



OPERATING INSTRUCTIONS 

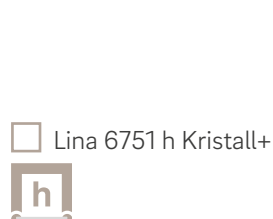
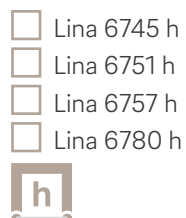
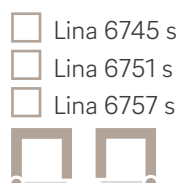
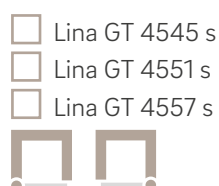
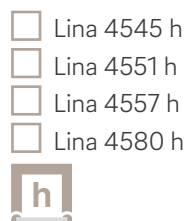
Fireplace insert

LINA 45-120

LINA TV 45-120

Camina  Schmid

Lina models



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The contents of the operating instructions are assessed as being factually correct at the time of publication, but are subject to updates and modifications to rectify faults or reflect design changes.

- ☐ Lina 7345 h
- ☐ Lina 7351 h
- ☐ Lina 7357 h
- ☐ Lina 7363 h



- ☐ Lina 7351 h Kristall+
- ☐ Lina 7363 h Kristall+



- ☐ Lina GT 7363 h Kristall+



- ☐ Lina 8745 h
- ☐ Lina 8751 h
- ☐ Lina 8757 h
- ☐ Lina 8770 h



- ☐ Lina 8751 h Kristall+
- ☐ Lina 8757 h Kristall+



- ☐ Lina 10045 h
- ☐ Lina 10051 h
- ☐ Lina 10057 h



- ☐ Lina 10051 h Kristall+



- ☐ Lina 12045 h
- ☐ Lina 12051 h
- ☐ Lina 12057 h



Lina TV models

- ☐ Lina TV 4545 s/s
- ☐ Lina TV 4551 s/s
- ☐ Lina TV 4557 s/s



- ☐ Lina TV 4545 h/s
- ☐ Lina TV 4551 h/s
- ☐ Lina TV 4557 h/s
- ☐ Lina TV 4580 h/s



- ☐ Lina TV 5545 s/s
- ☐ Lina TV 5551 s/s
- ☐ Lina TV 5557 s/s



- ☐ Lina TV 5545 h/s
- ☐ Lina TV 5551 h/s
- ☐ Lina TV 5557 h/s
- ☐ Lina TV 5580 h/s



- ☐ Lina TV 6745 s/s
- ☐ Lina TV 6751 s/s
- ☐ Lina TV 6757 s/s



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- ☐ Lina TV 6751 h/k Kristall+



- ☐ Lina TV 8745 h/s
- ☐ Lina TV 8751 h/s
- ☐ Lina TV 8757 h/s



- ☐ Lina TV 8751 h/k Kristall+



- ☐ Lina TV 10045 h/s
- ☐ Lina TV 10051 h/s
- ☐ Lina TV 10057 h/s



- ☐ Lina 10051 TV h/k Kristall+



- ☐ Lina TV 12045 h/s
- ☐ Lina TV 12051 h/s
- ☐ Lina TV 12057 h/s



Scope of delivery

- Service box with operating and installation instructions, heat protective glove, tensioning key (depending on model front), fireplace glass cleaner, stove paint, long adjustable feet (depending on model)

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1. Safety

1.1 About these instructions

These are original installation instructions in English. Fireplace inserts have been designed in line with the state of the art and recognised safety regulations. These operating instructions are intended to help you use this heating technology safely and properly. Compliance with these operating instructions will ensure your safety and is the prerequisite for correct operation and environmentally-friendly operation. These instructions are intended for anyone that handles this appliance.

Only use the product if it is in a perfectly safe state and in a correct and proper way. The manufacturer's warranty will be invalidated and any claim voided in the event of incorrect operation and by using other fuels than the fuels listed.

1.2 Warnings

1.2.1 Symbols



The "CAUTION" symbol indicates potential hazards for people.



The "i" symbol indicates important information.



The "Prohibited" symbol indicates things you must refrain from doing. Failure to comply with these instructions may result in all the manufacturer's warranties and liability claims being invalidated.



The "Refer to the instructions" symbol indicates that operating regulations must be complied with.

1.2.2 Personal injury

Warning notes signalled by the "CAUTION" symbol provide information about possible residual hazards to people that can arise when working with this appliance. Signal words also highlight the nature and severity of the hazard.

DANGER

DANGER – signals an imminent danger that could lead to severe injuries or even fatal injury.

WARNING

WARNING – signals a possible hazardous situation that could lead to severe injuries or even fatal injury.

CAUTION

CAUTION – signals a possible hazardous situation that could lead to minor injuries.

1.2.3 Material damage

Warnings signal possible residual dangers that could lead to material damage to the fireplace inserts or the environment when handling fireplace inserts.

NOTICE

NOTICE – signals a possible hazardous situation that could lead to material damage and damage to the environment.

1.3 Safety instructions

SAFETY INSTRUCTION

SAFETY INSTRUCTION – provides important information relating to the safe use of this product and indicates possible dangers. It provides information on how dangers can be avoided.

1.4 Important information



Information indicated by the "i" symbol provides useful information that could simplify your handling of the fireplace inserts.

1.5 Target groups

1.5.1 Operator

The operator is the owner and user of the heating technology or the person to whom the technical operation of this appliance has been transferred. The operator has an obligation to find out about the safe and proper operation and maintenance of the fireplace insert and use the product in a safe and proper condition.

1.5.2 Technician

A person is referred to as a technician who is suitable to plan and build a fireplace on account of his technical and safety-related training and practical experience. Their tasks also include maintenance, repair and inspection of the fireplace insert.

1.6 Standards and regulations

National and local regulations need to be adhered to when connecting and operating the fireplace. Local, fire and construction regulations and VDE regulations apply.



More information can be found in the attached installation instructions.

1.7 CE marking and serial plate

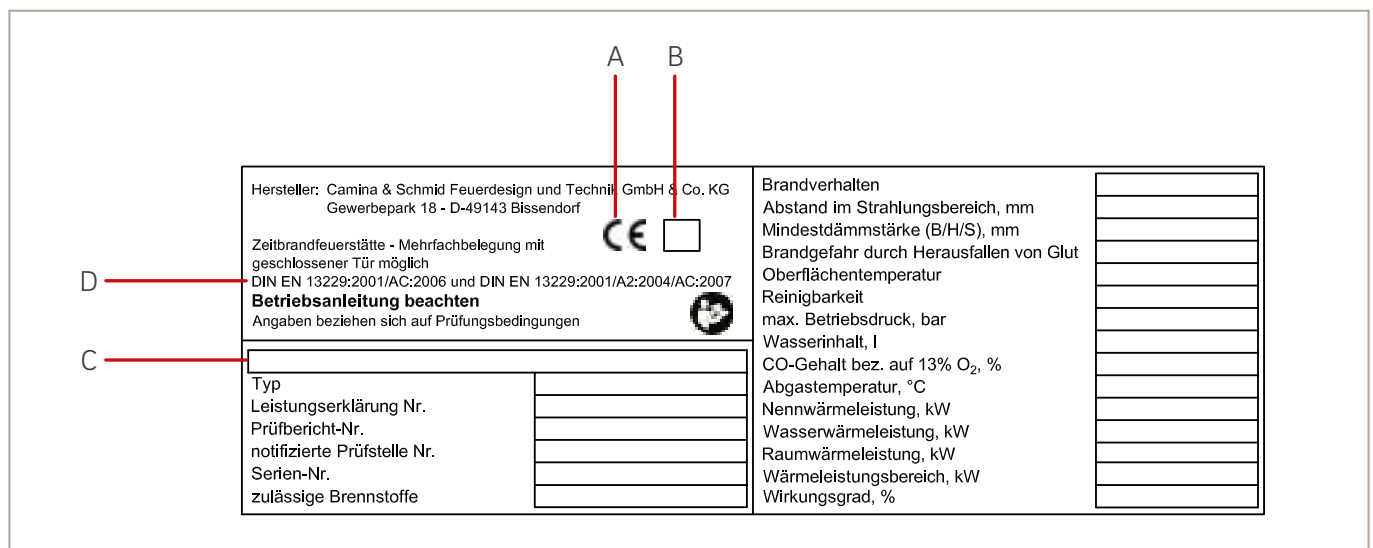
Fireplace inserts conform to European directives and supplementary national requirements. The CE marking on the serial plate of the appliance indicates that the manufacturer Camina & Schmid Feuerdesign und Technik GmbH & Co. KG, confirms that the product conforms to its declared performance.

You can request a copy of the Declaration of Performance for the product in accordance with (EU) 305/2011:

From your dealer/importer or

E-mail: info@camina-schmid.de

Website: www.camina-schmid.de/leistungserklaerungen



Hersteller: Camina & Schmid Feuerdesign und Technik GmbH & Co. KG Gewerbepark 18 - D-49143 Bissendorf	Brandverhalten Abstand im Strahlungsbereich, mm	
Zeitbrandfeuerstätte - Mehrfachbelegung mit geschlossener Tür möglich DIN EN 13229:2001/AC:2006 und DIN EN 13229:2001/A2:2004/AC:2007	Mindestdämmstärke (B/H/S), mm Brandgefahr durch Herausfallen von Glut	
Betriebsanleitung beachten Angaben beziehen sich auf Prüfungsbedingungen	Oberflächentemperatur Reinigbarkeit	
Typ	max. Betriebsdruck, bar Wasserinhalt, l	
Leistungserklärung Nr.	CO-Gehalt bez. auf 13% O ₂ , %	
Prüfbericht-Nr.	Abgastemperatur, °C	
notifizierte Prüfstelle Nr.	Nennwärmeleistung, kW	
Serien-Nr.	Wasserwärmeleistung, kW	
zulässige Brennstoffe	Raumwärmeleistung, kW	
	Wärmeleistungsbereich, kW	
	Wirkungsgrad, %	

Fig. 1: Serial plate

No.	Type
A	CE marking as per (EC) No. 765/2008
B	Year in which the CE marking was attached for the first time
C	Intended use
D	Source of the harmonised standard

i The information on the serial plate is used to uniquely identify the appliance.

The serial plate is located on the base of the body with appliances with ash box.



Fig. 2: Example of serial plate on the base of the body

Components:

A = Ash box

B = Serial plate on the base of the body

1.8 Correct and proper use

1.8.1 Fireplace inserts

The fireplace inserts are part-time operation fireplaces in compliance with EN 13229. They may only be operated as individual room heaters (stoves). Other uses – such as their use as the sole heating system for all rooms – are not permitted.

The fireplace inserts are used to heat the room air. They are primarily used for the heating of single rooms and may only be operated within these rooms.

1.8.2 Fuels

The fireplace inserts may only be operated with natural, air-dried wood with a residual moisture content of up to 20 % or pellets made of natural wood according to ISO 17225-3. The use of other fuels is not permitted.

1.8.3 Combustion air supply

The presence of oxygen is required for the combustion process. The fireplace inserts are designed and constructed as room air-dependent fireplaces. Supply air is fed to the unit through an opening in the lower part of the appliance. Ensure an adequate combustion air supply to ensure an optimum combustion process when designing, installing and operating the fireplace inserts.

Refer to chapter 12 "Technical data" for information on the combustion air requirement of the individual appliance types.

1.8.4 Closed operation

Only operate fireplace inserts with the door closed. When in operation, only open the door briefly to load and insert fuel. Keep all doors and adjustment devices closed when fireplace inserts are not in operation.

1.8.5 Multiple flue connections

Refer to chapter 12 "Technical data" regarding the suitability of the fireplace inserts if more than one fireplace is connected to the same chimney. The information regarding closed operation specifically applies in this case. If all the doors and adjustment devices are open, it can lead to functional faults on other fireplaces connected to the chimney.

1.8.6 Cleaning, maintenance and troubleshooting

Comply with cleaning and maintenance intervals and immediately rectify faults. These measures are part of correct and proper use!

1.9 For your safety!

DANGER

Failure to observe the safety instructions may result in serious personal injury as well as damage to property and the environment.



