if network and reception is available.
Check if pin code is deactivated
Replace SIM card

Fault:	Cause:	Remedy:
Stove will not start	1. The set target room temperature is lower than the momentary room temperature (actual temperature); the symbol “STANDBY” appears on the display	Increase target temperature.
	2. Storage container is empty	Replenish storage container.
	3. Overpressure in the chimney system	Open possibly existing chimney shutter, remove impurities in the chimney or smoke pipe
	4. Electrical ignition is defect	Replace ignition fuse (in the controller), otherwise summon a service technician
	5. Power supply is interrupted	Plug in mains cable, check fuse (in the controller, see Picture 12), check fuse in distributor box
	6. Error message „STB tripped, check burner“	Exchange fuse F4 in controller (T2.0 A)
No indication on display	1. Fuse defect	Exchange fuse F2 in the controller (T0.63 A)
	2. Loose or defect connection cable between control unit and controller	Check plug contacts, otherwise summon a service technician
Fire burns with long yellow flame; Wood pellets stack up in the burner pot and/or the panel soots up excessively	1. The supply of combustion air is blocked in the burner pot due to ash deposits.	Switch off stove and allow to cool down. Remove the burner pot from the mounting and clean the air holes
	2. Burner pot is not seated correctly	Ensure that the burner pot is correctly inserted.
	3. Low quality fuel	Use only standardized wood pellets. Ensure that the fuel is dry and cannot absorb any moisture in storage.
	4. Seals at furnace door or on the cleaning covers are defect	Summon a service technician
	5 Flue-gas draughts or smoke pipes partially blocked with soot	Clean flue-gas draughts and smoke pipes
Fire goes out	1. Storage container is empty	Replenish storage container
	2. The supply of combustion air is blocked in the burner pot due to ash deposits	Clean burner
	3. Too much dust in the pellet container	Empty pellet container and clean screw conveyor channel with vacuum cleaner
	4. Screw conveyor jammed	1. Withdraw mains plug and move worm motor to and fro, otherwise 2. Empty pellet container and clean screw conveyor channel with vacuum cleaner, otherwise 3. Summon service technician
	5. Flue-gas ventilator defect	Summon a service technician

