



Technical manual 19.3

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Introduction

Dear customer,



Thank you for choosing and trusting Duroflame pellet stoves. Duroflame pellet stoves are designed, developed and produced in the Netherlands with the utmost precision and attention, to achieve the greatest possible user convenience and to protect the safety of both the user and the installer.

We recommend that you carefully read this manual before using the Duroflame stove to ensure optimum safety and enjoyment from your Duroflame.

We also recommend that you keep the manual within immediate reach of the stove, where it is easily and quickly accessible. If the manual is lost or damaged, you can request a copy from Duroflame.

Important issues in this manual are indicated using the illustrations below. Some parts in the text are printed in **bold** for added emphasis.

Important symbols:

	<p>Note:</p> <p>Carefully read any sections with this warning symbol. It indicates that this text contains information you need to be aware of for your pellet stove to function properly and safely.</p>
	<p>Information:</p> <p>This symbol indicates that a section contains important information about using the pellet stove correctly.</p>

As a result of the continuous improvement of Duroflame products, Duroflame reserves the right to make changes and additions to this manual, without prior notice. Copying all or part of this manual without the permission of Duroflame is prohibited.

1 Terms of guarantee and recommendations

1.1 Terms of guarantee

Duroflame pellet stoves come with a 2-year warranty, provided that the guarantee certificate (invoice) and associated documents are present. This guarantee does not apply to parts that are subject to normal wear and tear, such as the combustion pot. **A 2-year guarantee applies to the electrical and electronic components and fans, with the exception of the glow plug.** The glow plug is only covered by the guarantee if a defect ex factory can be demonstrated immediately upon purchase. The guarantee does not apply to parts that become defective due to lack of maintenance and/or the use of poor quality pellets. The guarantee does not apply if damage is caused by atmospherics, natural disasters, electrical surges, fire, faulty (electrical) installation or maintenance that has not been carried out according to the manufacturer's instructions.

- Duroflame ensures that the agreed deliveries are carried out properly and in accordance with the standards (applicable in its trade), but never provides any additional guarantee in relation to these deliveries and work than expressly agreed between the parties.
- For the term of guarantee, Duroflame warrants the usual normal quality and reliability of the item delivered.
- If the manufacturer or supplier has issued a guarantee for the items delivered by Duroflame, this guarantee will apply equally to the parties. Duroflame will inform the other party of this.
- If the purpose for which the other party wishes to process or use the items deviates from the usual purpose of these items, Duroflame only guarantees that the items are suitable for this purpose if it has confirmed this to the other party in writing.
- No claim can be made under the guarantee as long as the other party has not yet paid the agreed price for the items and/or the agreed remuneration for the work.
- The previous paragraph does not apply to the consumer.
- In the event of a correct claim under the guarantee, Duroflame will – at its discretion – provide free repair or replacement of the items, the correct execution of the agreed work or reimbursement of or a discount on the agreed price. In the event of additional damage, the provisions of the liability clause contained in these general terms and conditions shall apply.
- Contrary to the previous paragraph, the consumer has the choice between repair or replacement of the items or the correct execution of the agreed work, unless this cannot reasonably be required from Duroflame. Instead, the consumer is entitled to terminate the contract by written notice or demand a discount on the agreed price.

1.2 Safety recommendations



- The installation, repair and maintenance of the stove must be carried out by qualified personnel. Pay particular attention to electrical connections. Make sure that all electrical connections are securely fastened to prevent contact with the rest of the stove.
- Be sure that all local provisions, including the provisions that refer to national and European standards, are observed during the installation and use of the device.
- Never allow children to operate or use the stove.
- It is important for each user to read this manual carefully and completely and follow the instructions to ensure the correct application and use of the stove.
- The operation, adjustment of settings and any other use, are to be carried out by adults.
- The stove may only be used for the purpose for which it was designed. The manufacturer cannot be held liable for damage caused by incorrect use and/or incorrect application.
- Do not place any objects on top of the stove and make sure that objects are placed at a safe distance from the stove. Failure to comply with these recommendations may cause a fire hazard.
- The responsibility for any incorrect use of the stove lies entirely with the end user and releases Duroflame from any liability.
- Any modification of the stove and replacements using non-original parts may compromise the user's safety and releases Duroflame from any liability. It is forbidden to apply these modifications and replacements without written permission.
- Do not twist or pull electrical cables. This also applies if the stove is disconnected from the electricity grid.
- Do not close or narrow ventilation openings. Ventilation openings ensure proper combustion and prevent the stove from overheating.
- Avoid touching the hot parts of the stove without wearing protective clothing or accessories.
- Be sure to clearly point out the dangers of the stove to children, the elderly and the disabled, and make sure that people do not come too close to a hot stove.
- It is not permitted to use the stove while the door is open, because this may result in smoke formation in the room.
- This stove is an electrical device, so be aware of moisture and liquids around the stove. We recommend that you switch off the stove prior to cleaning and/or maintenance, carry out the switch-off procedure and then remove the plug from the socket.
- The stove must be connected to a circuit breaker and an earth connection according to the 73/23 EEC & 93/98 EEC standards.
- Improper installation or poor maintenance may cause injury to persons or animals, or damage to objects. In this case, Duroflame refuses any liability.
- After removing the packaging, check the product thoroughly and carefully. If the contents of the packaging are incomplete or incorrect, please contact the dealer from whom you purchased the product. Keep the packaging away from children or people with a mental disability, as it may present a danger.
- The stove must be entirely cleaned and maintained after every 1200 burning-hours or a year's use.

1.3 Recommendations for the operation

- Use the control panel to switch off the stove in the event of a power cut or malfunction.
- Never manually throw pellets in the combustion pot.
- If the stove fails to start up properly, remove unburned pellets before attempting to start it up again.
- Do not allow the area heated by the stove to overheat; this may cause health issues.
- Install the stove in a suitable room which is provided with ventilation, electricity, a smoke outlet and firefighting equipment.
- In the event of a fire in the flue duct, switch off the stove and keep the door closed.
- If the stove is on a combustible base, be sure to install a steel or glass fireproof plate under the stove.
- Never light the stove in any way other than described in the start-up procedure.

2 Operation

2.1 The fuel



Duroflame pellet stoves use pellets as fuel. Pellets comprise wood fibres pressed together under very high pressure, after which they take on their solid form without any additives. **It is not permitted to use a Duroflame pellet stove for burning any raw materials other than wood pellets.** This also applies to lighting the stove. The guarantee does not cover damage caused by using other materials and in addition safety is compromised.

It is important that the pellets have a high-quality composition, because the quality of the pellets affects the combustion and pollution of the stove. Characteristics of high-quality pellets are:

Diameter: 6-7mm

Length: 30mm

Hard pressed

Free of additives, adhesives and resin

Calorific value: 20,244 kJ/kg

7% moisture content

High-quality pellets prevent the following issues:

Poor combustion

Clogging of the combustion pot

Clogging of the flues

A quickly soiled window

Lots of ashes and unburned pellets



Please note that moist pellets can cause poor combustion, resulting in the above issues. Store your pellets in a dry place, at least one metre away from the stove. We recommend that you select your pellets carefully. The use of bad pellets can damage your pellet stove, as a result of which the guarantee and manufacturer's liability lapse.

2.2 Operation

The basic function of a pellet stove is as follows: A pellet stove has a built-in tank for pellets. A screw conveyor transports pellets from this tank to the combustion pot. A glow plug ignites the pellets in the combustion pot. The air required for combustion is forced through the blower along the combustion pot. The flue gases generated during combustion are discharged through the blower.



Depending on the model, there are two ways a pellet stove can create a warm air flow in the room: by using a room ventilator or a convection current. **Because these air currents also prevent the stove from overheating, it is highly important that the air current applied can circulate freely and is not blocked.**

3 Use

Observe this chapter when you start using your pellet stove. It provides a step-by-step description of what is happening and the malfunctions and problems that may occur. These are described in chapter 5 and 6 with the corresponding solutions.

3.1 Control panel



3.1.1 SET



This button is used to confirm or to enter a selected menu.

3.1.2 AUTO



Use this button to choose between the weekly thermostat or manual operation.

3.1.3 ON/OFF



Use this button to switch the pellet stove on and off. Also use this button to exit a menu.

3.1.4 Temperature



Use these buttons to set the desired temperature, navigate through the various menus and change settings.