Follow the instructions

Carefully read through these operating instructions before using the fireplace! Keep them in a safe place!

SAFETY INSTRUCTION

For technicians:

The attached installation instructions include information on the safe and proper design, assembly and installation of the product!

SAFETY INSTRUCTION

Operating errors can result in personal injury and/or damage to property!

Make sure that only people who are capable of using the fireplace correctly have access to it! Never leave children unattended with the fireplace! Make sure that children remain a sufficient safety distance from the fireplace when it is working!



Never modify the appliance!

Modifications to the appliance can cause significant disruptions to its function!

This can cause material damage and consequently cause a danger to people!

Only use original spare parts!

⚠ CAUTION

Risk of explosion!

High temperatures are produced in front of the fireplace, which could heat up explosive materials!
Never lay and/or store explosive materials close to the fireplace when it is in operation.
Maintain a safe distance from the fireplace!

⚠ WARNING

Risk of fire!

High temperatures are produced in front of and at the fireplace. Sparks can also jump out when the door is open. Keep the door closed when the fireplace is in operation! Only open the door briefly to load or reload fuel!
Never lay and/or store combustible materials close to the fireplace when it is in operation!
Do not place combustible objects on hot surfaces.
Maintain a safe distance from the fireplace!
Refer to chapter 1.11 "Fire protection" for information on the safety distances.

⚠ WARNING

Hazardous gases!

Toxic smoke and heating gas can escape when the stove door is opened due to the strong degassing process with solid fuels and in conjunction with an inadequate flue liner. Keep the door closed when the fireplace is in operation! Only open the door briefly to load or reload fuel!
Make sure that doors with self-closing function always need to be manually locked!
Only operate fireplace inserts with closed doors!

⚠ WARNING

Hazardous gases!

The chimney draught can be lower than required specifically during transition times (e.g. autumn or spring) or in bad weather (e.g. fog, strong wind etc.). Keep the door closed when the fireplace is in operation! Make sure that doors with self-closing function always need to be manually locked!
Check the heating technology and chimney before the start of the heating period!

⚠ WARNING

Hazardous gases!

Fireplace inserts are room air-dependent fireplaces. When simultaneously operating appliances, such as air extraction systems (e.g. ventilation systems, extractor fan hoods), the required draught of the chimney can be negatively influenced!
Ensure a supply of combustion air and fresh air!
Ensure adequate ventilation in the locations of the fireplace!
Check the heating technology and chimney before the start of the heating period!

⚠ CAUTION

Hot surfaces!

Risk of burning by touching hot surfaces!
The front of the fireplace insert warms up considerably during the heating operation.
Door, handles and parts of the fireplace become hot during operation.
Maintain a safe distance from the fireplace!
Always use the heat protective glove provided (see Service Box) before working with the fireplace – such as reloading fuel!

⚠ SAFETY INSTRUCTION

Risk of burns from flames and hot gases!

Flames are produced on the fuel as well as hot gases in the firebox of the appliance during the combustion process. Operate the fireplace in such a way that there is no direct contact with the flame and/or hot gases.

⚠ SAFETY INSTRUCTION

Comply with cleaning and maintenance intervals and immediately rectify faults.

1.10 Behaviour in the event of an emergency

1.10.1 In the event of a fire

Correct behaviour in the event of a fire:

1. Never put yourself or other people's lives in danger!
2. Warn other people!
3. Shut down the fireplace if possible!
4. Call the fire service!

1.10.2 In the event of a chimney fire

⚠ SAFETY INSTRUCTION

Temperatures above 1,000 °C can be produced in the event of a chimney fire.

Never use water to put out the fire as there can be explosive vapours and their volume can be increased considerably (10 l water produces 17,000 l steam).

Soot deposits in the chimney can catch fire. They are caused by the use of wood that is too wet or inadequate cleaning of the chimney.

Correct behaviour in the event of a chimney fire:

1. Reduce the combustion air supply!
2. Call the fire service!
3. Remove combustible materials (e.g. furniture) up the full height of the chimney.
4. Provide access to the cleaning openings (e.g. basement and loft).

Before lighting the fireplace again:

1. Inform a technician/chimney sweep and check the chimney for damage.
2. Determine the cause of the chimney fire with the technician/chimney sweep and rectify it.

1.11 Fire protection

Comply with all state building regulations, fire regulations, administrative and insurance-related regulations applicable at the installation site. National and local regulations need to be complied with. Should there not be fire protection regulations in the country of installation, then we would recommend adhering to the "Regulations governing fireplace and air heating construction" (TROL).

1.11.1 Floor in front of the fire box opening

Floors made of combustible materials need to be protected by a covering of non-combustible material in front of all fire box openings. The covering needs to extend a minimum of 500 mm to the front and a minimum of 300 mm beyond the fire box opening. There is no need for floor protection in front of fire box openings that are only opened for cleaning and maintenance, when operated as intended.

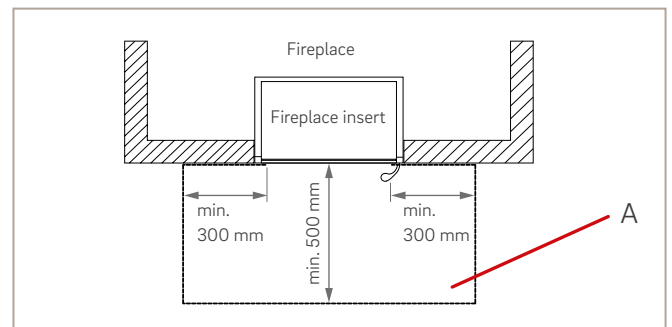


Fig. 3: Protection of the floor in the area in front of the fire box opening, Lina, Lina TV

Description:

A = Non-combustible floor covering

1.11.2 Parts made of combustible materials

1.11.2.1 Within the radiation range

Adhere to the following safety distances with regard to parts made of combustible materials or combustible parts, including fitted furniture, installed close to fireplaces: There needs to be a spacing of at least 800 mm from the front/top and sides of the fire box opening to combustible components.

A distance of 400 mm is enough if a radiation shield is fitted, vented on both sides. The distance of the ventilated radiation protection needs to be at least 20 mm.

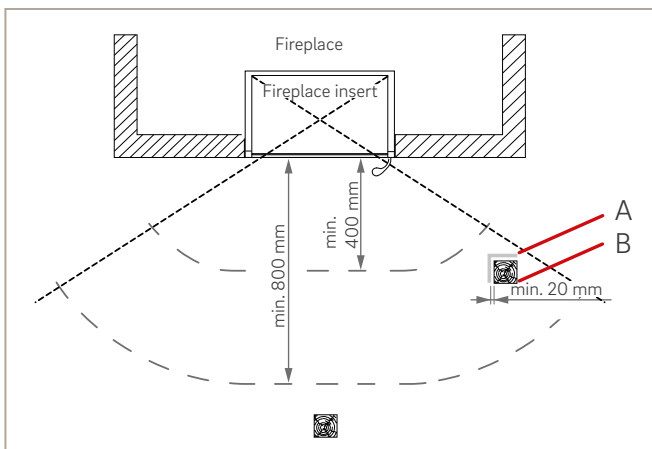


Fig. 4: Protection of combustible components in the radiation range in front of the fire box opening, Lina, Lina TV

Description:

A = Ventilated radiation protection

B = Parts made of combustible materials, furniture, fabrics

1.11.2.2 Outside the radiation range

Ensure the following safety distances with regard to parts made of combustible materials or combustible parts, including fitted furniture:

There needs to be a minimum distance of 50 mm from the free outside surfaces of the surrounding facing the location of the fireplace to combustible materials or combustible components and fitted furniture.

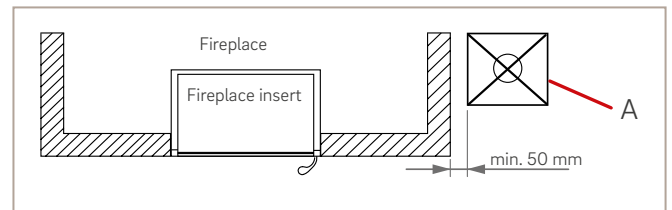


Fig. 5: Protection and distances with heated surfaces, Lina, Lina TV

Description:

A = Parts made of combustible materials, furniture, fabrics

2. Product information

2.1 Installation of Lina/Lina TV hinged door

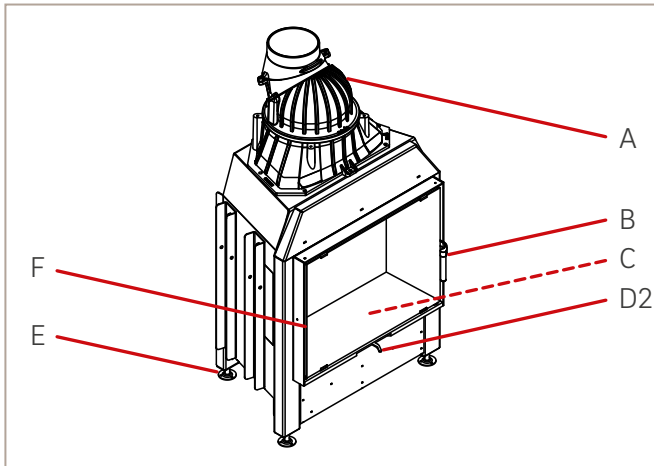


Fig. 6: Showing Lina 6751 s

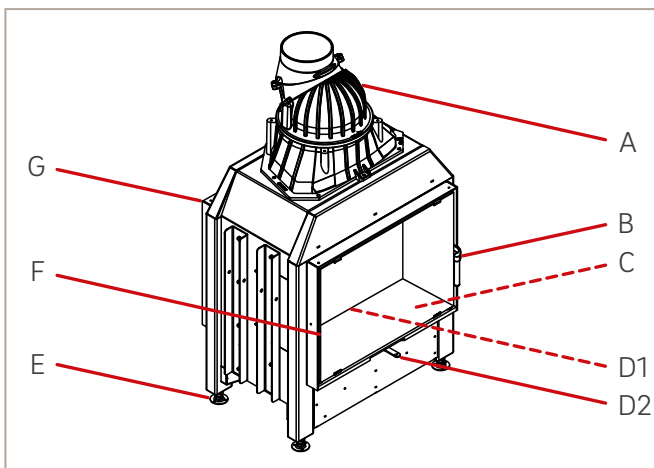



Fig. 7: Showing Lina TV 6751 s/s

Components:

- A = Cast-iron dome
- B = Door handle, hinged door
- C = Fire box inner lining
- D1 = "Combustion air" lever
- D2 = "Combustion air" lever
- E = Adjustable foot M16
- F = Hinged door with vitroceramic window
- G = Rear hinged door

 Further information on the appliance types can be found in chapter 12 "Technical data".

 Example of construction – other types are similar.

2.2 Installation of Lina/Lina TV guillotine door

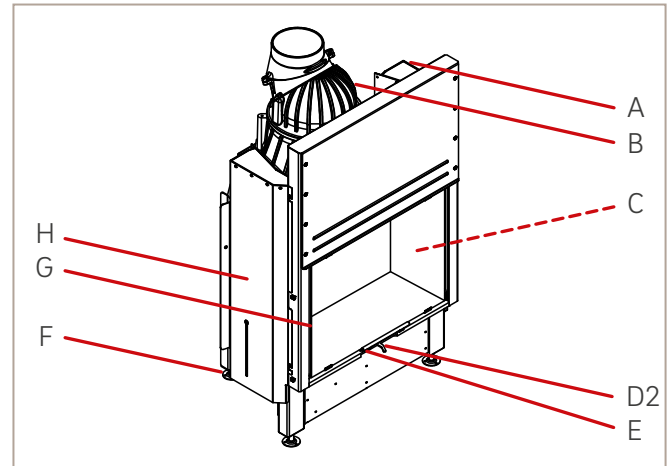


Fig. 8: Showing Lina 6751 h

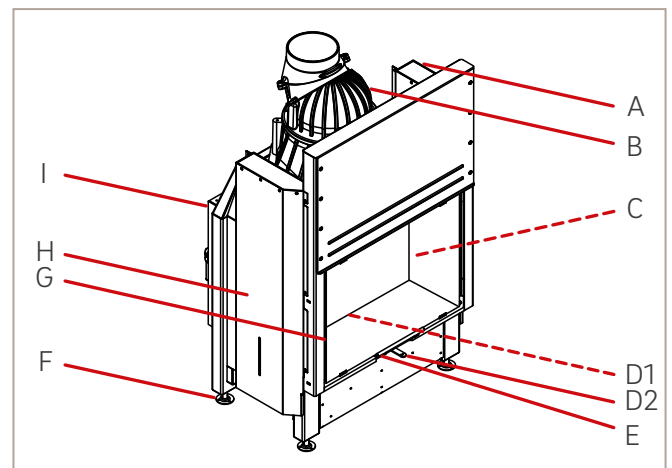


Fig. 9: Showing Lina TV 6751 h/s

Components:

- A = Weight shaft cover on right
- B = Cast-iron dome
- C = Fire box inner lining
- D1 = "Combustion air" lever
- D2 = "Combustion air" lever
- E = Door handle, guillotine door
- F = Adjustable foot M16
- G = Guillotine door with vitroceramic window
- H = Weight shaft cover on left
- I = Rear hinged door

2.3 Weight and dimensions

The weight and dimensions of the product vary depending on the type and model. The serial plate includes important information – such as the serial number – for identifying the appliance.