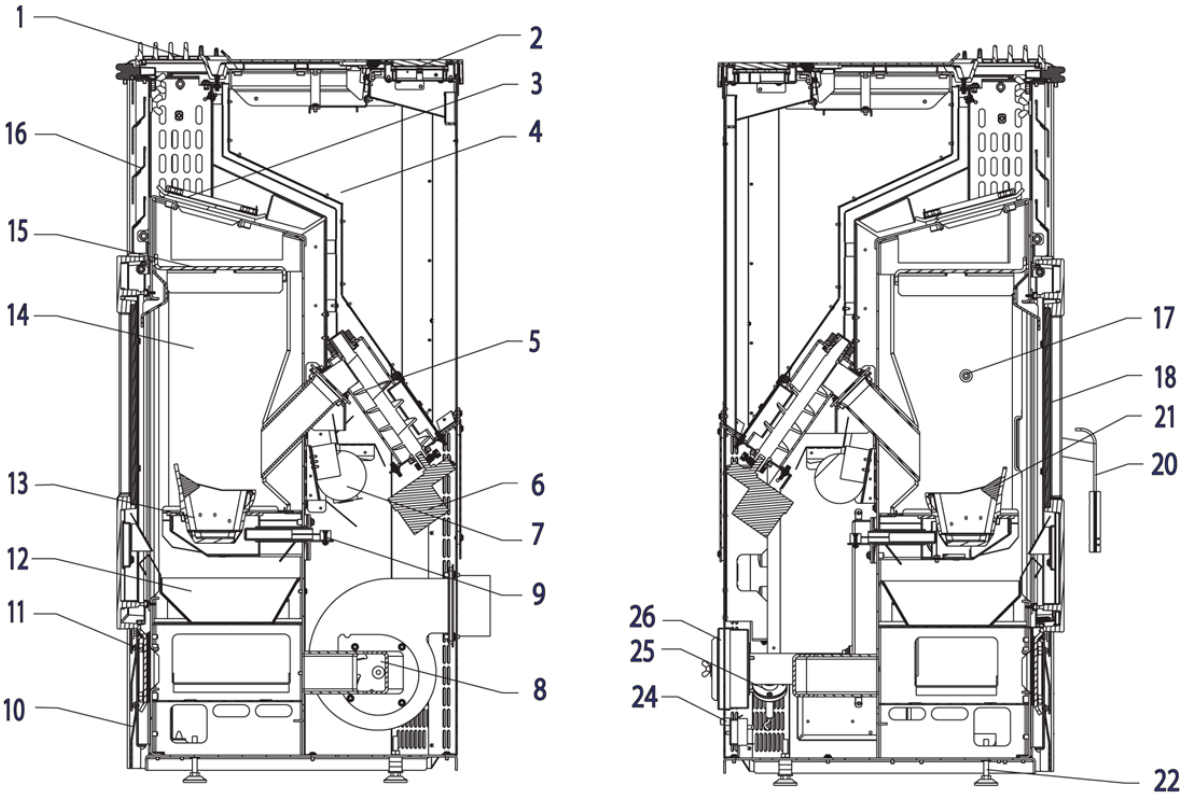
Fault:	Cause:	Remedy:
Pellet stove switches off after approx. 30 minutes	1. Flue gases have not reached the operating temperature	Check, whether there are sufficient wood pellets in the burner pot. Press start button again.
	2. Burner blocked	Clean burner
	3. Shutdown, air volume to little during cleaning	Clean air filter
Flue gas escapes	1. Power failure	Ventilate room
	2. Smoke pipes or chimney (flue) very dirty	Clean smoke pipes or chimney (flue)

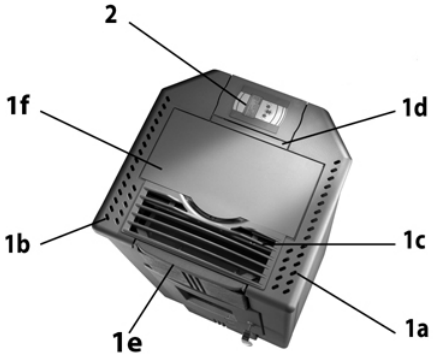
13. Name plate symbol:

HAAS + SOHN OFENTECHNIK GMBH **Urstein Nord 67, A-5412 Puch**		
Pellet-Kaminofen		
Typenbezeichnung:		ECO Pellet 302.08
Wärmeleistungsbereich:		2,9 - 9,3kW
Nennwärmeleistung		9,0 kW
Zugelassener Brennstoff:		Holzpellets Ø 6mm (DIN 51731, ÖNorm M 7135),
Bauart: EN 14785	Registrier Nr.	RRF-85 09 2058
Prüfstellenkennziffer: 1625	CO NWL	CO Teillast
Staub bez.auf 13% O_2: 17 mg/Nm³	0,012	0,020
Wirkungsgrad:	91,8%	94,50%
Mindestabstände zu brennbaren Bauteilen:	seitlich:	10 cm
	hinten:	5 cm
	vorne im Strahlungsbereich:	80 cm
Versorgungsspannung:		230 V (50 Hz)
Elektrische Leistungsaufnahme:	Heizphase:	30-70 W
	Zündphase:	550 W
Abgastemperatur: 160°C	**Bedienungsanleitung beachten!**	
Die Mehrfachbelegung des Schornsteins ist zulässig! **Herstellnummer:** 9 050630 200001		CE