3.1.5 Power



Use these buttons to select the power at which the stove should operate. These buttons are also used to navigate through the various menus and change settings.



3.2 Installing the stove

3.2.1 Precautions



The stove must be installed by qualified personnel.

The stove must be installed in a suitable room, which must:

- comply with the operation and environmental conditions (described in this manual).
- be provided with electricity (230V 50 Hz (EN73-23)).
- have a chimney flue or vertical interior or exterior flue duct.
- be equipped with fresh air intake.
- be earthed according to EU standards.



The burning of pellets in the pellet stove results in flue gases. The stove must always be connected to a chimney flue or a vertical interior or exterior flue duct to discharge these flue gases. While these flue gases are barely visible, they can become extremely hot. Always be sure to avoid contact with flue gases.

3.2.2 Location of the stove

The proper position of the stove depends on the space and the possibility of placing the chimney/flue duct. Consult the local authorities about the local regulations for installing a stove in relation to the chimney/flue duct and any other regulations that have been laid down for this purpose. The manufacturer shall refuse any liability if the installation does not comply with applicable legislation.

To ensure the stove cools properly, distributes heat properly and to promote fire safety, please observe the following distances to other objects:

- On the sides: 30 cm.
- At the back: 20 cm.
- At the front: 80 cm

Ensure that the stove is installed in such a manner that allows both the stove and flues to be properly cleaned and maintained.



It is not permitted to place the stove in a bedroom, a bathroom, a shower, a room that contains a risk of explosion, or outside. Do not place the stove on a floor that does not seem suitable for bearing the stove's weight. Place a steel or glass fireproof plate under the stove if the stove is on a combustible base.

All packaging materials can be re-used for similar uses, or possibly as waste similar to municipal solid waste, in accordance with regulations.

3.2.3 Connection

Electrical connection



It is important for the stove to be installed by a specialist technician. The connection to the electricity grid is made by means of the power cable supplied. Make sure the plug remains accessible at all times when the appliance is installed. Also make sure you have a well-earthed socket.

The stove is secured using a fuse at the back of the stove.

Connection to the flue duct

This chapter describes the conditions with which the flue duct must comply. These conditions we prescribe shall in no way be considered a replacement of the existing rules. All local provisions, including those referring to national and European standards, must be complied with when installing the flue duct.

The factory is not responsible for the malfunctioning of the stove due to the use of a flue duct that does not comply with the conditions and regulations.



- **Have the chimney and the pellet stove installed by qualified personnel.**
- **The internal diameter of the duct must be equal to or wider than 80 mm.**
- **Use steel or stainless steel pipes for the duct; do not use plastic or aluminium.**
- **Use pipes with a silicone sealing ring for the duct: these can withstand high temperatures.**
- Use T-piece for corners to allow inspection during annual maintenance.
- The connection between the stove and the chimney must be as short as possible to ensure a proper draught and prevent condensation.
- Do not use a 90° bend (T-piece) more than three times.
- Horizontal sections must be under 2 metres, featuring a minimum angle of 5°.
- Do not connect more than one device to a flue tube.
- Use insulated pipes outdoors to prevent condensation.

Ventilation

The room where the stove is located must have proper ventilation to ensure a proper combustion in the stove. Insufficient ventilation in a house can cause poor combustion, in particular in modern and airtight houses. Poor combustion is also more likely to occur in rooms with (electric) exhaust. These issues can be prevented by using/installing proper ventilation. Proper ventilation near the stove is mandatory.

The air inlet must have a total net surface area of 100 cm². This surface area must be increased if (electric) exhaust or other heating systems are present in the same room (e.g. a cooker hood or wood-burning stove).

An external air inlet can be connected to all Duroflame pellet stoves. External air inlets allow the pellet stove to use outside air for combustion and the combustion of the stove will no longer be affected by the ventilation in the room. Ask your dealer about the options.



The above air supplies must guarantee a minimum capacity of 50 m³/hour. The air supply must never be blocked.

3.3 Starting the pellet stove

3.3.1 Starting up for the first time



Note! Observe the following recommendations when using the stove for the first few times:

- The curing process of the lacquers is complete after the stove has been lit several times. During this curing process, vapours and odours may be released during the first few times of use.
- Start by using the stove at a medium power a few times so all mechanical parts can settle and the lacquers can cure. This will promote the life of the stove.
- Keep children away from the stove; the fumes that are released can be harmful to children's health. Adults should also be careful with these fumes and avoid inhalation as much as possible.
- Do not touch parts and surfaces until they have completely cooled down; the parts and surfaces may still be unstable.
- Properly ventilate the room several times after and during the first times of use.
- The first start-up of the pellet stove may take longer than usual. Because the screw conveyor has not yet been filled, it takes longer for the pellets to reach the combustion pot.

It may be that it takes too long for the pellet stove and an error message appears (Error1). In this case, press and hold the 'ON/OFF' button for a few seconds and restart the pellet stove using the



Carry out the following actions for starting up the pellet stove for the first time:

- Ensure that the pellet stove is installed correctly and as described in the previous sections.
- Fill the tank with pellets or check whether the tank is filled with pellets.
- Check that the combustion pot is placed as far back as possible and that the glow plug is in front of the hole in the combustion pot.
- Check that the door is securely closed.

3.3.2 Switching on the pellet stove

Switch on the stove using the feed switch. The feed switch is the switch the feeder cable is connected to.

Possible defect: 5.1 No image

3.3.3 Ignition



- Check that there are sufficient pellets in the tank.
- Check that the combustion pot is clean, placed as far back as possible and that the glow plug is in front of the hole in the combustion pot.
- Check that the door is securely closed.

Start the stove by pressing and holding the



ON/OFF button until you hear a beep.

The pellet stove indicates: 'IGNITION ON'. The pellet stove will start and complete the following steps:

Cleaning/preheating.

During this phase, the glow plug starts to glow and the combustion pot is cleaned. Possible malfunctions are:

Malfunction: ERROR 6

Malfunction: ERROR 9

Loading pellets

During this phase, pellets are added until a fire starts in the combustion pot. The blower will slow down. Possible malfunctions are:

Possible defect: 5.2 No pellet supply

Ignition and stabilisation

After ignition, the flue gas temperature will rise and the stove will recognise this as a fire. The stove will now enter the stabilisation mode for a few minutes, and the stove will supply fewer pellets to allow the fire to slowly start. A possible malfunction is:

Malfunction: ERROR 1

3.4 Pellet stove in operation

The pellet stove has successfully completed its start-up process and is now in operation. The following text is shown:

VERW. MANUAL

Ta Ti P...

3.4.1 Meaning of VERW. MANUAL


This means.: 'heating manually'. The stove must be switched on and off manually. The stove is not set using a timer and will not automatically turn on and off.


Pressing the AUTO  button will change the text into Auto.

This means that the timer is switched on, provided it has been set.


3.4.2 The meaning of Ta Ti P

Ta indicates the measured ambient temperature. Ti indicates the desired (set) ambient temperature. P1 to P5 indicate the selected power.

Adjust Ti using the temperature buttons 

Adjust the power P1 to 5 using the power buttons 


3.5 Switching off the pellet stove

Switch off the pellet stove by pressing the ON/OFF  button

The following message appears: COOLING DOWN STARTS. This means that the stove will cool down to a certain safe temperature. This takes about 20 minutes. Once the pellet stove has sufficiently cooled down, the blower (7.1.9) will stop running.


3.6 Settings

Use the menu to adjust various settings.

Access this menu via SET . The following settings can be changed here:

3.6.1 Adjusting time and date

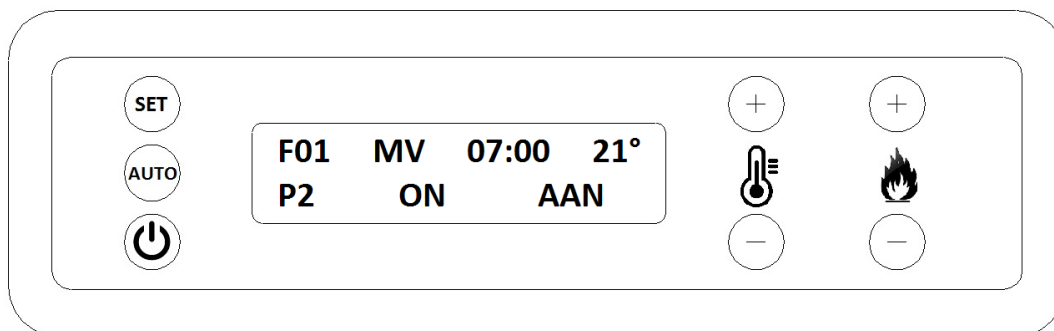
Set the date and time here. Use the power buttons to switch between the settings you want to change.