2.4 Function

The fireplace inserts are room air-dependent combustion systems and fulfil the following function:

- Individual room heating (stove) by warm air and radiation heat, produced by the combustion cycle in the firebox.

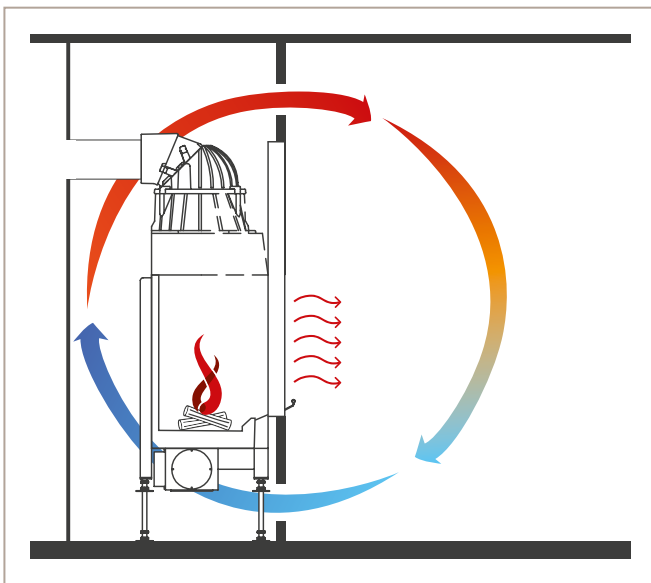


Fig.10: Heating circuit, diagram

2.4.1 Fire box

The firebox is used to burn wood fuels. The oxygen needed for combustion is supplied through openings in the lower part of the appliance. The heating gases produced by the combustion process are discharged through a flue gas connector. For greater efficiency, additional equipment can be connected downstream of the fireplace insert. Depending on the design, these can lead to higher convective output, heat storage or hot water heating. The exhaust gases are then transported to the chimney via the connection pipe. The wood ash produced remains in the firebox without ash collector, and with appliances with ash box it is collected under the firebox.

2.5 Heating technology and environment

Wood is an energy source that is constantly regenerated and is CO₂-neutral in terms of the environment and in the natural cycle.

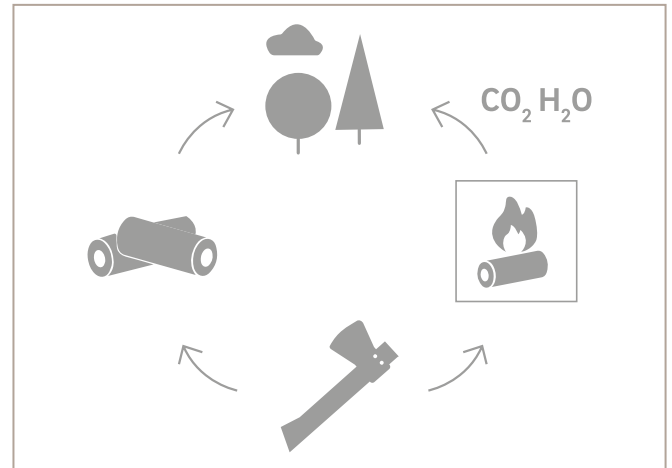


Fig.11: Environmental and wood cycle

The fireplace inserts are technically designed for optimum combustion with low CO₂ emissions and achieve a high energy efficiency class.

The prerequisite for optimum use of this heating technology is the professional design and installation of the appliance by the specialist company and regular care and maintenance of the fireplace.

The selection of fuels used also has a positive impact on combustion efficiency in the fireplace.

3. Fuels



PROHIBITED! Never use waste materials as fuel!

Only use the fuels approved for the appliance!

The fireplace inserts are solely designed for logs and wood briquettes. Never use coal, peat, wood pellets or other fuels!

3.1 Prohibited fuels

Newly felled, impregnated, painted, glued or coated wood, chipboard, shavings and sawdust, bark and chipboard waste, cardboard, waste paper briquettes, plastics and household waste are all prohibited fuels!

Their combustion residue will produce uncontrolled air pollution but will also have an adverse impact on the functionality and service life of the chimney and fireplace insert. The consequences are a higher susceptibility to failure and faster wear. This can lead to costly refurbishment measures or even replacement of the appliance. All warranties and the right to warranty claims are invalidated by the use of non-approved fuels.

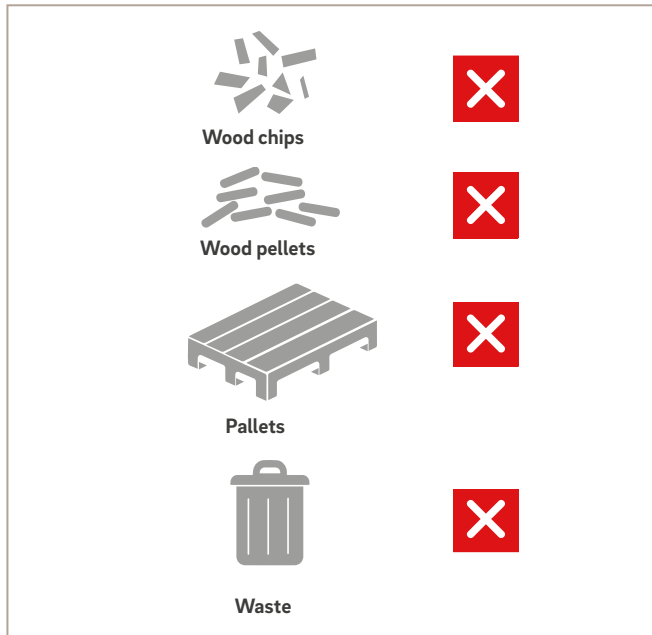


Fig. 12: Examples of unauthorised fuels

3.2 Permitted fuels

Logs and wood briquettes are approved for use with fireplace inserts.

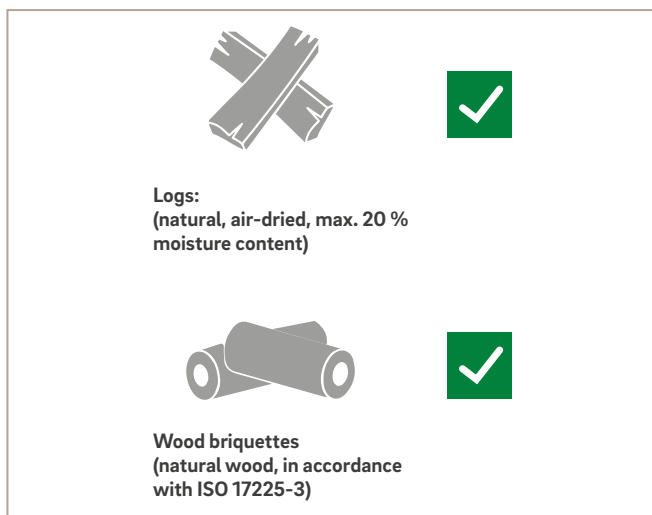


Fig. 13: Examples of approved fuels

3.3 Logs

3.3.1 Recommended residual moisture level

As a manufacturer with over 20 years of experience with fireplaces, tests carried out on the test bench and practical experience have shown that a 15 % residual moisture level is ideal for the efficiency of the system and its emissions. The most important factor for clean and low-emission combustion is the combustion chamber temperature. The aim is to raise the combustion chamber temperature as quickly as possible to over 500 °C. Only then is the carbon in the wood converted into carbon dioxide rather than carbon monoxide. A high combustion chamber temperature is also necessary for the pyrolytic self-cleaning effect, which is conducive to a clean and clear vitrocement window. Only dry wood burns with low emissions! Energy is used to evaporate the water, which is then lost for heating. Wood with a residual moisture level of 15 % has approximately twice the calorific value of recently cut wood with a water content of approx. 50 %. The higher water content and the lower combustion temperature increase the formation of soot and tar in the fireplace and especially in the chimney. This results in environmental pollution, greater need for cleaning and damage to the fireplace. We recommend a residual moisture level of 15 % for a cleaner environment and cleaner vitrocement windows.

i Wood with a residual moisture content of more than 20 % is difficult to ignite and causes higher emissions. We prescribe a maximum residual moisture content of 20 % for our fireplace inserts.

3.3.2 Heating behaviour of wood

Note that different types of wood burn differently:

- Hardwoods are ideal as firewood. They burn slowly and with a steady flame. The embers are long-lasting.
- Coniferous wood is high in resin and burns quickly. Coniferous wood tends to spark more during the combustion cycle.

3.3.3 Calorific value of the wood

Use the diagram to determine the calorific value in kWh/kg (based on 15 % residual moisture content) of the most popular types of wood used.

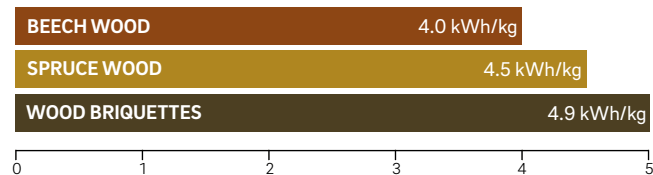


Fig. 14: Calorific value of the wood

3.3.4 Correct drying and storage

Use only natural, split, seasoned and air-dried wood with a residual moisture of at most 20 % or recommended 15 %.

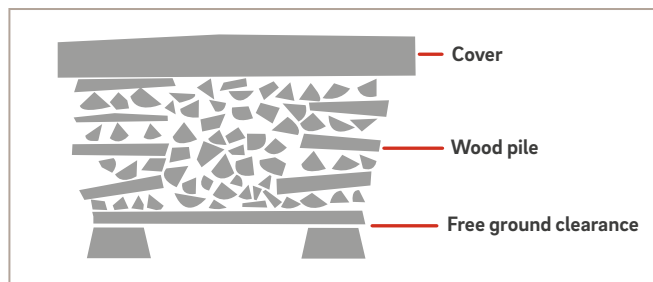


Fig. 15: Example of a log pile

The recommended method for drying wood correctly is to store it outside buildings. Split wood dries better and has better burning behaviour.

The stack of logs should be constructed with no contact with the ground, as it could otherwise draw moisture out of the soil. Preferably store logs on the south side of a building, protected from rain and well ventilated. Stack logs loosely and supported on one side. Leave a ventilation gap between the individual logs.

Storing fresh or wet wood in closed buildings (e.g. garages) or in packaging without adequate air exchange prevents drying and leads to the wood slowing down and going mouldy.

i Leave the firewood in the warm living room one day before using it, especially during the colder and wetter months of the year.

3.3.5 Drying time

A minimum of one year is a guideline time for drying softwood (e.g. coniferous wood, birch) and a minimum of two years for hardwood (e.g. beech, ash). We recommend that you dry your wood for 2 to 3 years. A wood moisture meter can be used to determine the actual moisture content of the wood.

3.4 Wood briquettes

NOTICE

Wood briquettes have a higher energy density of more than 20 % compared to firewood and grow in volume in the fire.

Reduce the amount of wood added. Refer to the manufacturer's product information when using briquettes.