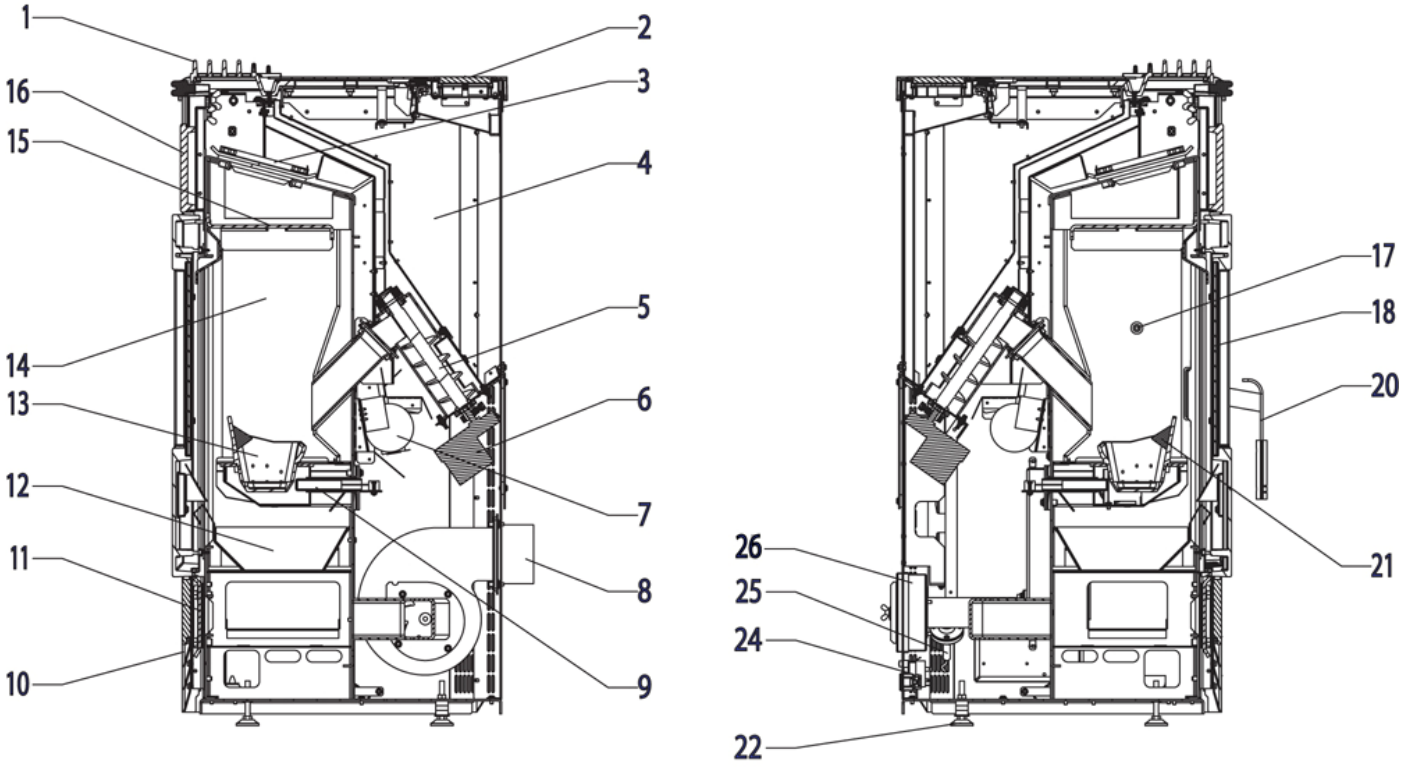
14. Spare parts list

Modell:		302.08	302.06/C	309.06
Spare part	**No.**	**Item No.**	**Item No.**	**Item No.**
Top plate right	1a	0020203150005	0020203080005	0020203080005
Top plate left	1b	0020203160005	0020203090005	0020203090005
Front plate	1e	0020203100005	0020203100005	0020203100005
Air grating	1c	0020203110005	0020203110005	0020203110005
Intermediate plate	1d	0020203120005	0020203120005	0020203120005
Tank cover	1f	0530208005800	0530208005800	0530208005800
Cover hinge		186146	186146	186146
Furnace doors complete		0020203070005	0020203070005	0020203070005
Glass pane	18	186217	186217	186217
Sealing cord glass pane		142908		
Sealing cord furnace door		142908		
Door handle	20	0530207005301	0530207005301	0530207005301
Burner pot	13	0020203040005	0020203040005	0020203040005
Burner taper	21	0020203080005	0020203050005	0020203050005
Furnace lining left	14	186032	186032	186032
Furnace lining right	14	186031	186031	186031
Furnace lining left rear	14	186034	186034	186034
Furnace lining right rear	14	186033	186033	186033
Draft deflector plate	15	186079	186079	186079
Ash box	12	186046	186046	186046
Adjustment foot	22	186353	186353	186353
Mains cable		186338	186338	186338
Device plug with main switch	23	186232	186232	186232
Main cable harness		186360	186360	186360
Cable harness network filter		186357	186357	186357
Cable harness worm motor		186358	186358	186358
Cable harness ignition		186359	186359	186359
Ingnition	9	186158	186158	186158
Clamping stone ceramic		186159	186159	186159