Use the temperature buttons to  change the settings.

Use SET to  save the changed setting.

3.6.2 Weekly program

This is where you set the timer for the entire week. Below is a picture of the menu. We will provide a step-by-step explanation of what you are required to set. Refer to the above for details on how to proceed with the settings.



F01

This is the program number. You can set up to 15 different programs.

MF

MF has been used in the example. This means the same setting from Monday to Friday. You can also set SS for Saturday and Sunday. It is possible to choose per day.

07.00

This is where you can set the time, for example, at what time the stove is to carry out the selected setting.

21°

This value is the pre-selected desired temperature. In the example, this means that the stove has to heat up to 21°C and then starts to modulate.

P2

This is the mode required for the stove to burn until the desired temperature is reached.

ON

You can choose between ON and OFF to indicate whether the stove should start up (ON) or turn off (OFF) on the days and times that you have set according to the above steps.


ON

The example shows ON. Indicate whether you want to use this program (F01) (ON) or not (No. A). This is also where you activate and deactivate the programme, as you activated it according to the above steps. This is not the same as switching the stove on and off, because this is set at ON or OFF as above.

3.6.3 Change language

You can choose your preferred language using the power buttons.



Confirm the desired language using  SET.



3.6.4 Setting the pellet stove

Use this menu for setting three different values: the pellet auger (7.1.4), the blower (7.1.9) and the convection fan (7.1.10). By default, these values are set to 0%. You can adjust these values between -50% and +50%.



Note! Adjusting the stove has a major impact on the operation of the pellet stove. Do not change the values by too large intervals; instead, consult your dealer.

Loading pellets

You can increase or decrease the quantity of pellets here. Pellets have their very own properties, involving length, type of wood, compression, etc., and you may need to make some adjustments to your pellet supply. We recommend consulting your dealer about this.

Vent. Flue gas

This is where you set the amount of combustion air. In addition to the pellet supply, a suitable oxygen ratio is of main importance for good combustion. We recommend consulting your dealer about this.



Vent. Air

This is where the speed at which the convection fan (7.1.10) should run is set. These values only apply if the stove is equipped with a convection fan. Increase this value if, for example, the stove requires additional cooling or if you wish to disperse the heat more quickly. It is not recommended to decrease this value to prevent insufficient cooling of the stove.

3.6.5 Thermostat mode

Use this menu to select the thermostat control for the stove to follow. It should be set to 'stove thermostat'. Other functions are not in use.

3.6.6 Blocking keys




This is where you can block keys by pressing the following buttons for 20 seconds: temperature minus and the  power knob minus 



Repeat this operation to release blocking.

3.6.7 ECO stop




Set the ECO stop if you wish for the stove to completely switch off as soon as the desired temperature has been reached. Be aware that this may have consequences for the life of your glow plug. In addition, and for ECO stop in particular, it is important that you regularly check the combustion pot for contamination to ensure that the stove starts up properly.

Set the ECO stop as follows: Simultaneously press SET and the power  minus  for more than 5 seconds until PARAMETERS appears on the screen. Press SET twice until it says 'Parameter 1 Value (..)'.


Use the power button plus  to navigate to parameter 62.

As a default, this value is set to 0, meaning that the ECO stop is deactivated. This is where you set the temperatures at which the stove should switch.

For example: If you set this value to 2 and set the desired temperature (see Ti 3.4.2) to 20°C, the stove will switch off at 22°C and on at 18°C. Set a large value to prevent the stove from switching on and off continuously.

You can set the value using the    temperature buttons.

Confirm the set value using SET 

4 Periodic maintenance

4.1 General maintenance



Be sure to carry out regular maintenance and clean the stove as described in the following paragraphs to ensure a long life. **For (fire) safety reasons, a full service must be carried out by qualified personnel after each year of use or 1200 burning-hours.**

Before carrying out maintenance and cleaning, ensure that the stove is switched off, the plug has been removed from the socket and the stove has cooled down.

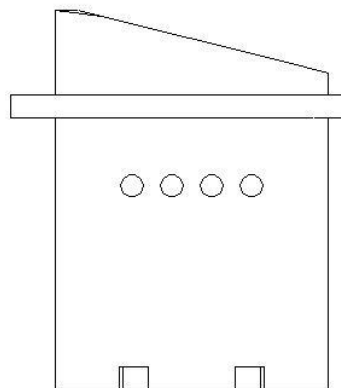
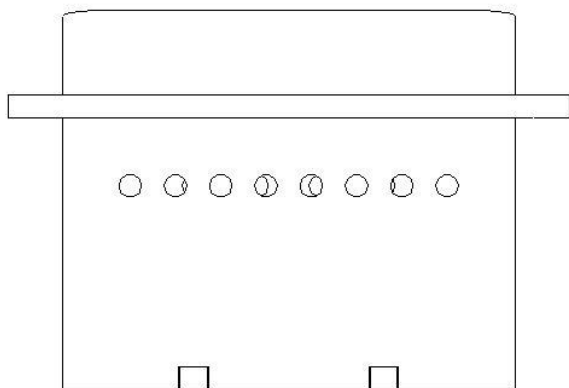
Never use corrosive or aggressive cleaning agents on external or internal parts. The use of these agents may cause corrosion and damage, and the guarantee does not cover damage caused by this.

Have defective components replaced by your dealer or manufacturer.

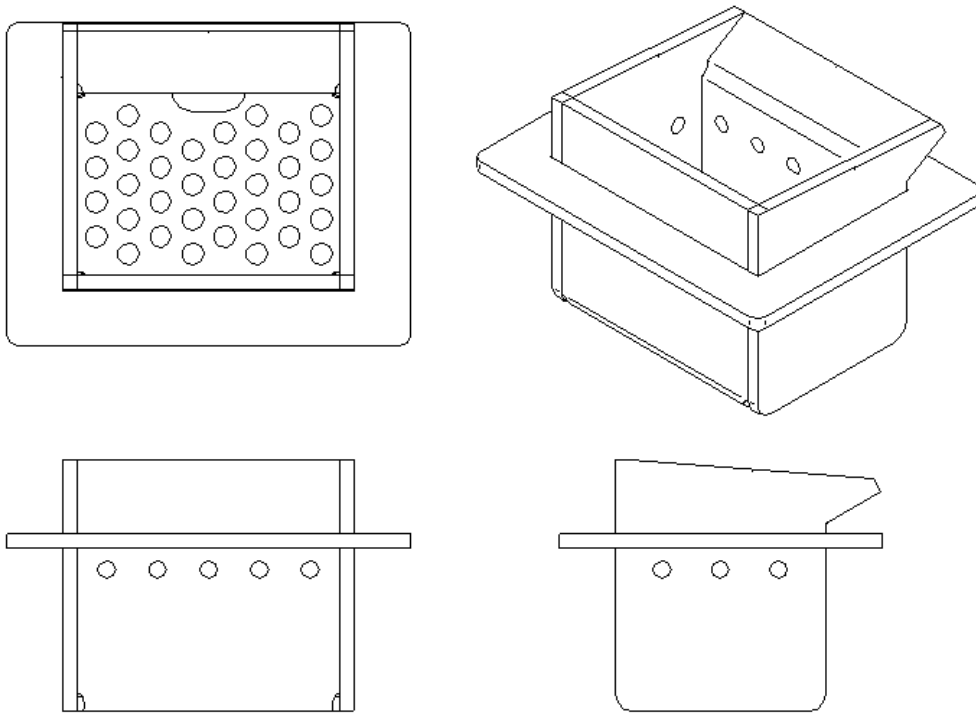
4.1.1 Cleaning the combustion pot and the ashpan

Clean the combustion pot and ashpan before each use. Cleaning the combustion pot is important for proper combustion. Failing to clean the combustion pot may clog the holes in the combustion pot and prevent the air from properly achieving combustion. This causes slagging. When cleaning, make sure no ash or pellets are left **under the combustion pot**.