The quality of wood briquettes can vary greatly. Only wood briquettes made of natural wood in accordance with ISO 17225-3 are suitable for use with this appliance.

4. Prior to operation

4.1 Transport

4.1.1 Delivery

The standard delivery comes on a pallet. The appliance is protected by wrapping film.

Check the appliance for transport damage after removing the packaging. Immediately report damage to the supplier of your appliance!

Check that the delivery is complete.

4.1.2 Storage

NOTICE

Store the appliance in a dry place! The appliance is only designed and constructed for use in dry indoor areas.

Fireplace inserts are inherently heavy. Position the appliance on a suitable level base surface at its location and prevent it from toppling over or falling.

Protect the appliance from dust – e.g. site dust – or other dirt.

4.2 Installation and handover

⚠ SAFETY INSTRUCTION

Only permit a technician to install your fireplace!

- The fireplace must be installed by a technician. Refer to the attached installation instructions for design and installation.
- Ensure that the fireplace is handed over by the operator or technician in line with national and local regulations, if necessary, by representatives of the authorisation body (chimney sweep).

4.3 Start-up

NOTICE

Incorrect initial start-up can lead to damage to the fireplace!

⚠ SAFETY INSTRUCTION

Only permit a technician to start up your fireplace!

⚠ SAFETY INSTRUCTION

The requirements governing safe and proper use need to be fulfilled and guaranteed prior to initial start-up!

⚠ SAFETY INSTRUCTION

Gases can be released from the paintwork when the appliance is heated up for the first time.

Provide adequate ventilation of the location of the fireplace during this phase! The paintwork on the fireplace gains its special strength when exposed to temperature during initial start-up. This can result in temporary odours. Avoid inhalation.

4.3.1 Initial start-up by the technician

The fireplace is initially started up by the technician. The fireplace is heated for the first time and all connections and fireplace components are checked. These checks need to be documented and handed over to the operator.

i To do so, use the start-up report at the end of these operating instructions.

The technician needs to hand over to the operator all the technical documents on the appliance and all accessory parts for the safe operation of the fireplace. Following initial start-up, the technician has an obligation to instruct the operator in the correct and safe handling of the fireplace.

i More information regarding initial start-up can be found in the attached installation instructions.

4.3.2 Start-up by the operator

The operator of the fireplace has an obligation to obtain instruction on the operation of the fireplace, safe and proper handling and correct and environmentally-friendly heating from the contractor.

He needs to hand over all the required technical documents on the fireplace insert and all accessory parts for the safe operation of the fireplace. He needs to have read and understood information on safe and correct handling of the appliance.

5. Operation

⚠ DANGER

Hazardous gases!

Risk of fatal injury by exhaust gas escape!

Ensure sufficient air supply and/or discharge of heating gases!

NOTICE

Damage caused by heat accumulation!

The fireplace is equipped with ventilation grilles for the cold air inlet and hot air outlet. The grilles ensure safe air circulation and prevent the accumulation of heat. Damage can be caused to the fireplace and/or there can be odour problems if these openings are not open or can be covered. Never close or cover the ventilation grilles when the fireplace is in operation!

Do not place any combustible objects close to hot air outlets.

Inadequate supply of air and/or discharge of heating gas can lead to hazardous exhaust gas escape at the location of the fireplace. Do not modify the combustion air supply and keep all combustion air openings of the fireplace open during operation! Keep the lockable ventilation grilles open during operation and during the cooling-down phase!



Fig. 16: Ventilation grille, open

5.1 Information on heating operation

The length and intensity of the heating operation is affected by the type of wood, thickness of the wood, supply of air and required draught of the chimney.

The amount of air entering the heating chamber is regulated by the combustion lever and affects the combustion process. Allow for a combustion air requirement of approx. 12.5 m³/h with 1 kg wood, plus an additional allowance for air exchange, extractor fan hood and similar extraction systems. Provide controlled ventilation of no more than 4 Pa of under draught towards the outside at the location of the fireplace insert.

When simultaneously operating extraction systems (e.g. ventilation systems, extractor hoods), only fireplaces with additional safety devices are permitted, which have general technical approval.

5.2 Controls

5.2.1 Door controls, guillotine door

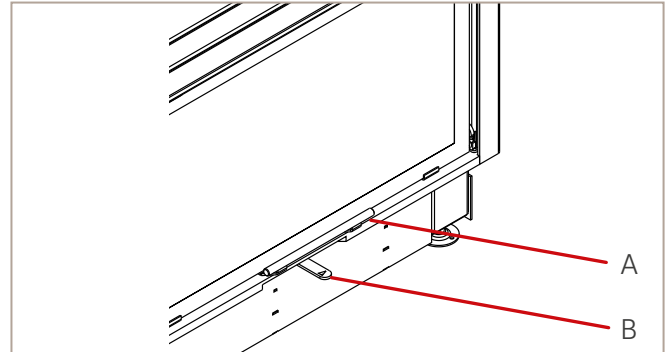


Fig. 17: Controls, guillotine door

Controls:

A = Door handle, guillotine door

B = "Combustion air" lever for combustion air supply control

5.2.2 Door controls, hinged door

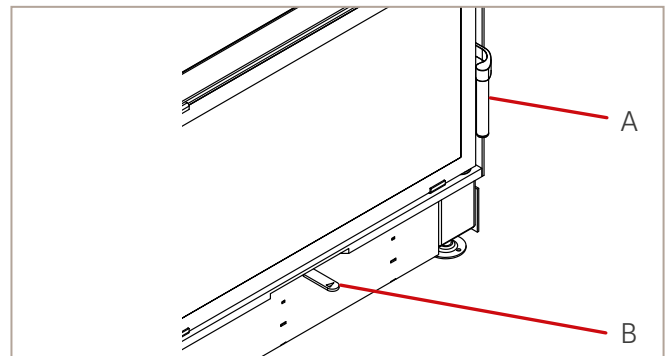


Fig. 18: Controls, hinged door

Controls:

A = Door handle, hinged door

B = "Combustion air" lever for combustion air supply control

5.2.3 Doors and door handles

Only open doors to load wood during heating and close them afterwards. Use the door handle to lock the door with a hinged door version. If more than one fireplace is connected to the same chimney, the doors need to be self-closing at the location of the fireplace in line with the regulations. This is the delivery state with hinged doors, however this needs to be ensured on site with guillotine doors.



The Kristall+ models feature a removable door handle on the guillotine door.

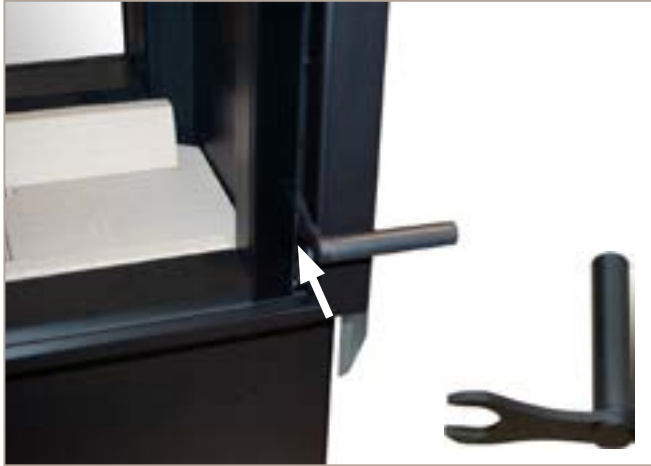


Fig. 19: Removable door handle

5.2.4 “Combustion air” lever

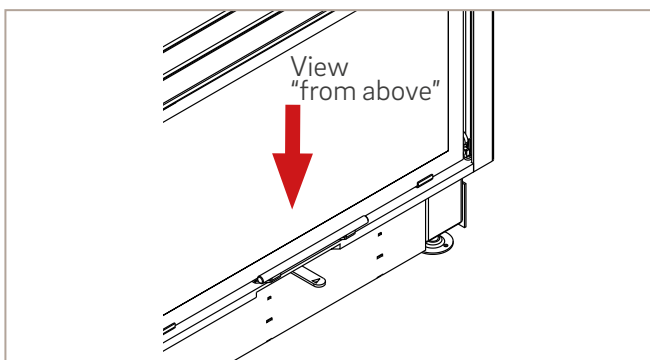


Fig. 20: “Combustion air” lever

“Top” view of Lina, Lina TV

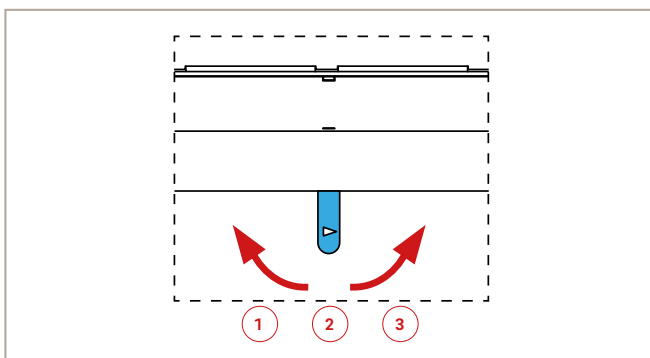


Fig. 21: “Combustion air” lever – Positions for Lina, Lina TV

Positions:

1. Combustion air open
2. Combustion air half-open
3. Combustion air closed

5.3 Loading

5.3.1 Preparation for the addition of fuel

Remove the combustion residue from the last heating processes when cooled down. It is not necessary to remove the ash as an ash bed promotes the combustion cycle. However, make sure that the combustion air supply inlets are free and a sufficient volume of combustion air is guaranteed.

Refer to chapter 7.1.3 “Removing ash” for the procedure.

5.3.2 Recommended wood arrangement

The cross-section of the wood logs and arrangement of the wood in the firebox is crucial to ideally support the combustion cycle. The optimum size changes with requirements.

5.3.2.1 Without reloading

First place large logs in the firebox when burning a large volume of wood without wishing to add more wood. Place medium-sized logs on top of them, followed by smaller logs, and then place kindling on top of the pile of logs. Stacking the wood in layers ensures that a high combustion chamber temperature is quickly produced.



Fig. 22: Example of wood arranged in layers

5.3.2.2 With reloading

After the 1st combustion, you can then place a sufficient quantity of kindling and medium-sized to large wood logs on the ember bed.

5.4 Lighting the fire

⚠ DANGER

Danger of fire by an ignition flame or deflagration!

Do not use liquid fuels or other hazardous liquid to light the fire or pour it onto the flames!

Use paraffin kindling or other ignition aids, such as sawdust fireplace lighters!

⚠ DANGER

Risk of deflagration by a sudden surge of air!

When the door is opened, the sudden feed of air can trigger the deflagration of incompletely burned gases!
Only open the door if no flames can be seen.

⚠ DANGER

Escape of smoke, flames and sparks when the door is opened!

Smoke and flames can escape during combustion when the door is opened.

Only open the door if no flames can be seen.

View "from above"

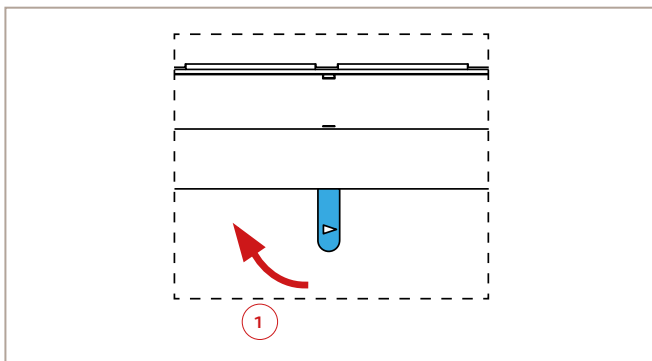


Fig. 23: "Combustion air" lever – Position 1

"Combustion air" lever – Position 1:

Once the firebox has been filled with logs and kindling, light the ignition aid with a long match or long fire lighter. Completely close the door as soon as the fire lighter has caught light and lock with the door handle. In poor weather conditions, it is possible to leave the door ajar under supervision for the first minute so that excess oxygen flows in and prevents the ceramic glass window from fogging up when it is heated up.



Refer to chapter 12 "Technical data" for the recommended loading capacity.