STB	24	186289	186289	186289
Suction draft blower	8	186100	186100	186100
Convection air blower	7	186673	186673	X
Worm motor	6	186126	186126	186126
Screw conveyor	5	0020203060005	0020203060005	0020203060005
Top screw conveyor bearing		186139	186139	186139
Bottom screw conveyor bearing		186207	186207	186207
Air volume sensor	25	186327	186327	186327
Flame temperature sensor	17	186179	186179	186179
Thermosensor waste gas		186334	186334	186334
Room temperature sensor		186337	186337	186337
Door contact switch		186240	186240	186240
Network filter		186356	186356	186356
Connector set		186267	186267	186267
Air filter	26	0530206005003	0530206005003	0530206005003
Controller complete		186250	186250	186250
Control unit BCE 16.0	2	186689	186689	186689
Buffer battery		186332	186332	186332
Fuse T 0.63 A		186340	186340	186340
Fuse T 2.0 A		186341	186341	186341
Gasket set flue gas fan		186342	186342	186342
Gasket set cleaning openings	3 + 11	186343	186343	186343
Ceramic front above red			1871711	
Ceramic front below red			1871591	
Ceramic SW above red			1871331	
Ceramic SW below red			1871341	
Ceramic front above cotto			1871712	
Ceramic front below cotto			1871592	
Ceramic SW above cotto			1871332	
Ceramic SW below cotto			1871342	
Stone ST front above		186507		
Stone ST front below		0530208006100		
Column left		186420	0530206005034	0530906005034
Column right		186430	0530206005035	0530206005035
Side wall left		0530207005057	0530206005002	0530906005002
Side wall right		0530207005056	0530206005001	0530906005001