Duroflame combustion pot used in the Batavia T3, Square and Rembrand T2



Duroflame combustion pot used in the Pelle and Rinus



4.1.2 Cleaning the glass

The glass in the door must be cleaned to maintain a clear view of the fire. The frequency of cleaning depends on the pellets used. Clean the glass using a damp paper cloth dabbed in ash and wipe it dry.

The glass in the stove is resistant to high temperatures, but it can break if it is cooled down too quickly. Be sure to wait until the stove has completely cooled down before cleaning with cleaning agents. Do not use the stove with broken glass. Have broken glass replaced by qualified personnel.

4.1.3 Cleaning of lacquered metal parts

Clean lacquered parts using a damp cloth. Do not use aggressive, corrosive or oil-based cleaning products, such as benzine and alcohol.

4.1.4 Cleaning the combustion chamber

It is important to vacuum out and empty the pellet stove on a regular basis. Use a vacuum cleaner suitable for ash extraction or a special ash vacuum cleaner.

4.1.5 Cleaning the pellet tank

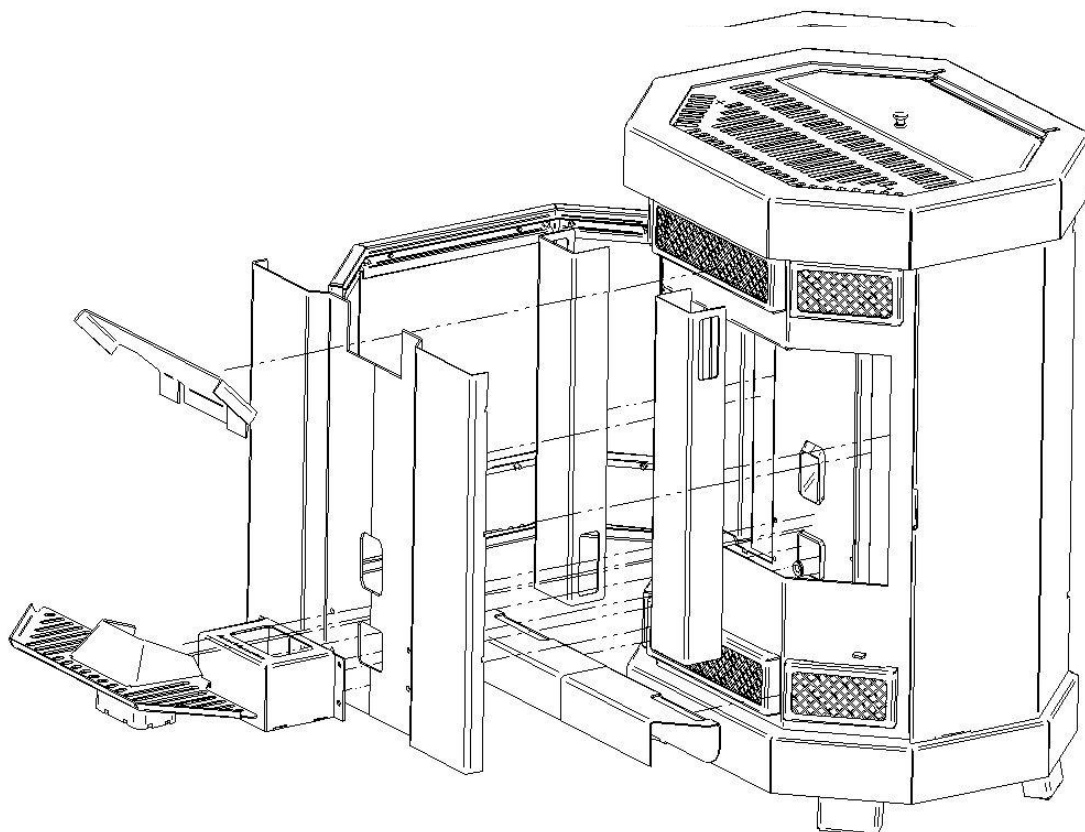
Clean your pellet tank every 3 months, depending on your pellets and consumption. If too much dust and sawdust accumulates at the bottom of the tank, the screw conveyor may be unable to load sufficient pellets or may get stuck, resulting in damage.

4.1.6 Maintenance schedule

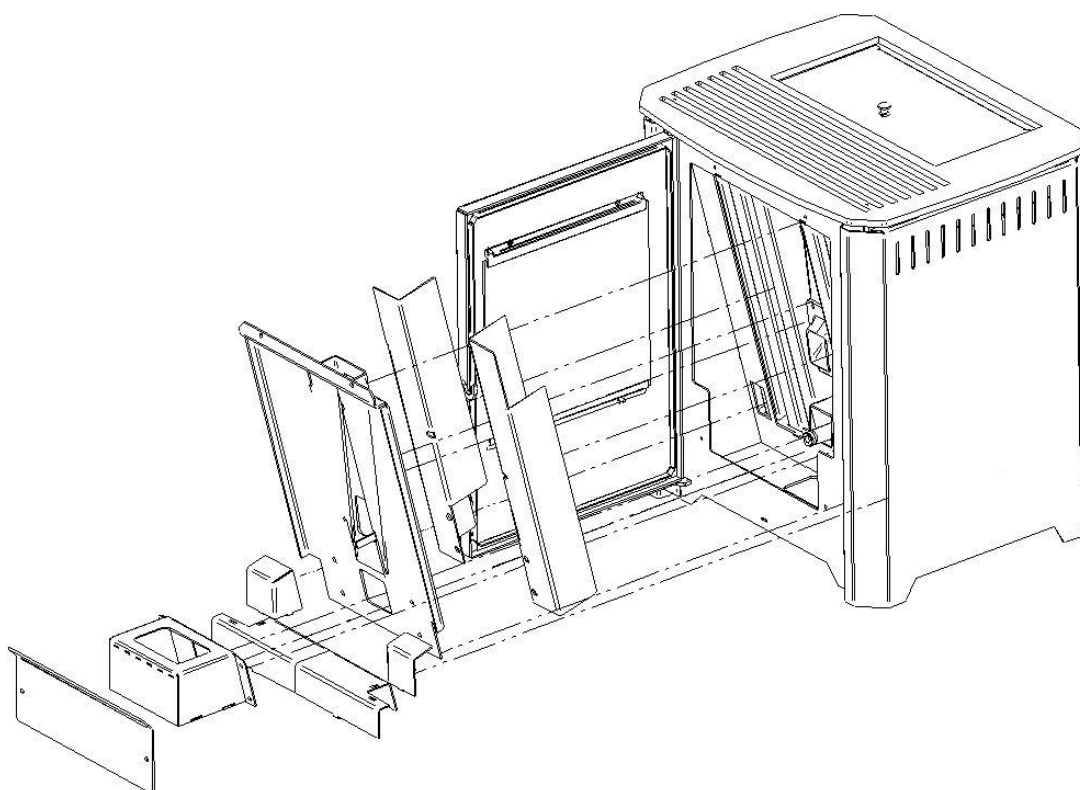
Parts/Period	Before each use	every 2 days	every 7 days	every 90 days	Annually & after 1200 burning-hours
Combustion pot	x				
Window		x			
Combustion chamber			x		
Flues/heat exchanger					x
Pellet tank				x	