5.5 Phases of the heating process

The heating process is divided into three combustion stages:

Combustion stages:

1. Heating up and heating phase
2. Power phase
3. Ember phase

The combustion process needs different quantities of oxygen for the individual combustion stages. The supply of oxygen is regulated by the "combustion air" lever (below the door) for optimum combustion in the respective combustion stages. Clean combustion is only achieved with an adequate supply of oxygen and maintenance of the combustion temperature.

The combustion air lever can be disabled if the SMR combustion control for automatic combustion control of the air supply is installed.

If the combustion air lever is to be used, then it needs to be permanently in position 1 "Combustion air open".

5.5.1 Combustion stage 1: Heating up and heating phase

View "from above"

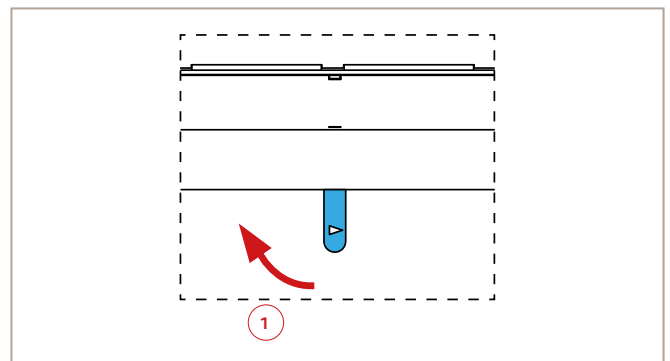


Fig. 24: "Combustion air" lever – Position 1

"Combustion air" lever – Position 1:

This setting enables the required full combustion air requirement to be supplied. Maintain this setting after lighting until there are no more blazing (yellow) flames!

5.5.2 Combustion stage 2: Power phase

View "from above"

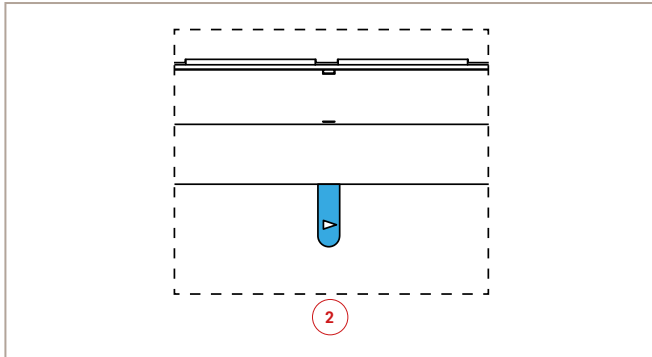


Fig. 25: "Combustion air" lever – Position 2

"Combustion air" lever – Position 2:

This setting throttles the supply of air and extends the combustion time. Do not open the door of the appliance in this phase as this interrupts combustion and has a significant impact on the chimney effect. However, should the door of the appliance nevertheless need to be opened, we would recommend initially only opening it a small gap – and leaving it like this – until the system has calmed down. Then the door can be slowly and carefully opened further.

i The "combustion air control half-open" positions are basic recommendations. However, they should be adapted to local conditions and to the volume of wood used to prevent incomplete combustion.

5.5.3 Combustion stage 3: Ember phase

View "from above"

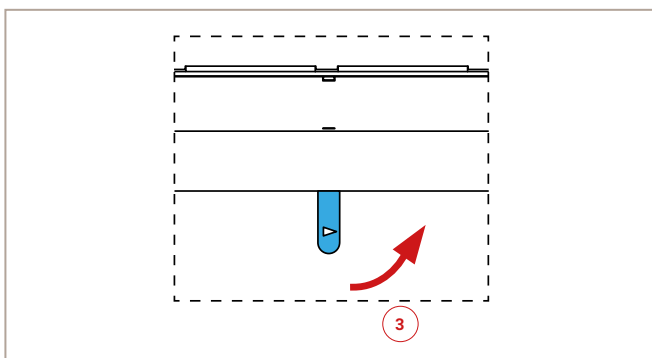


Fig. 26: "Combustion air" lever – Position 3

"Combustion air" lever – Position 3:

The air supply can be throttled when the combustion cycle is finished and no more flames are visible. The rapid cooling down of the fireplace and the living space by the flue liner is prevented in this position of the combustion lever. A further heating process now needs to be started beginning with phase 1. The combustion lever is also moved to this position when the fireplace insert is not in use.

5.6 Combustion on ash grate

The wood rests on the ash grate with appliances with an ash grate. The ash is collected in a ash box underneath, which can be removed from the appliance. After cleaning, return the ash box to the appliance.

Refer to chapter 7.1.3 "Removing ash" for the procedure.

5.7 Fireplace insert becomes too hot

The fireplace insert can overheat by the addition of too much wood.

- Do not attempt to extinguish the fire.
- Do not remove burning fuel from the fire box.
- Slightly close the "combustion air" lever (between position 2 and position 3) to reduce the flame (heat), but on no account fully close the supply of air.
- Open all windows to distribute additional heat.
- Open any closed air grilles.
- Only call the fire service if smoke or fire escapes.

i Reduce the volume of logs with the next combustion.

5.8 Heating in the transitional period (spring/autumn)

During the transitional months, that is to say when the outside temperatures are higher, sudden rises in temperature can cause the flue liner to fluctuate, with the result that heating gases are not fully drawn up. In this case, fully open the "combustion air" lever (position 1) and fill the fireplace insert with smaller quantities of small logs. The fuel will then burn more quickly with flames and will then stabilise the flue liner.

5.9 Operational breaks

Keep the door and all adjustment devices closed when the fireplace insert is not in operation.

6. Faults

⚠ CAUTION

Hot gases or liquids!

Hot gases or liquids can escape if lines are leaking or dismantled!

First allow the fireplace to cool down!

⚠ SAFETY INSTRUCTION

In the event of a fault, immediately shut down your fireplace and only operate it once the faulty components have been replaced and/or the fault has been rectified!

7. Maintaining the heating technology

⚠ CAUTION

Risk of burning from hot parts of the system or residual wood!

Allow the appliance to cool down before working on it!

⚠ CAUTION

Fire hazard from embers!

For safety reasons, once removed, store the ash in a fireproof container and leave to cool down completely.

7.1 Maintenance instructions

We recommend regular care and cleaning to obtain optimum combustion results with a clean fireplace insert.

7.1.1 Cleaning the vitroc ceramic window of the door

The fireplace insert features a high temperature-resistant vitroc ceramic window.

If the fireplace insert is not operated correctly (for instance when wet wood is used, incorrect lighting, smouldering fire operation and with low heat requirement during the transition period), then the vitroc ceramic window of the fireplace insert can soot up more frequently. Vitroc ceramic windows can be cleaned with the fireplace glass cleaner supplied in line with the instructions for use (Service Box).

The cleaning intervals depend on the operating time, heating habits and the quality of the fuel. Adjust the frequency of

cleaning to these conditions. Do not immerse glass seals with the fireplace glass cleaner!

7.1.2 Cleaning the metal surface

Carefully clean metal surfaces with a damp cloth without glass cleaner. Immediately wipe the cleaned surface dry.

7.1.3 Removing ash

⚠ DANGER

Risk of combustion and fire from embers!

Embers can glow for 24 hours and longer. Only dispose of cold ash. Carefully remove the ash from the firebox. Dispose of ash in sealed, non-combustible containers.

Use a dustpan and brush to remove cooled ash from the fireplace. Do not use abrasive implements to clean the appliance! a flat ash bed can remain in the firebox. This aids the next combustion cycle. Only remove ash when the supply of air has been shut off. If necessary, use a dustpan and brush to clean the side linings of the firebox.

Procedure with ash grate:

1. Makes sure that the ash has cooled down completely. Only then remove the ash grate and the ash box.
2. Dispose of the ash in a sealed, non-combustible container.
3. Replace the empty ash box and then the ash grate.



A useful environmentally-friendly hint:

The ash from permitted fuels contains a large percentage of mineral substances that are ideal for fertilising plants.



Cleaning agent containing vinegar is not suitable for maintenance of the heating technology. This can result in odours.

7.1.4 Guillotine door in cleaning position

NOTICE

Broken vitroc ceramic window!

The vitroc ceramic window can break. Do not support yourself or lean on the door when it is tilted.

The door can be tilted in the cleaning position. This permits access to the inside of the vitroc ceramic window.

1. Open both locking tongues (B, C) on the top of the door by swivelling them. This secures the door and it can no longer be raised. The locking tongues (B, C) are located under the cover of the guillotine door (A).



Fig. 27: Locking tongue closed



Fig. 28: Locking tongues open

Components:

- A = Guillotine door cover
- B = Locking tongue on right
- C = Locking tongue on left

2. Open lock by swivelling the locking lever (A) to the left.

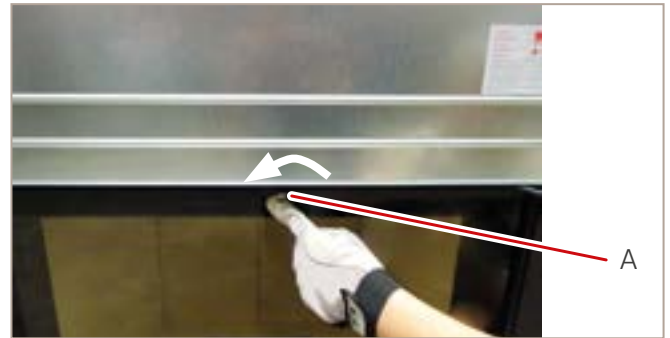


Fig. 29: Lock open

Components:

- A = Locking lever

3. Carefully tilt door forwards. The vitroc ceramic window can now be cleaned.

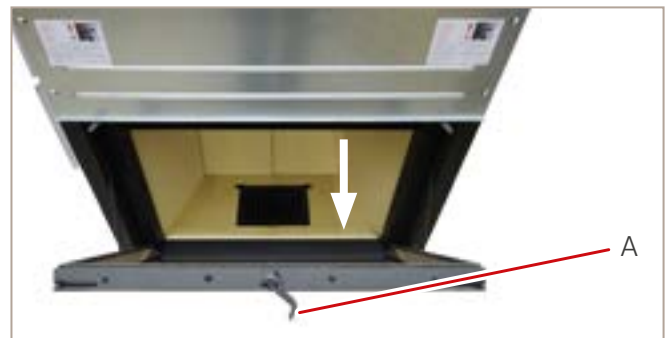


Fig. 30: Door in cleaning position

Components:

- A = Locking lever

4. Carefully tilt back the door to its starting position and close the lock by pivoting the locking lever (A) to the right.