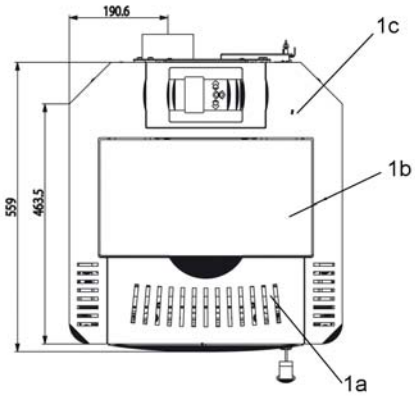


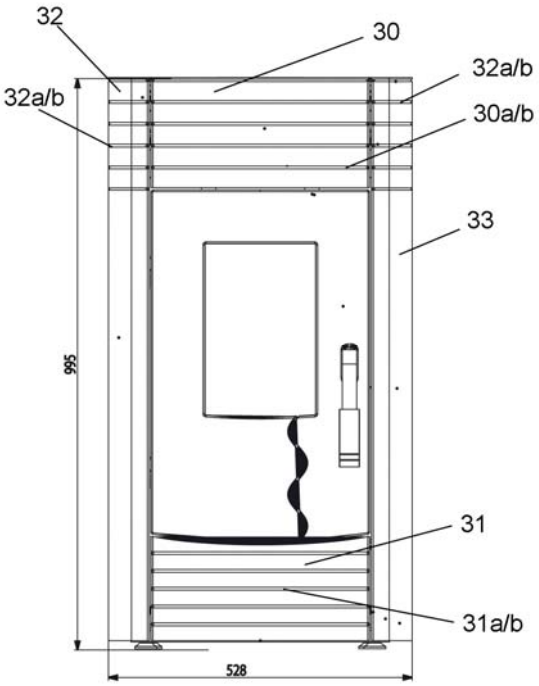
Picture 29: Spare Parts 302.08

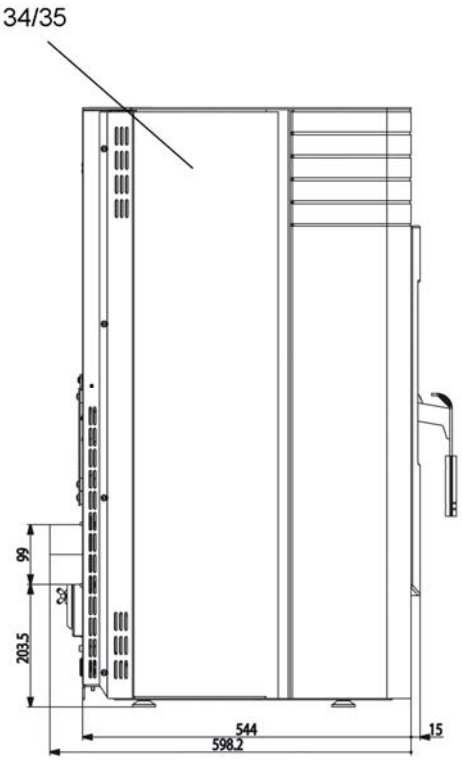


Picture 30:: Spare Parts 302.06 / 309.06

Modell:		310.06
Spare part	**No.**	**Item No.**
Rear cover plate	1a	0531006006180
Cover panel ahead	1c	0531006006170
Tank cover	1b	0530206005810
Cover hinge		186146
Furnace doors complete		0530206005016
Glass pane	18	186217
Sealing cord glass pane		196917
Sealing cord furnace door		142908
Door handle	20	0530207005301
Burner pot	13	0020203040005
Burner taper	21	0020203050005
Furnace lining left	14	186032
Furnace lining right	14	186031
Furnace lining left rear	14	186034
Furnace lining right rear	14	186033
Draft deflector plate	15	186079
Ash box	12	186046
Adjustment foot	22	186353
Mains cable		186338
Device plug with main switch	23	186232
Main cable harness		186360
Cable harness network filter		186357
Cable harness worm motor		186358
Cable harness ignition		186359
Ingnition	9	186158
Clamping stone ceramic		186159
STB	24	186289
Suction draft blower	8	186100
Worm motor	6	186126
Screw conveyor	5	0020203060005
Top screw conveyor bearing		186139
Bottom screw conveyor bearing		0089000170005
Air volume sensor	25	186327
Flame temperature sensor	17	186179
Thermosensor waste gas		186334
Room temperature sensor		186337
Door contact switch		186240
Network filter		186356
Connector set		186267
Air filter	26	0530206005003
Controller complete		186250
Control unit BCE 16.0	2	186689
Buffer battery		186332
Fuse T 0.63 A		186340
Fuse T 2.0 A		186341
Gasket set flue gas fan		186342
Gasket set cleaning openings	3 + 11	186343
Front above castgrey	30	0531006006160
rear mounted steel sheet top panel anth.	30a	0531006001162
rear mounted steel sheet top panel champ.	30b	0531006011162
rear mounted steel sheet SW l. + r. anth.	32a	0531006001135
rear mounted steel sheet SW l. + r. champ.	32b	0531006011135
Front below castgrey	31	0531006006150
rear mounted steel sheet front below anth.	31a	0531006006155
rear mounted steel sheet front below champ.	31b	0531006007155
Column left castgrey	32	0531006006140
Column right castgrey	33	0531006006130
Column left champagne	32	0531006017140
Column rightchampagne	33	0531006017130
Side wall left	34	0531006006120
Side wall right	35	0531006006110