4.2 Annual maintenance

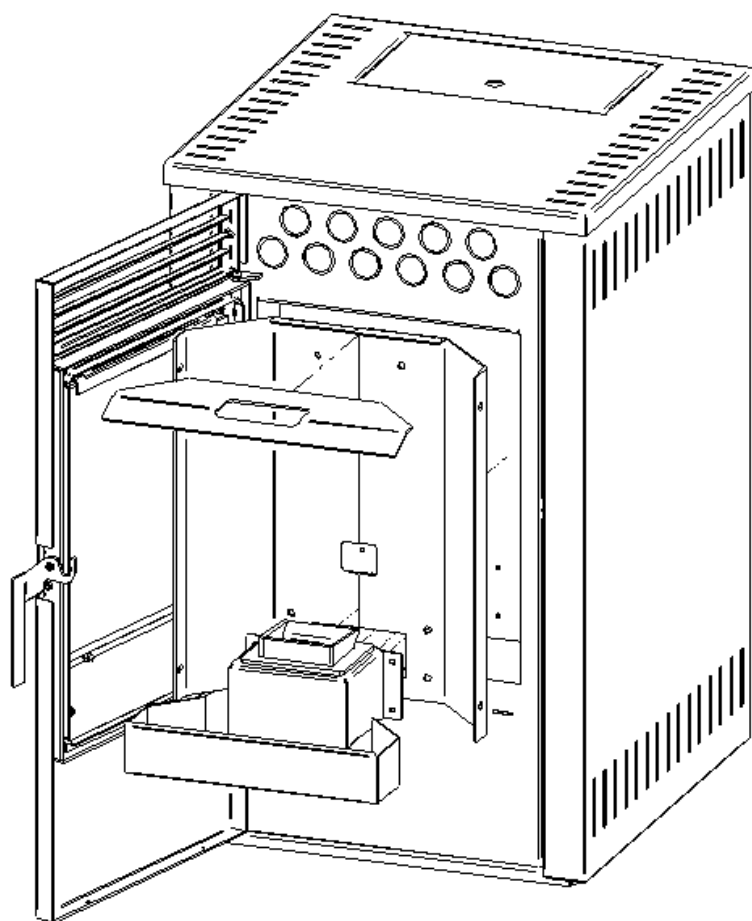
The pellet stove must undergo a complete service every year or after 1200 burning-hours to ensure the preservation of your stove and your personal safety. The stove must be completely disassembled and the heat exchanger and the flues cleaned. This is important to prevent the stove from becoming clogged with ash and dust. This annual maintenance must be carried out by qualified personnel. Below are the various models and the parts to be disassembled for cleaning the flues and heat exchanger.



4.2.1 Batavia T3



4.2.2 Rembrand T2 / Carré



4.2.3 Pelle / Rinus

5 Problems and solutions

5.1 No image

Nothing appears on the display screen. There may be various causes for this.

No power supply; check whether the outlet has power. Check the fuses in your house. Check for a break in the cable. Replace the power cord if there is a break in the cable. Check the fuse in the switch. The switch shows a picture of a fuse; this is the location of the fuse. Replace the fuse if it is broken.

If it has power supply, check the data cable between the printed circuit board and the display (refer to component 7.1.3 Data cable). Transport and relocation may cause this cable to come loose and make insufficient contact. Solve this by firmly pressing the plugs. If this does not solve the issue, it may be that the cable has broken.

5.2 No pellet supply

The stove does not supply pellets.

Possible causes include:

- One of the safety sensors is switched on, this may be the maximum thermostat (see component 7.1.7) or the pressure monitoring device (see component 7.1.6).
- The screw conveyor motor (see component 7.1.4) is defective.
- The screw conveyor (see component 7.1.5) is stuck or blocked.

5.3 No ignition

The stove uses the flue gas temperature sensor (component 7.1.12) to measure the temperature increase of the flue gases. If they do not rise quickly enough, the stove will cause this failure. A distinction must be made between ignition and no ignition.

The stove shows no ignition or fire.

Possible causes include:

- The glow plug is defective (see component 7.1.8 Glow plug)
- A lack of oxygen. This may have several causes:
 - The stove is clogged and needs maintenance (4.2 Annual maintenance)
 - The blower (7.1.9) does not rotate hard enough and does not exhaust sufficiently.
 - The house has excessive underpressure. Examples of causes include: insufficient ventilation, a mechanical central exhaust system or a cooker hood in the kitchen. You can check this by opening a window near the stove. If the stove burns well after opening a window, this demonstrates that there is too much underpressure in the house.

There is fire and ignition but the stove measures insufficient flue gas temperature.

Possible causes include:

- The flue gas temperature sensor (7.1.12) is defective.
- Ignition is taking too long. One solution is to increase the speed of the blower and the pellet supply (refer to 3.6.4).

5.4 The pellet stove becomes too hot

If the pellet stove becomes too hot, it malfunctions and indicates ERROR 6 (refer to 6.1.3) on the display. The maximum thermostat (refer to 7.1.7) will switch on. This may be caused by one of several reasons:

- The combustion is too hot. This may be caused by pellets with too much energy. The pellet supply (refer to 3.6.4) must be adjusted downwards.
- The blower (refer to 7.1.9) is unable to discharge sufficient flue gases and heat. Check that the combustion pot is clean. It may also be that the pellet stove requires maintenance.
- The pellet stove is covered. If the pellet stove is covered, it is unable to release heat.
- The convection fan is broken (refer to 7.1.10). You do not feel the stove blowing. This only applies to models with a convection fan.

5.5 It's becoming too hot in the house

The temperature in the house rises further than you have set. This may have several causes:

- The stove has too much power in P1. This usually is the cause and there is nothing wrong with the stove. You have set the stove at 20°C for example, but the temperature rises much further. Check whether the stove actually modulates back to P1. Keep in mind that a pellet stove produces about 3kW of heat in the lowest position. This means that in a small and/or well insulated room, the temperature will continue to rise as long as you leave the stove on. If you do not want the temperature to rise any further, make sure there is sufficient ventilation or switch the stove off.
- The room temperature sensor (7.1.13) is lying somewhere and therefore measures in the wrong place. If it is placed on the floor or against the wall, it measures the temperature of the wall or the floor instead of the room temperature.
- The room temperature sensor (7.1.13) malfunctions. If this is the case, the stove will not properly read the temperature and respond accordingly.

6 Fault reports and solutions



Reset the fault by pressing and holding the



ON/OFF button until you hear a

beep.

6.1.1 ERROR 1

This report appears if there is no ignition.
Refer to 5.3 No ignition.

6.1.2 ERROR 5

No pellets. The flue gas temperature is too low. Possible causes include:


- The tank is empty. Fill the tank with pellets.
- There is a defect, refer to 5.2 No pellet supply.

6.1.3 ERROR 6

This fault report has one of two causes:

- Component 7.1.6 Pressure monitoring device.
- Component 7.1.7 Maximum thermostat.

6.1.4 ERROR 8

This fault report is triggered if the current is interrupted when the stove is in the ignition, operating or cooling phase. You can reset this fault by pressing and holding the ON/OFF  button until you hear a beep.

Possible causes: refer to 5.1 No power supply.

6.1.5 ERROR 9

- This fault report appears if no rotations of the flue gas fan are measured. Check whether the fan rotates or not. You can rotate the fan using the component test (refer to 8.1.2)
- The blower does not rotate (component 7.1.9 Blower). Check that the fan is not blocked. Check the plugs and cables if the fan is not blocked.
- The fan is rotating. Check the encoder (7.1.11). This is the sensor that measures blower RPM. To check this, refer to (8.1.3)

6.1.6 'Service'

This report indicates that the stove has been burning for 1200 hours. The stove indicates this as a reminder that maintenance must be carried out. You can find the resetting of this report at (8.1.6).

7 Components

7.1 Explanation of the components

7.1.1 Printed circuit board

The printed circuit board or motherboard controls every stove component.

7.1.2 Control panel

The control panel or display is used to operate the stove.

7.1.3 Data cable

The data cable or flat cable connects the printed circuit board and the control panel.

7.1.4 Screw conveyor motor

The screw conveyor motor is attached to the bottom of the screw conveyor, also referred to as a worm. This is an electric motor with a transmission to 4 or 2 revolutions.

7.1.5 Screw conveyor

This is an axis with a spindle around it, which rotates at low RPM by means of the screw conveyor motor and raises the pellets.

7.1.6 Pressure monitoring device

The pressure monitoring device measures the counterpressure in the discharge. If the counterpressure is too high, the switch will switch over and the stove will malfunction, and the screw conveyor motor will not receive any power.

7.1.7 Maximum thermostat

The maximum thermostat monitors the maximum temperature of the pellet tank. As soon as it becomes too high, the thermostat will switch over and the stove will malfunction, and the screw conveyor motor will not receive any power.

You can reset the maximum thermostat by pressing the reset button, which is found at the back of the stove. Look for a black cap with a diameter of about 1 cm that can be unscrewed with a white button behind it. Press this button to reset the maximum thermostat.

7.1.8 Glow plug

The glow plug element starts glowing during ignition. It is located in the tube at the bottom of the combustion pot, at the back.

7.1.9 Blower

The blower extracts the flue gases from the stove. The blower creates an underpressure in the stove and blows the flue gases into the flue tube and oxygen is taken up through the combustion pot. The blower rotates at different speeds to realise proper combustion.