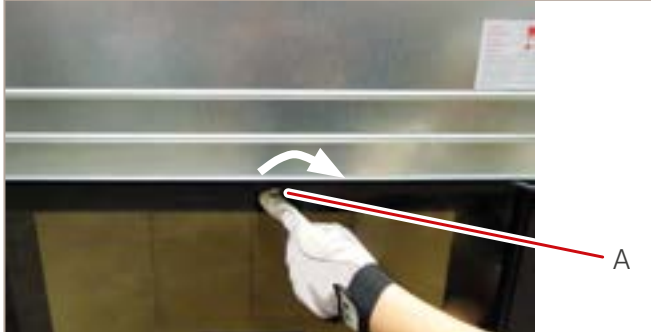


Fig. 31: Lock open

Components:

A = Locking lever

5. Close both locking tongues (A, B) on the top of the door by swivelling them. The door is working properly again.



Fig. 32: "Right locking tongue" open

Components:

A = Locking tongue on left

B = Locking tongue on right

7.1.5 Rear tilting door in cleaning position, Lina TV Kristall+ model

1. Open lock by swivelling the locking lever (A) to the left and carefully tilting the rear door forwards.

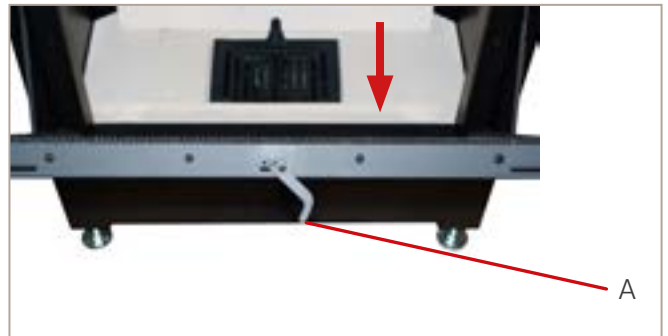


Fig. 33: Lock open

Components:

A = Locking lever

2. The rear door is in its cleaning position and the vitroceramic window can now be cleaned.



Fig. 34: Rear door in cleaning position

Components:

A = Locking lever

7.2 Useful hints in the event of faults

Fault	Cause	Remedy	Chapter
Vitroceramic window seriously sooted	Wood too damp	Use logs with a max. residual moisture content of 20 % (recommended 15 %).	3.3
	Wrong fuel	Only use the fuels recommended in these instructions.	3.1/3.2
	Wood logs too large	Use the size of logs recommended in the instructions. Split logs that are too large if necessary. Do not use round logs.	3.3/12.
	Too little wood used	Use the recommended quantity of wood, especially with a cold start.	12.
	Weather	Fill the firebox with less fuel, but use sufficient kindling.	5.8
	Combustion air setting	Check whether the "combustion air" lever is in the recommended position.	5.5
	Chimney required draught	The required delivery pressure is 12 Pa. The required draught is affected by the weather. If the problem persists, inform your technician/chimney sweep or installer.	5.7/5.8
	More than one fireplace connected to the same chimney	Check that the door and air control device of other fireplaces connected to the same chimney are closed.	1.8.5

Fault	Cause	Remedy	Chapter
Fire burns poorly or is hard to ignite	Wood too damp	Use logs with a max. residual moisture content of 20 % (recommended 15 %).	3.3
	Wrong fuel	Only use the fuels recommended in these instructions.	3.1/3.2
	Wood logs too large	Use the size of logs recommended in the instructions. Split logs that are too large if necessary. Do not use round logs.	3.3/12.
	Too little wood used	Use the recommended quantity of wood, especially with a cold start.	12.
	Wood lit from below	Ignite the wood from above as per these instructions.	5.3/5.4
	Weather	Fill the firebox with less fuel, but use sufficient kindling.	5.8
	Combustion air setting	Check whether the "combustion air" lever is in the fully open position.	5.5
	Combustion air from the room	Open the window and switch off any extraction system.	1.8.5/5.1
	External combustion air	Check the combustion air conduit and clean if necessary.	
	Chimney required draught too low	Light a pilot fire in the chimney and ask your technician/chimney sweep or installer for advice.	
	Chimney blocked	Inform your technician/chimney sweep.	
	More than one fireplace connected to the same chimney	Check that the door and air control device of other fireplaces connected to the same chimney are closed.	1.8.5
	Flue gas throttle flap	Open throttle flap, if fitted.	

Fault	Cause	Remedy	Chapter
Smoke escapes when fuel is added	Wood added too soon	Only add new fuel at the embers stage.	5.5.3
	Quick opening of the door	Slowly open the door a small way, wait until the flow of air has increased, then continue to open it as far as necessary to add wood.	5.5.2
	Under draught in the location of the fireplace	Open the window and switch off any extraction system.	1.8.3/5.2
	Chimney blocked	Inform your technician/chimney sweep.	
	Flue gas throttle flap	Open throttle flap, if fitted.	

Fault	Cause	Remedy	Chapter
Fire burning too strongly	Wood too dry	Use logs with a max. residual moisture content of 20 % (recommended 15 %).	3.3
	Wrong fuel	Only use the fuels recommended in these instructions.	3.1/3.2
	Wood logs too small	Use the size of logs recommended in the instructions. Split logs that are too large if necessary. Do not use round logs.	3.3/12.
	Too large a quantity of wood	Use the recommended amount of wood.	12.
	Combustion air setting	Check whether the "combustion air" lever is in the recommended position.	5.5
	Chimney required draught too high	The required delivery pressure is 12 Pa. Inform your technician/chimney sweep or installer.	5.8/12.
	Flue gas throttle flap	Close throttle flap, if fitted.	

8. Repair hints

8.1 Cracks in the combustion chamber lining

Cracks in the fire box lining fundamentally do not adversely affect the function of the fireplace insert. They only need to be replaced if pieces of the firebox lining have broken off and the stove body can no longer be protected.

8.2 Damage to paintwork

Only repair paint damage with heat-resistant original paint. Use spray paint to repair larger areas of damage. Ask your dealer for Camina & Schmid stove paint.

9. Inspection and maintenance

9.1 Safety inspection

You will obtain optimum, environmentally-friendly heating results with regular inspection of the fireplace and the chimney by a technician. The technically correct function of all safety parts will guarantee your safety. We therefore recommend an annual inspection by a specialist firm or a chimney sweep.

9.2 Maintenance

The fireplace needs to be maintained regularly by a specialist company and/or by a chimney sweep. The ACTUAL condition of the fireplace needs to be compared with the INTENDED state. Essentially this is a visual inspection. The results need to be recorded in writing. Replace or repair faulty parts immediately.

9.3 Maintenance information

9.3.1 In the event of malfunctions, faults

Shut down the fireplace in the event of problems or faults – such as decreasing heat output, decreasing draught and/or escape of smoke. Arrange for the cause to be rectified immediately by a technician.

9.3.2 After operating breaks

After all breaks in operation and longer pauses, check the heating and exhaust paths, specifically the chimney for blockages and remove blockages before starting up the fireplace again. Check the entire fireplace for faults!

10. Disassembly and disposal

All the packaging materials used are environmentally-friendly and recyclable:

Waste disposal key	Type of waste
15 01 01	Paper and cardboard packaging
15 01 02	Plastic packaging
15 01 03	Wood packaging
15 01 04	Metal packaging

A specialist needs to professionally dismantle and break apart the fireplace. Wear parts and old equipment contain valuable materials. These components need to be sorted according to different materials and taken away for recycling in line with your country's system, or for disposal.

Old electrical and electronic devices need to be collected separately in accordance with the German Waste Electrical and Electronic Equipment Directive (WEEE). In Germany, the manufacturer has a duty to take back and dispose of old equipment. This is possible through registered collection points, such as recycling centres.


i Please note local disposal options and contact your local disposal company to determine to what extent the fireplace can be disposed of as "registered" bulk waste.

i Very small quantities (1 or 2 pieces) of components that have come into contact with the fire (firebox inner lining) can be disposed of with normal household waste, usually this is if they are broken and the appropriate replacement of single plates.

11. Environmental conservation

If operated properly, the fireplace inserts comply with the exhaust gas/emission values of the 2nd stage of the 1st German Federal Emission Protection Ordinance.

12. Technical data

Operation with closed fireplace according to EN 13229		Lina GT	Lina	Lina	Lina	Lina	Lina	Lina
		4545 s/h 4551 s/h 4557 s/h	4545 s/h 4551 s/h 4557 s/h	4580 h	5545 s/h 5551 s/h 5557 s/h	5580 h	6745 s/h 6751 s/h 6757 s/h	6780 h
Nominal heat output	kW	5	7	7	7	7	9	9
Thermal output range	kW	2.4–5.4	3.4–7.8	3.4–7.8	3.4–7.4	3.4–7.4	3.2–10.9	3.2–10.9
Room heat output	kW	5	7	7	7	7	9	9
Heat distribution: through the viewing window	%	30	25	25	30	30	30	30
Heat distribution: convective output	%	70	75	75	70	70	70	70
Suitable for multiple flue connections to the chimney		✓	✓	✓	✓	✓	✓	✓
Flue gas connector	Ø in mm	160	180	180	180	180	180	200
Combustion air connector	Ø in mm	125	125	125	125	125	125	125
SMR combustion control		✓	✓	✓	✓	✓	✓	✓
recommended free cross-section ¹	Supply air (cm ²)	840	1260	1260	1180	1180	1520	1520
	Recirculation air (cm ²)	700	1050	1050	980	980	1260	1260
Combustion air requirement	m ³ /h	20	28	28	28	28	36	36
Recommended quantity of wood, approx.	kg	2.0	3.0	3.5	3.0	3.5	4.0	4.3
Recommended quantity of wood with NHK, approx.	kg	---	5.5	---	5.5	---	7.0	---
Recommended quantity of wood with heat storage system, approx.	kg	4.0	5.5	---	5.5	---	5.5	5.5
Recommended length of logs	cm	33	33	33	33	33	33	33
Fuel conversion	kg/h	3.7	5.1	5.1	5.1	5.1	5.3	5.3
Minimum distance to the fire box (in accordance with TR OL 2006, version 2010)	mm	800	800	800	800	800	800	800
Minimum distance to the insulation (in accordance with TR OL 2006, version 2010)	mm	50	70	70	70	70	90	90
Insulation thickness (with a wall that does not need to be protected) (based on SILCA® 250K/M)	mm	60	60	60	60	60	60	60
Weight	kg	180–220	190–230	250	200–240	260	220–260	280
Fuel	Type	Wood	Wood	Wood	Wood	Wood	Wood	Wood
Triple values with nominal heat output	Flue gas mass flow	g/s	4.7	7.5	7.5	6.4	6.4	9.1
	Flue gas temperature	°C	340	330	330	260	260	320
	Required delivery pressure	Pa	12	12	12	12	12	12
Triple values for connecting ceramic flues (wood used as fuel)	Firing power	kW	13.2	18.2	---	18.2	---	18.2
	Flue gas mass flow	g/s	11.9	14.7	---	15.1	---	16.3
	Flue gas temperature upstream of the connecting surface	°C	347	337	---	335	---	335
	Required delivery pressure at the flue gas connector	Pa	15	15	---	15	---	15
	Combustion air requirement	m ³ /h	46.3	63.9	---	63.9	---	66.3
	Recommended flue length ²	m	3.5	3.5	3.5	1.7	---	3.5
Emission values Wood fuel	CO - based on 13 % O ₂	mg/Nm ³	< 1250	< 1250	< 1250	< 1250	< 1250	< 1250
	Dust - based on 13 % O ₂	mg/Nm ³	< 40	< 40	< 40	< 40	< 40	< 40
	Efficiency	%	> 78	> 78	> 78	> 80	> 80	> 78
Minimum heat-emitting surface ³ (based on closed design)	m ²	3.6	3.6	3.6	3.6	3.3	4.2	4.0
Ecodesign Regulation in accordance with (EU) 2015/1185		✓	✓	✓	✓	✓	✓	✓
Energy efficiency class in accordance with (EU) 2015/1186		A	A	A	A+	A+	A	A
Energy efficiency index (EEI)		103.2	103.7	103.7	109.0	109.0	103.4	103.4
Declaration of Performance	No.	LE29102332	LE29061106	LE29061106	LE29102333	LE29102333	LE29061074	LE29061074
possible connected equipment	Top mounted heat exchanger	---	✓	---	✓	---	✓	---
	Hot air top-mounted element	---	✓	---	✓	---	✓	---
	Heat exchanger	---	✓	---	✓	---	✓	---
Efficiency with connected equipment	%	---	> 80	---	> 80	---	> 80	---
Hot water top-mounted element (HVAR R)		---	✓	---	✓	---	✓	---

s = hinged door, h = guillotine door, TV = tunnel version

The specified waterside output was determined under test conditions. The achievable output can vary depending on the flue liner, quantity of wood and pump assembly used.


¹ The calculation was based on "TR OL 2006, edition 2010 – Table 17: Free cross-section in cm² for grille or opening tile based on the thermal output for air heating" with the preferred air velocity of 0.75 m/s. Supply air grille 240 cm²/kW, recirculation air grille 200 cm²/kW.

² The information regarding flue lengths is a recommendation and based on the calculation in accordance with TR OL 2022 chapter 15. The calculation is based on a medium-heavy design and a flue ratio of 360 cm².

³ Average value based on the storage time. Depending on the material properties and the construction thickness.