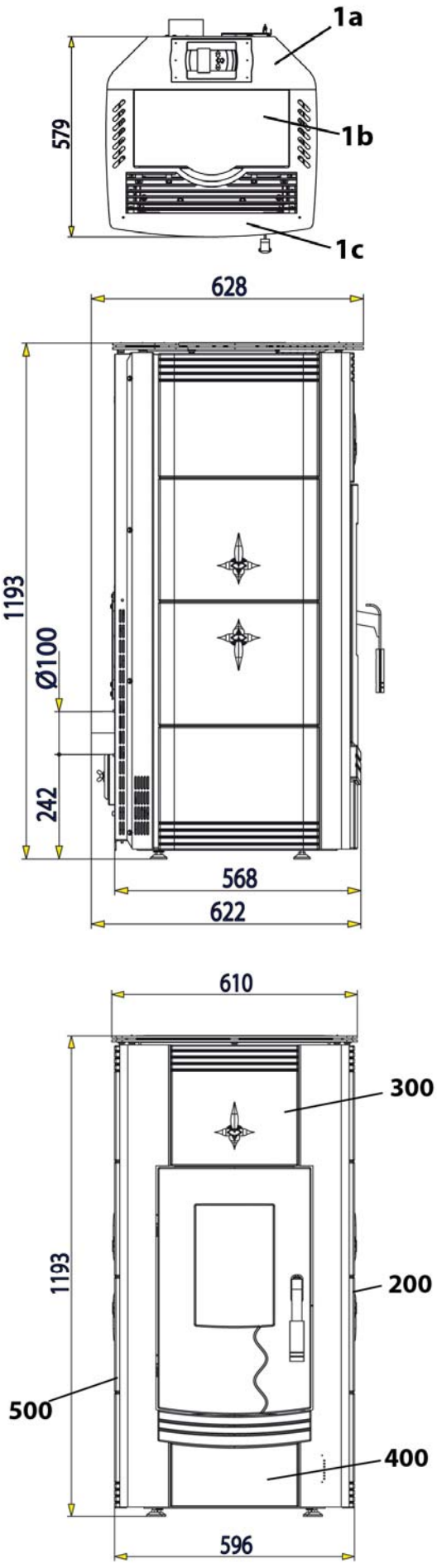






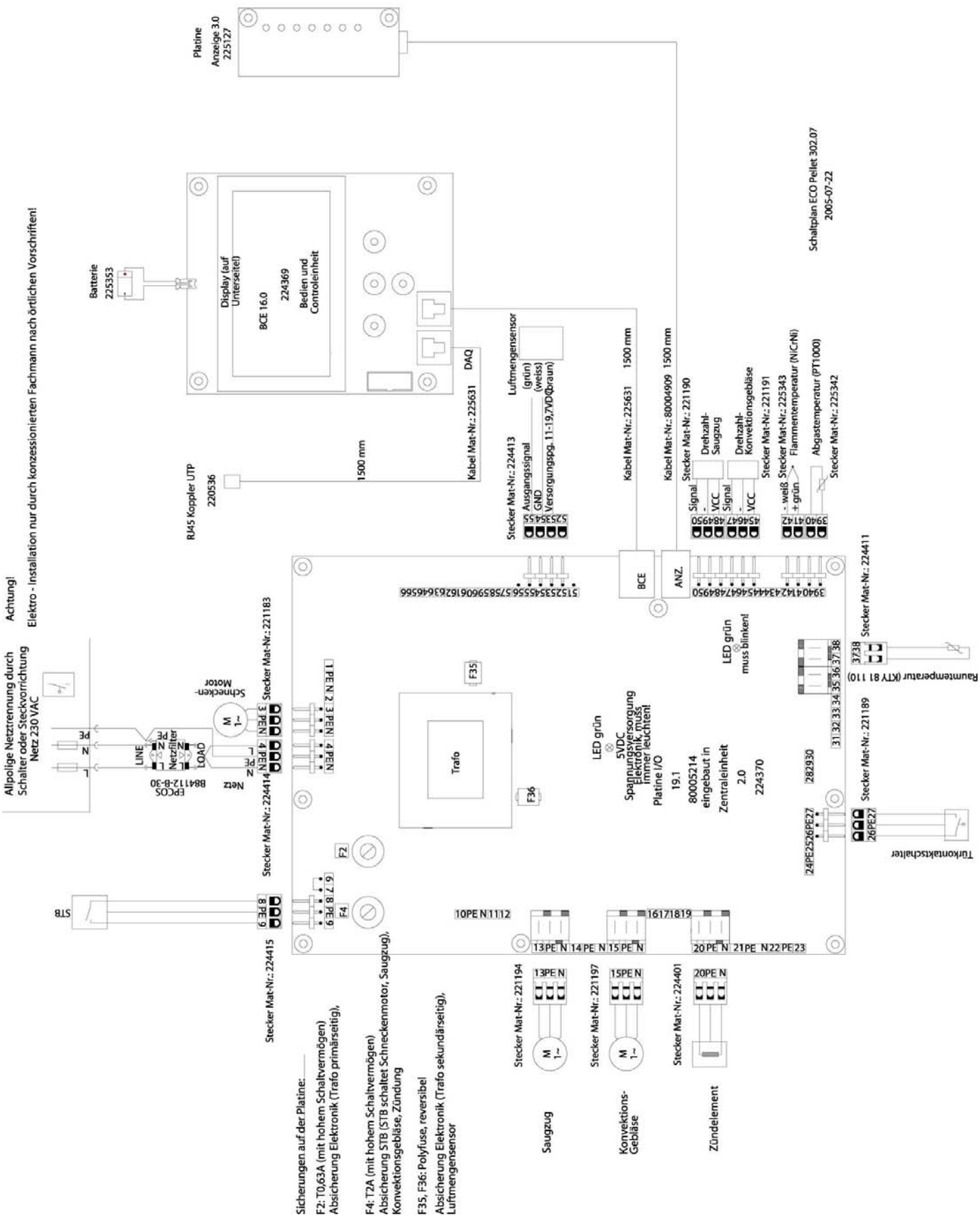
Picture 31:: **Spare Parts 310.06**

Model:		302.07 C
Spare part	**No.**	**Item No.**
Cover panel rear	1a	0530207025801
Tank cover	1b	0530208015003
Cover panel ahead	1c	0530207105800
Cover hinge		186146
Furnace doors complete		0020203070005
Glass pane	18	186217
Sealing cord glass pane		196917
Sealing cord furnace door		142908
Door handle	20	0530207005301
Burner pot	13	0020203040005
Burner taper	21	0020203080005
Furnace lining left	14	186032
Furnace lining right	14	186031
Furnace lining left rear	14	186034
Furnace lining right rear	14	186033
Draft deflector plate	15	186079
Ash box	12	186046
Adjustment foot	22	186353
Mains cable		186338
Device plug with main switch	23	186232
Main cable harness		186360
Cable harness network filter		186357
Cable harness worm motor		186358
Cable harness ignition		186359
Ingnition	9	186158
Clamping stone ceramic		186159
STB	24	186289
Suction draft blower	8	186100
Convection air blower	7	186673
Worm motor	6	186126
Screw conveyor	5	0020203060005
Top screw conveyor bearing		186139
Bottom screw conveyor bearing		186207
Air volume sensor	25	186327
Flame temperature sensor	17	186179
Thermosensor waste gas		186334
Room temperature sensor		186337
Door contact switch		186240
Network filter		186356
Connector set		186267
Air filter	26	0530206005003
Controller complete		186250
Control unit BCE 16.0	2	186689
Buffer battery		186332
Fuse T 0.63 A		186340
Fuse T 2.0 A		186341
Gasket set flue gas fan		186342
Gasket set cleaning openings	3 + 11	186343
Ceramic front above Bordeaux	300	0530207410300
Ceramic front below Bordeaux	400	0530207410400
Ceramic SW Bordeaux right	200	0530207410200
Ceramic SW Bordeaux left	500	0530207410500
Ceramic front above panna	300	0530207420300
Ceramic front below panna	400	0530207420400
Ceramic SW panna right	200	0530207420200
Ceramic SW panna left	500	0530207420500
Column left		0530207005014
Column right		0530207005052