7.1.10 Convection fan

The convection fan blows air from the room through the heat exchanger to cool the pellet stove.

7.1.11 Encoder

This is a sensor that measures the blower's RPM. This is usually a black cap on top of the blower where a wheel rotates. Stoves with a continuously rotating screw conveyor motor have their encoder on the screw conveyor motor.

7.1.12 Flue gas temperature sensor

This is a sensor that measures the temperature of the flue gases, so the stove can determine the amount of fire in the stove.

7.1.13 Room temperature sensor

This is a sensor that measures room temperature. Based on this, the stove determines whether it should modulate. Make sure that this sensor is placed at a proper place. Do not place it directly on the floor or against a wall, where it will not be able to measure the ambient temperature but instead that of the floor or the wall.

8 Reset component test / service message

This is where you can test the components and read sensor values.

Enter this menu by pressing  SET and the power button  plus for more than 5 seconds.

The stove now displays 'TEST COMPONENTI'. Press SET .



You can test the components when the stove is switched off.

8.1.1 Testing the screw conveyor motor

Go to 'Motore Coclea' to test the screw conveyor motor (component 7.1.4). Press and hold SET to test whether this engine runs. This is also where you can read the RPM if the stove has a continuously running screw conveyor motor. It is indicated in 3 digits, but this is a factor of 10 (100RPM = 1000RPM). The RPM indicated is that of the electric motor, not that of the screw conveyor itself.

8.1.2 Testing the blower

Go to 'Aspiratore Fumi' to test the blower (component 7.1.9). Pressing SET should cause the fan to run at full power for as long as the button is pressed. You can also read the RPM here. Maximum RPM is approximately 2850. S=000 does not apply.

8.1.3 Testing the convection fan

This is where you test the convection fan (component 7.1.10), if present. Go to Vent. Ambiente, then press and hold SET. The fan will run at full power.

8.1.4 Testing the glow plug

Press and hold SET to test the glow plug. The plug should become hot.

8.1.5 Reading temperature sensors

Go to the display with 'Ta Tf Th'.



The value Ta indicates the measured ambient temperature.

The value Tf indicates the measured flue gas temperature.

The value Th does not apply.

8.1.6 Reading and resetting operating hours

Go to the screen with 'Ore Lav. Da Ass' to determine the number of hours your stove has been burning. Read the total amount of operating hours under Ore Lav. These hours cannot be reset. Find the hours you can reset under Da Ass. If this amount exceeds 1200, the pellet stove displays a service message. Following maintenance, reset the service message in this menu as follows;

simultaneously press and hold both   **temperature buttons** until the hours jump to 00000.

The service message disappears from the display.


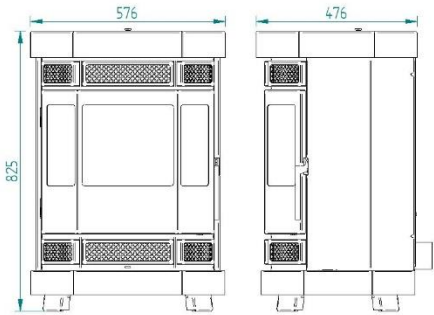





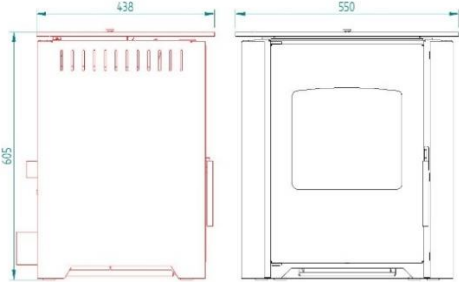


Note! Press the right buttons! Simultaneously pressing the power buttons will cause the parameters to reset to the settings of the software manufacturer. These settings are completely different from the pellet stove parameters.


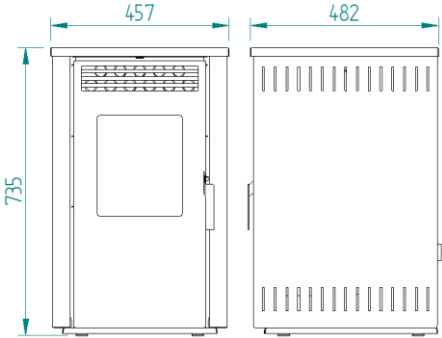


8.1.7 Reading the fire cycle


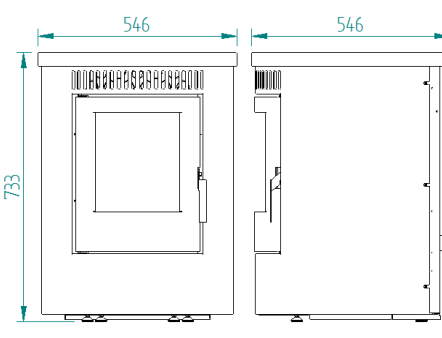


Read the current operating position of the stove and the duration of the cycle involved here. Go to the 'Vc Vf Va Pi Time' screen. This is where you can read the P position (related to P1 to 5; refer to 3.4.2) at which the stove currently operates.


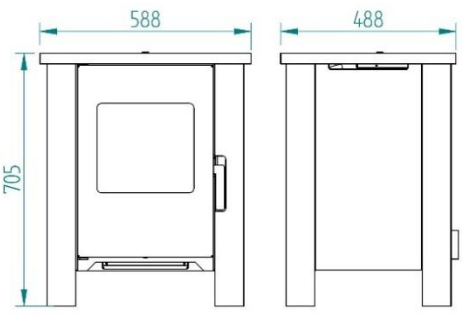


9 Technical specifications

DUROFLAME		
Batavia T3 		
Pelletkachel bestemd voor gebruik in huiselijke ruimtes.		
		
Afstand tot aangrenzende brandbare materialen:		
Voorzijde: 100 cm	Zijkanten: 30cm	Achterzijde: 20cm
Prestaties	Nominaal	Minimaal
Vermogen	7.9kW	2.2kW
Rendement	90.8%	94.8%
Rookgastemp.	123°C	39°C
Verbruik	174KG	0.47KG
Stroomverbruik	0,054kW	0,018kW
CO bij 13% O ₂	216 mg/Nm ³	413 mg/Nm ³
NO _x bij 13% O ₂	164 mg/Nm ³	147 mg/Nm ³
C _x H _y bij 13% O ₂	6 mg/Nm ³	11mg/Nm ³
Stof bij 13% O ₂	16 mg/Nm ³	17 mg/Nm ³
Gewicht		1015kg
Max. stroomverbruik		420W
Netspanning		230 V - 50Hz
Rookgasafvoer		80mm
Luchtinlaat		50mm
Materiaal, maximale afmetingen en vochtgehalte pellets		Hout, Ø7mm, Lengte: 30mm, Vocht <12%
Gebruik alleen aanbevolen brandstof.		
Elektronische sturing inclusief wektijdschakelaar.		
Lees voor gebruik de handleiding.		
 		