Mean specific heat distribution = approx. 500 W/m²

⁴ With the exception of height 80 cm

Operation with closed fire box in accordance with EN 13229		Lina GT 7363	Lina 7345 s/h 7351 s/h 7357 s/h 7363 s/h	Lina 8745 h 8751 h 8757 h	Lina 8770 h	Lina 10045 h 10051 h 10057 h	Lina 12045 h 12051 h 12057 h	Lina TV 4545 s/h 4551 s/h 4557 s/h 4580 h
Nominal heat output	kW	6	9	10	19	10	10	7
Thermal output range	kW	4.4–6.3	3.2–10.9	4.6–10.1	8.0–19.2	3.2–10.9	4.9–10.6	3.4–7.8
Room heat output	kW	6	9	10	19	10	10	7
Heat distribution: through the viewing window	%	25	35	35	35	35	40	50
Heat distribution: convective output	%	75	65	65	65	65	60	50
Suitable for multiple flue connections to the chimney		✓	✓	✓	✓	✓	✓	✓
Flue gas connector	Ø in mm	180	200	200	200	200	200	180
Combustion air connector	Ø in mm	125	150	150	150	150	150	125
SMR combustion control		✓	✓	✓	✓	✓	✓	✓
recommended free cross-section ¹	Supply air (cm²)	1080	1410	1560	2970	1560	1440	840
	Recirculation air (cm²)	900	1170	1300	2470	1300	1200	700
Combustion air requirement	m³/h	24	36	40	76	40	40	28
Recommended quantity of wood, approx.	kg	2.5	4.0	4.5	5.5	5.0	5.0	3.0
Recommended quantity of wood with NHK, approx.	kg	---	5.5	5.5	---	9.0	---	---
Recommended quantity of wood with heat storage system, approx.	kg	4.5	6.0	---	---	---	---	5.5
Recommended length of logs	cm	33	33	33	33	33	33	33
Fuel conversion	kg/h	1.8	4.7	---	---	---	---	5.1
Minimum distance to the fire box (in accordance with TR OL 2006, version 2010)	mm	800	800	800	800	800	800	800
Minimum distance to the insulation (in accordance with TR OL 2006, version 2010)	mm	60	90	100	100	100	100	70
Insulation thickness (with a wall that does not need to be protected) (based on SILCA® 250KM)	mm	60	60	60	60	60	60	60
Weight	kg	230	230-290	280-320	350	310-350	340-400	190-250
Fuel	Type	Wood	Wood	Wood	Wood	Wood	Wood	Wood
Triple values with nominal heat output	Flue gas mass flow	g/s	6.2	9.1	8.9	17.8	10.1	7.5
	Flue gas temperature	°C	214	320	320	263	320	330
	Required delivery pressure	Pa	12	12	12	12	12	12
Triple values for connecting ceramic flues (wood used as fuel)	Firing power	kW	15	19.8	---	---	---	18.2
	Flue gas mass flow	g/s	14.5	16.7	---	---	---	14.7
	Flue gas temperature upstream of the connecting surface	°C	418	345	---	---	---	337
	Required delivery pressure at the flue gas connector	Pa	15	15	---	---	---	15
	Combustion air requirement	m³/h	56	59.6	---	---	---	63.9
	Recommended flue length ²	m	---	3.5	3.5	---	3.5	3.5
Emission values Wood fuel	CO - based on 13 % O ₂	mg/Nm³	< 1250	< 1250	< 1250	< 1250	< 1250	> 1250
	Dust - based on 13 % O ₂	mg/Nm³	< 40	< 40	< 40	< 40	< 40	< 40
	Efficiency	%	> 80	> 78	> 78	> 78	> 80	> 78
Minimum heat-emitting surface ³ (based on closed design)	m²	2.7	4.0	4.4	7.6	4.4	4.1	2.4
Ecodesign Regulation in accordance with (EU) 2015/1185		✓	✓	✓	✓	✓	✓	✓
Energy efficiency class in accordance with (EU) 2015/1186		A ⁺	A	A	A	A	A	A
Energy efficiency index (EEI)		112.7	103.4	103.2	103.2	103.4	106.6	103.7
Declaration of Performance	No.	LE1260504-1	LE29061074-2	LE29102338	LE848363-1	LE29061074-3	LE29102334	LE29061106
possible connected equipment	Top mounted heat exchanger	---	✓	✓	---	---	---	---
	Hot air top-mounted element	---	✓	✓	---	✓	---	---
	Heat exchanger	---	✓	✓	---	✓	---	---
Efficiency with connected equipment	%	---	> 80	> 80	---	> 80	---	---
Hot water top-mounted element (HWA R)		---	✓	✓	---	✓	---	✓ ⁴

s = hinged door, h = guillotine door, TV = tunnel version

The specified waterside output was determined under test conditions. The achievable output can vary depending on the flue liner, quantity of wood and pump assembly used.


¹ The calculation was based on "TR OL 2006, edition 2010 – Table 17: Free cross-section in cm² for grille or opening tile based on the thermal output for air heating" with the preferred air velocity of 0.75 m/s. Supply air grille 240 cm²/kW, recirculation air grille 200 cm²/kW.

² The information regarding flue lengths is a recommendation and based on the calculation in accordance with TR OL 2022 chapter 15. The calculation is based on a medium-heavy design and a flue ratio of 360 cm².

³ Average value based on the storage time. Depending on the material properties and the construction thickness.

Mean specific heat distribution = approx. 500 W/m²

⁴ With the exception of height 80 cm

Operation with closed fire box in accordance with EN 13229		Lina TV	Lina TV	Lina TV	Lina TV	Lina TV	Lina TV
		5545 s/h 5551 s/h 5557 s/h 5580 h	6745 s/h 6751 s/h 6757 s/h 6780 h	7345 s/h 7351 s/h 7357 s/h 7363 s/h	8745 h 8751 h 8757 h	10045 h 10051 h 10057 h	12045 h 12051 h 12057 h
Nominal heat output	kW	7	9	9	10	10	10
Thermal output range	kW	3.4–7.4	3.2–10.9	3.2–10.9	4.6–10.1	3.2–10.9	4.9–10.6
Room heat output	kW	7	9	9	10	10	10
Heat distribution: through the viewing window	%	60	60	60	65	70	70
Heat distribution: convective output	%	40	40	40	35	30	30
Suitable for multiple flue connections to the chimney		✓	✓	✓	✓	✓	✓
Flue gas connector	Ø in mm	180	200	200	200	200	250
Combustion air connector	Ø in mm	125	125	150	150	150	150
SMR combustion control		✓	✓	✓	✓	✓	✓
recommended free cross-section*	Supply air (cm²)	840	1080	1080	1200	1200	1200
	Recirculation air (cm²)	700	900	900	1000	1000	1000
Combustion air requirement	m³/h	28	36	36	40	40	40
Recommended quantity of wood, approx.	kg	3.0	4.0	4.0	4.5	5.0	5.0
Recommended quantity of wood with NHK, approx.	kg	---	5.5	5.5	7.0	---	---
Recommended quantity of wood with heat storage system, approx.	kg	5.5	5.5	6.0	---	---	---
Recommended length of logs	cm	33	33	33	33	33	33
Fuel conversion	kg/h	5.1	5.3	4.7	---	---	---
Minimum distance to the fire box (in accordance with TR OL 2006, version 2010)	mm	800	800	800	800	800	800
Minimum distance to the insulation (in accordance with TR OL 2006, version 2010)	mm	70	90	90	100	100	100
Insulation thickness (with a wall that does not need to be protected) (based on SILCA® 250KM)	mm	60	60	60	60	60	60
Weight	kg	200-260	220-280	230-290	280-320	310-350	340-400
Fuel	Type	Wood	Wood	Wood	Wood	Wood	Wood
Triple values with nominal heat output	Flue gas mass flow	g/s	6.4	9.1	9.1	8.9	7.9
	Flue gas temperature	°C	260	320	320	320	365
	Required delivery pressure	Pa	12	12	12	12	12
Triple values for connecting ceramic flues (wood used as fuel)	Firing power	kW	18.2	18.2	19.8	---	---
	Flue gas mass flow	g/s	15.1	29.6	16.7	---	---
	Flue gas temperature upstream of the connecting surface	°C	335	335	335	---	---
	Required delivery pressure at the flue gas connector	Pa	15	15	15	---	---
	Combustion air requirement	m³/h	63.9	66.3	59.6	---	---
	Recommended flue length ²	m	1,7	3,5	3,5	3,5	3,5
Emission values Wood fuel	CO - based on 13 % O ₂	mg/Nm³	< 1250	< 1250	< 1250	< 1250	< 1250
	Dust - based on 13 % O ₂	mg/Nm³	< 40	< 40	< 40	< 40	< 40
	Efficiency	%	> 80	> 78	> 78	> 78	> 80
Minimum heat-emitting surface ³ (based on closed design)	m²	2,5	2,7	2,7	3,0	3,0	2,4
Ecodesign Regulation in accordance with (EU) 2015/1185		✓	✓	✓	✓	✓	✓
Energy efficiency class in accordance with (EU) 2015/1186		A ⁺	A	A	A	A	A
Energy efficiency index (EEI)		109.0	103.4	103.4	103.2	103.4	106.6
Declaration of Performance	No.	LE29102333	LE29061074	LE29061074-2	LE29102338	LE29061074-3	LE29102334
possible connected equipment	Top mounted heat exchanger	---	---	---	---	---	---
	Hot air top-mounted element	---	---	---	---	---	---
	Heat exchanger	---	---	---	---	---	---
Efficiency with connected equipment	%	---	---	---	---	---	---
Hot water top-mounted element (HWA R)		✓ ⁴	✓ ⁴	---	---	---	---

s = hinged door, h = guillotine door, TV = tunnel version

The specified waterside output was determined under test conditions. The achievable output can vary depending on the flue liner, quantity of wood and pump assembly used.

¹ The calculation was based on "TR OL 2006, edition 2010 – Table 17: Free cross-section in cm² for grille or opening tile based on the thermal output for air heating" with the preferred air velocity of 0.75 m/s. Supply air grille 240 cm²/kW, recirculation air grille 200 cm²/kW.

² The information regarding flue lengths is a recommendation and based on the calculation in accordance with TR OL 2022 chapter 15. The calculation is based on a medium-heavy design and a flue ratio of 360 cm².

³ Average value based on the storage time. Depending on the material properties and the construction thickness.

Mean specific heat distribution = approx. 500 W/m²

⁴ With the exception of height 80 cm

13. Product Data Sheets - (EU) 2015/1186

	Lina 45	
Name of the supplier	Camina & Schmid Feuerdesign und Technik GmbH & Co. KG	
Supplier's model ID	Lina 45 GT s/h	Lina 45 s/h · Lina TV 45 s/s, h/s
Energy efficiency class	A	A
Direct heat output (kW)	5.0	7.0
Indirect heat output (kW)	---	---
Energy efficiency index (EEI)	103.2	103.7
Fuel energy efficiency at nominal heat output (%)	78.1	78.4
Information on special precautions, installation or maintenance	Please refer to the instructions in the installation and operating instructions!	

	Lina 55	
Name of the supplier	Camina & Schmid Feuerdesign und Technik GmbH & Co. KG	
Supplier's model ID	Lina 55 s/h · Lina TV 55 s/s, h/s	
Energy efficiency class	A+	
Direct heat output (kW)	7.0	
Indirect heat output (kW)	---	
Energy efficiency index (EEI)	109.0	
Fuel energy efficiency at nominal heat output (%)	82.1	
Information on special precautions, installation or maintenance	Please refer to the instructions in the installation and operating instructions!	