Picture 32: **Spare parts 302.07C**

15. Wiring Diagram



No.:	Cable harness designation
3	Worm motor
4	Mains plug / mains filter
8	STB
13	Waste-gas ventilator
15	Convection air blower
20	Electrical ignition
26/27	Door contact switch
37/38	Room temperature sensor
39/40	Waste-gas temperature sensor
41/42	Flame temperature sensor
45-47	Speed convection air blower
48-50	Speed waste-gas blower
52-55	Air volume sensor
BCE	Connection control unit
ANZ	Display circuit board LEDs
DAQ	Connection service/customer service connector

16. Guarantee

General

HAAS + SOHN assumes a one year guarantee for this device in the framework of the warranty guidelines, excluded from this are parts which are directly subjected to fire (wearing parts). The guarantee begins with the day of delivery. The invoice is to be presented as evidence.

Warranty Guidelines

1. HAAS + SOHN assumes the guarantee for the duration of two years from delivery to the consumer, calculated for
a) perfect material characteristics and processing corresponding with the purpose,
b) proper professional assembly,
c) Adherence to the nominal heating output (Watt) according to DIN 18894 and the room heating capacity according to DIN 18893 (see device plate, Technical Specifications in this manual or catalogue specifications).

The warranties (a to c) extend to repair of the device or the faulty components free of charge. Entitlement to replacement free of charge exists only for parts, which show faults in the material and in the workmanship. More extensive claims are excluded.

We draw your attention to the fact, that our customer service stations are also available to you at any time and at the normal conditions after expiry of the guarantee.
We cannot accept any liability for alterations following the printing of this manual.

We reserve the right to implement technical modifications.

2. HAAS + SOHN assumes no guarantee for damage and defects to devices or their components, that are caused by:
external, chemical or physical influences during transport, storage, installation and utilization of the device (e.g. shocking with water, condensation water, overheating due to improper operation), is no quality defect,
incorrect choice of stove size, non-observance of the respective applicable building regulations, errors with the installation and connection of the device, insufficient or too strong chimney draught,
improperly executed repair work or other, in particular subsequent modifications to the fireplace or waste-gas line (stove pipe and chimney), use of unsuitable fuels, improper operation; overloading of the device (see manufacturer's operating manual), wear of parts made from iron or fire-clay subjected directly to the flames, insofar as they do not fall under the warranty (1a), improper handling, insufficient care and attention, use of unsuitable cleaning agents.

Complaints

We request that you present complaints exclusively to your specialist retailer. In doing so, definitely specify the model- and production number of your stove. These details can be found on the name plate of the device (at the back of the device).

Information for ordering spare parts

When ordering spare parts, we request that you specify completely the model- and production number of your pellet stove. These details can be found on the name plate of the device (in the cover of the storage container) and on the first page of this manual. If there is no marking present at this place regarding model- and production number, please enter these details there. As a result, you always have all important details at hand.

In addition, please observe the drawings and tables in this manual, here you will find the correct designation of the spare parts required.
Attention! The fireplace must not be changed!
Only spare parts may be used that are explicitly approved or offered by the manufacturer.
If necessary, please contact your specialist retailer.

Our supply program:

Oil stoves

Chimney stoves

Pellet stoves

Tiled- und slow combustion stoves for wood and coal

Slow combustion- and add-on cookers for wood, coal and oil

Chimney inserts for wood

Accessories for stoves and chimneys

Accessories for central oil supply

Air humidifiers

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