EN-14785-2006		
Notified Body: SGS Nederland BV (N.B. 0608)		
Rapport: EZKA/2018-01/00003-1		
Made in Holland		
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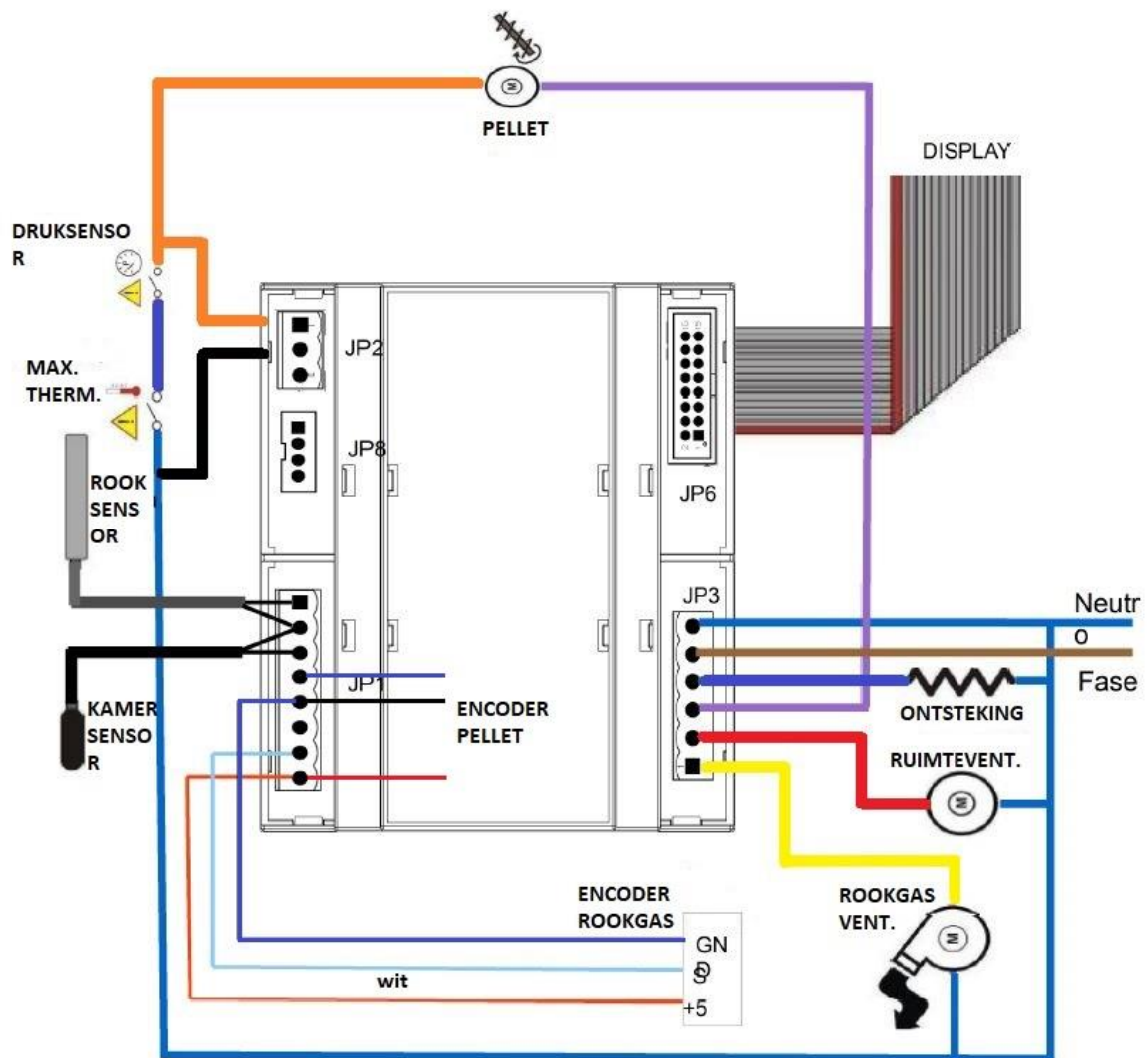
DUROFLAME		
Rembrand T2 		
Pelletkachel bestemd voor gebruik in huiselijke ruimtes.		
		
Afstand tot aangrenzende brandbare materialen:		
Voorzijde: 100 cm	Zijkanten: 15cm	Achterzijde: 20cm
Prestaties	Nominaal	Minimaal
Vermogen	5,8kW	2,5kW
Rendement	89,7%	95,4%
Rookgastemp.	126°C	47°C
Verbruik	130KG	0.53KG
Stroomverbruik	0,024kW	0,019kW
CO bij 13% O ₂	237 mg/Nm ³	529 mg/Nm ³
NO _x bij 13% O ₂	157 mg/Nm ³	134 mg/Nm ³
C _x H _y bij 13% O ₂	5 mg/Nm ³	14 mg/Nm ³
Stof bij 13% O ₂	17 mg/Nm ³	53 mg/Nm ³
Gewicht		83kg
Max. stroomverbruik		420W
Netspanning		230 V - 50Hz
Rookgasafvoer		80mm
Luchtinlaat		40mm
Materiaal, maximale afmetingen en vochtgehalte pellets		Hout, Ø7mm, Lengte: 30mm, Vocht <12%
Gebruik alleen aanbevolen brandstof.		
Elektronische sturing inclusief wektijdschakelaar.		
Lees voor gebruik de handleiding.		
 		
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Notified Body: SGS Nederland BV (N.B. 0608)		
Rapport: EZKA/2018-01/00003-2		
Made in Holland		
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DUROFLAME		
Pelle 		
Pelletkachel bestemd voor gebruik in huiselijke ruimtes.		
		
Afstand tot aangrenzende brandbare materialen:		
Voorzijde: 80 cm	Zijkanten: 15cm	Achterzijde: 20cm
Prestaties	Nominaal	Minimaal
Vermogen	7,3 kW	3,4kW
Rendement	85,7%	85,7%
Rookgastemp.	195°C	103°C
Verbruik	1,7KG	0,79KG
Stroomverbruik	0,058kW	0,025kW
CO bij 13% O ₂	186 mg/Nm ³	460 mg/Nm ³
NO _x bij 13% O ₂	142 mg/Nm ³	125 mg/Nm ³
CxHy bij 13% O ₂	9 mg/Nm ³	30 mg/Nm ³
Stof bij 13% O ₂	18 mg/Nm ³	24 mg/Nm ³
Gewicht		55,5 kg
Max. stroomverbruik		420W
Netspanning		230 V - 50Hz
Rookgasafvoer		80mm
Luchtinlaat		50mm
Materiaal, maximale afmetingen en vochtgehalte pellets		Hout, Ø7mm, Lengte: 30mm, Vocht <12%
Gebruik alleen aanbevolen brandstof.		
Elektronische sturing inclusief wektijdschakelaar.		
Lees voor gebruik de handleiding.		
 		
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Notified Body: SGS Nederland BV (N.B. 0608)		
Rapport: EZKA/2017-02/00031-1		
Made in Holland		
Verbindingsweg 35, 9781DA, Bedum		

DUROFLAME		
Rinus 		
Pelletkachel bestemd voor gebruik in huiselijke ruimtes.		
		
Afstand tot aangrenzende brandbare materialen:		
Voorzijde: 100 cm	Zijkanten: 15cm	Achterzijde: 20cm
Prestaties	Nominaal	Minimaal
Vermogen	7,3 kW	3,4kW
Rendement	85,7%	85,7%
Rookgastemp.	195°C	103°C
Verbruik	1,7KG	0,79KG
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CO bij 13% O ₂	186 mg/Nm ³	460 mg/Nm ³
NO _x bij 13% O ₂	142 mg/Nm ³	125 mg/Nm ³
CxHy bij 13% O ₂	9 mg/Nm ³	30 mg/Nm ³
Stof bij 13% O ₂	18 mg/Nm ³	24 mg/Nm ³
Gewicht		55 kg
Max. stroomverbruik		420W
Netspanning		230 V - 50Hz
Rookgasafvoer		80mm
Luchtinlaat		50mm
Materiaal, maximale afmetingen en vochtgehalte pellets		Hout, Ø7mm, Lengte: 30mm, Vocht <12%
Gebruik alleen aanbevolen brandstof.		
Elektronische sturing inclusief wektijdschakelaar.		
Lees voor gebruik de handleiding.		
 		
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Notified Body: SGS Nederland BV (N.B. 0608)		
Rapport: EZKA/2017-02/00031-1		
Made in Holland		
Verbindingsweg 17, 9781DA, Bedum		

DUROFLAME		
Carré 		
Pelletkachel bestemd voor gebruik in huiselijke ruimtes.		
		
Afstand tot aangrenzende brandbare materialen:		
Voorzijde: 80 cm	Zijkanten: 15cm	Achterzijde: 20cm
Prestaties	Nominaal	Minimaal
Vermogen	5,8kW	2,5kW
Rendement	89,7%	95,4%
Rookgastemp.	126°C	47°C
Verbruik	130KG	0.53KG
Stroomverbruik	0,024kW	0,019kW
CO bij 13% O ₂	237 mg/Nm ³	529 mg/Nm ³
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C _x H _y bij 13% O ₂	5 mg/Nm ³	14 mg/Nm ³
Stof bij 13% O ₂	17 mg/Nm ³	53 mg/Nm ³
Gewicht		83kg
Max. stroomverbruik		420W
Netspanning		230 V - 50Hz
Rookgasafvoer		80mm
Luchtinlaat		40mm
Materiaal, maximale afmetingen en vochtgehalte pellets		Hout, Ø7mm, Lengte: 30mm, Vocht <12%
Gebruik alleen aanbevolen brandstof.		
Elektronische sturing inclusief weektijschakelaar.		
Lees voor gebruik de handleiding.		
 		
EN-14785-2006		
Notified Body: SGS Nederland BV (N.B. 0608)		
Rapport: EZKA/2018-01/00003-2		
Made in Holland		
Verbindingsweg 17, 9781DA, Bedum		

10 Electrical diagram



11 Combustion cycles

This section describes the cycles the pellet stove goes through during the various combustion phases and which parameters are addressed.

Preheating/cleaning

Time par. 29/30

During this phase, the glow plug starts to glow and the combustion pot is cleaned

Supplying pellets/oxygen

Time par. 40

Pellet supply position par. 25

Blower par. 55

During this phase, pellets are added until fire is measured in the combustion pot.

Stabilisation

Delta T °C par. 35

Stabilisation time par. 59

Stabilisation power par. 107

Once the flue gas temperature has risen (delta T), the stove enters its stabilisation phase and fewer pellets are added.

In operation

Pellet supply par. 1-5

Space fan par. 8-12

Blower par. 14-18

Max. flue gas temperature °C par. 20-24

The pellet stove is now in operation. Once the maximum flue gas temperature is reached, the pellet supply switches back to positions (P4 through P1).

Cleaning

Time cycle par. 33-34

Time cleaning par. 31-32

Pellet supply position par. 26

During cleaning, the combustion pot is blown clean.

In operation

Switching off

Temp. Cool down °C par. 36

Cleaning time min. par. 37

Flue gas vent. stand par. 42

During cooling, the temperature drops to the set temperature. After that, the blower still runs after the set time.

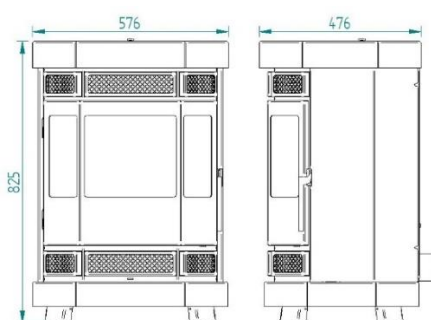
EU declaration of conformity

Product: Batavia T3

Manufacturer: Duroflame BV
Verbindingsweg 17
9781 DA Bedum
The Netherlands

This declaration of conformity shall be issued under the full responsibility of the manufacturer.

Product description: Batavia T3 pellet stove for domestic use.

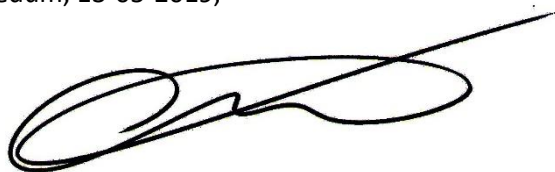


The object described above is in accordance with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Standards to which conformity is declared: NEN-EN 14785:2006, Annex ZA: Household heating appliances fired with pressed wood.
Commission regulation (EU) 2015/1185

Approved laboratory which carried out the initial type of tests: SGS Nederland B.V.
Leemansweg 51
6827BX Arnhem
The Netherlands
Notified Body 0608
Rapport EZKA/2018-01/00003-1

Bedum, 13-05-2019,



Aldrik Sebens
Director Duroflame BV

EU declaration of conformity

Product: Carré

Manufacturer: Duroflame BV
Verbindingsweg 17
9781 DA Bedum
The Netherlands

This declaration of conformity shall be issued under the full responsibility of the manufacturer.

Product description: Carré pellet stove for domestic use

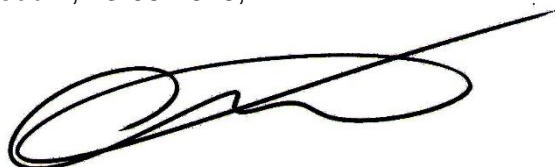


The object described above is in accordance with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Standards to which conformity is declared: NEN-EN 14785:2006, Annex ZA: Household heating appliances fired with pressed wood.
Commission regulation (EU) 2015/1185

Approved laboratory which carried out the initial type of tests: SGS Nederland B.V.
Leemansweg 51
6827BX Arnhem
The Netherlands
Notified Body 0608
Rapport EZKA/2018-01/00003-2

Bedum, 13-05-2019,



Aldrik Sebens

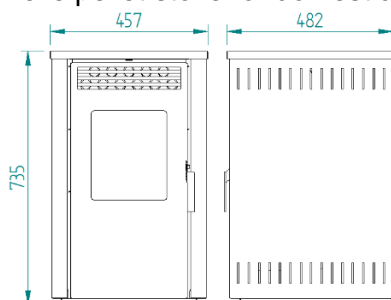
EU declaration of conformity

Product: Pelle

Manufacturer: Duroflame BV
Verbindingsweg 17
9781 DA Bedum
The Netherlands

This declaration of conformity shall be issued under the full responsibility of the manufacturer.

Product description: Pelle pellet stove for domestic use.



The object described above is in accordance with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Standards to which conformity is declared: NEN-EN 14785:2006, Annex ZA: Household heating appliances fired with pressed wood.
Commission regulation (EU) 2015/1185

Approved laboratory which carried out the initial type of tests: SGS Nederland B.V.
Leemansweg 51
6827BX Arnhem
The Netherlands
Notified Body 0608
Rapport EZKA/2017-02/00031-1

Bedum, 13-05-2019,



Aldrik Sebens
Director Duroflame BV

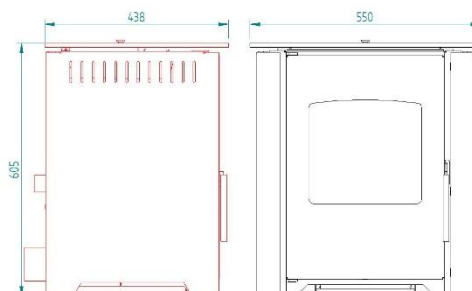
EU declaration of conformity

Product: Rembrand T2

Manufacturer: Duroflame BV
Verbindingsweg 17
9781 DA Bedum
The Netherlands

This declaration of conformity shall be issued under the full responsibility of the manufacturer.

Product description: Rembrand T2 pellet stove for domestic use.

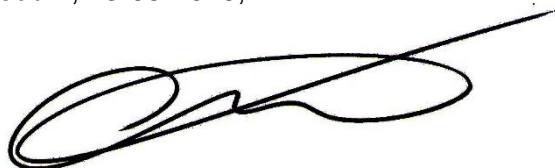


The object described above is in accordance with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Standards to which conformity is declared: NEN-EN 14785:2006, Annex ZA: Household heating appliances fired with pressed wood.
Commission regulation (EU) 2015/1185

Approved laboratory which carried out the initial type of tests: SGS Nederland B.V.
Leemansweg 51
6827BX Arnhem
The Netherlands
Notified Body 0608
Rapport EZKA/2018-01/00003-2

Bedum, 13-05-2019,



Aldrik Sebens
Director Duroflame BV

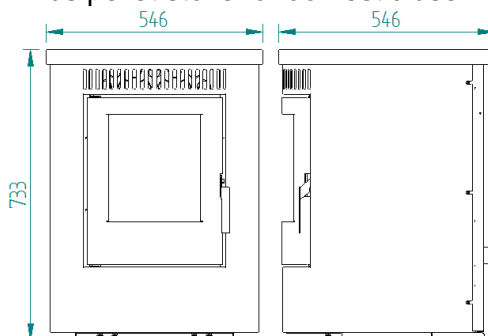
EU declaration of conformity

Product: Rinus

Manufacturer: Duroflame BV
Verbindingsweg 17
9781 DA Bedum
The Netherlands

This declaration of conformity shall be issued under the full responsibility of the manufacturer.

Product description: Rinus pellet stove for domestic use.



The object described above is in accordance with Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Standards to which conformity is declared: NEN-EN 14785:2006, bijlage ZA: Huishoudelijke ruimteverwarmingstoestellen gestookt met geperst hout
Commission regulation (EU) 2015/1185

Approved laboratory which carried out the initial type of tests: SGS Nederland B.V.
Leemansweg 51
6827BX Arnhem
The Netherlands
Notified Body 0608
Rapport EZKA/2017-02/00031-1

Bedum, 13-05-2019,



Aldrik Sebens
Director Duroflame BV