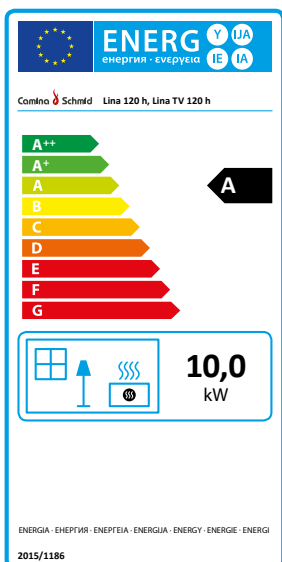
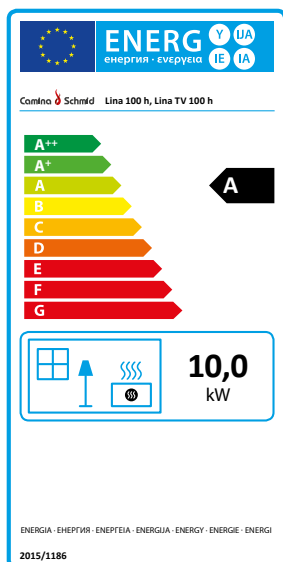
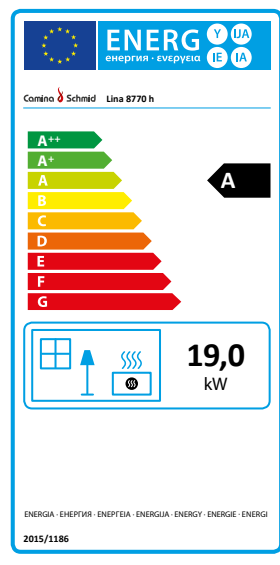
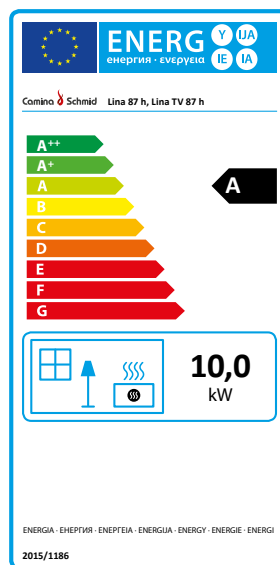
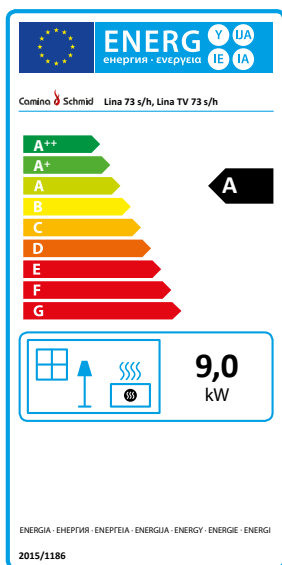
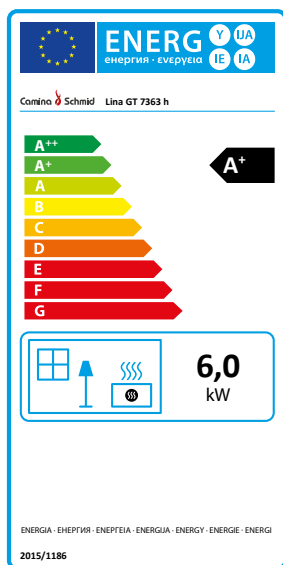
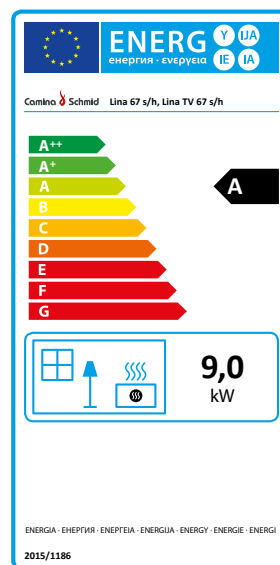
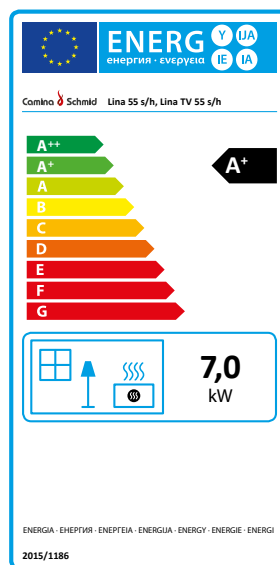
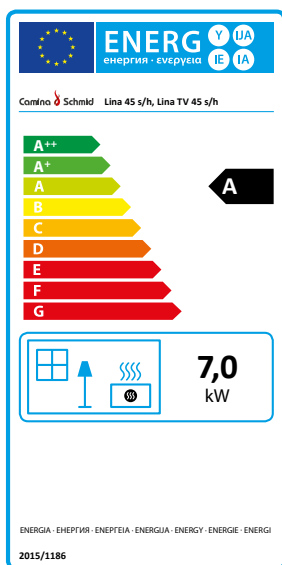
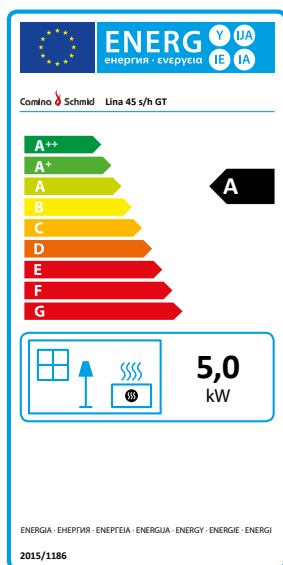
	Lina 67	
Name of the supplier	Camina & Schmid Feuerdesign und Technik GmbH & Co. KG	
Supplier's model ID	Lina 67 s/h · Lina TV 67 s/s, h/s	
Energy efficiency class	A	
Direct heat output (kW)	9.0	
Indirect heat output (kW)	---	
Energy efficiency index (EEI)	103.4	
Fuel energy efficiency at nominal heat output (%)	78.2	
Information on special precautions, installation or maintenance	Please refer to the instructions in the installation and operating instructions!	

	Lina 73	
Name of the supplier	Camina & Schmid Feuerdesign und Technik GmbH & Co. KG	
Supplier's model ID	Lina GT 7363 h	Lina 73 s/h · Lina TV 73 s/s, h/s
Energy efficiency class	A+	A
Direct heat output (kW)	6.0	9.0
Indirect heat output (kW)	---	---
Energy efficiency index (EEI)	112.7	103.4
Fuel energy efficiency at nominal heat output (%)	83.9	78.2
Information on special precautions, installation or maintenance	Please refer to the instructions in the installation and operating instructions!	

	Lina 87	
Name of the supplier	Camina & Schmid Feuerdesign und Technik GmbH & Co. KG	
Supplier's model ID	Lina 87 h · Lina TV 87 h/s	Lina 8770 h
Energy efficiency class	A	A
Direct heat output (kW)	10.0	19.0
Indirect heat output (kW)	---	---
Energy efficiency index (EEI)	103.2	103.2
Fuel energy efficiency at nominal heat output (%)	78.1	78.1
Information on special precautions, installation or maintenance	Please refer to the instructions in the installation and operating instructions!	

	Lina 100, Lina 120	
Name of the supplier	Camina & Schmid Feuerdesign und Technik GmbH & Co. KG	
Supplier's model ID	Lina 100 h · Lina TV 100 h/s	Lina 120 h · Lina TV 120 h/s
Energy efficiency class	A	A
Direct heat output (kW)	10.0	10.0
Indirect heat output (kW)	---	---
Energy efficiency index (EEI)	103.4	106.6
Fuel energy efficiency at nominal heat output (%)	78.2	80.4
Information on special precautions, installation or maintenance	Please refer to the instructions in the installation and operating instructions!	

14. Energy label



15. Technical data - EU 2015 (1185)

Technical documentation for individual room heaters for solid fuels - Regulation (EU) 2015/1185 supplementary to Directive 2010/30/EU:

Name and address of the manufacturer: Camina & Schmid Feuerdesign und Technik GmbH & Co. KG

Harmonised standards: EN 13229 :2001/A2 :2004/AC:2007

Other applied standards or technical specifications: none

Indirect heating function (yes/no): no

Models (Fuel: logs, moisture content ≤ 25 %)	Test reports	Direct thermal output	Room heating annual efficiency ηs 5 %	ηs [x %]	Emissions at nominal heat output (*)				EEI (*)
					PM	OGC	CO	NO _x	
					[x] mg/Nm³ (13 % O₂)				
Lina 45	RRF - 29 15 4505-1	7.0 kW	65.0	75.0	40	120	1500	200	106
Lina 45 GT	RRF - 29 10 2332	5.5 kW	65.0	75.0	40	120	1500	200	103.3
Lina 55	RRF - 29 10 2333	7.0 kW	65.0	75.0	40	120	1500	200	109
Lina 67	RRF - 29 15 4500-1	9.0 kW	65.0	75.0	40	120	1500	200	107.5
Lina 73	RRF - 29 06 1074	9.0 kW	65.0	75.0	40	120	1500	200	103.4
Lina 87	TÜV Süd R-809066-4	10.0 kW	65.0	75.0	40	120	1500	200	106.7
Lina 87/70	TÜV Süd R-848363-1	19.0 kW	65.0	75.0	40	120	1500	200	103.3
Lina 100	RRF - 29 06 1074	10.0 kW	65.0	75.0	40	120	1500	200	103.4
Lina 120	RRF - 29 10 2334	10.0 kW	65.0	75.0	40	120	1500	200	106.6

(*) PM = particulate matter, OGC = organic gaseous compounds, CO = carbon monoxide, NO_x = nitrous oxides, EEI = Energy Efficiency Index

Type of thermal output / Room temperature control

- One-stage thermal output, no room temperature control: no
- Two or more stages, no room temperature control: yes

Specific precautions for assembly, installation or maintenance

Please refer to the information in the installation and operating instructions!

16. General warranty conditions

This product represents an innovative German quality product manufactured by Camina & Schmid in compliance with the state of the art. When designing our products, we attach great importance to good design, high-quality workmanship and perfect engineering. Should defects nevertheless occur on the system that can be proven to be based on material and/or manufacturing defects, we will rectify them according to the conditions described below. Legal warranty claims by the end customer against the seller remain unaffected by these warranty conditions.

Warranty conditions

1. You have proof of purchase (purchase receipt or invoice) as well as the completed warranty certificate.
2. The system was purchased by a company in one of the Member States of the European Union and was operated by a first end customer within a Member State of the European Union at the time the defects occurred.
3. The product has been installed and put into operation by a specialist firm in compliance with the statutory provisions. A relevant commissioning report is available.
4. The installation and connection was carried out properly and correctly adhering to the applicable Camina & Schmid installation instructions and operating and assembly instructions.
5. The fireplace including the flue gas paths have been inspected by the specialist firm and maintained annually as required. A relevant confirmation document (e.g. maintenance log) has been received from the specialist firm regarding the maintenance work carried out.
6. The specialist firm was informed by the operator within one week of the problem occurring.
7. The specialist firm will send the manufacturer written notification of the complaint. Independent rectification of the complaint by the specialist company is possible with prior written agreement and clarification of cost with the manufacturer.

Warranty period and limitation period

Depending on the product, the warranty period for our products starts with delivery of the product from the factory to the specialist firm or wholesaler and is:

- 5 years: cast-iron masonry inserts
- 5 years: masonry stoves
- 5 years: fireplace inserts, fireplace cassette inserts
- 2 years: boiler units/hot water top-mounted heat exchangers
- 2 years: for the electronic components as well as operating elements, such as handles, door hinges, rails

The warranty period ends without notice. All claims arising from a warranty claim shall be limited to six months after the occurrence of the claim.

Warranty exclusions

The following parts and/or damage are excluded from the warranty:

- Damage caused by improper installation, use or external influences
- Fire box inner linings
- Surfaces and ceramic glass windows
- Seals
- Fragile items
- Parts that come into contact with the fire
- Wear parts
- Costs for testing, measuring and adjustment work
- Reimbursement for indirect or direct consequential damages
- Maintenance costs

Damage caused by improper installation, use or external influences

This includes, for example frost, incorrect storage or transport, external force, unsuitable / lack of fuel

Fire box inner lining

Cracks in the fire box inner lining cannot be prevented due to the high temperatures in the fireplace and different work under high thermal loading – ultimately these are natural products (chamotte, vermiculite). The fireplace can continue to be used without any problems providing no major pieces have broken off the plates. A warranty claim can only come into effect for the fire box inner lining if the plates / mouldings dissolve into sandy or chunky parts due to poor mass and thus have an adverse impact on the required protective function. Permanent colour-fastness is excluded with coated and dark interior lining.

Surfaces and ceramic glass

Discolouration of galvanised or painted surfaces, sooty or annealed glazing, and all changes caused by the effects of too high a heat are excluded from the warranty.

Seals

Damaged seals, which in most cases have aged to cause leaks, are also exempt from the warranty.

Fragile items

Fragile items, such as ceramic glass windows, are exempt from the warranty due to incorrect transport, incorrect storage and misuse, as well as a lack of maintenance.

Parts that come into contact with the fire

This affects all internal parts that come into contact with the fire. The heavy exposure is due to the high temperatures in the firebox and various work under high thermal and mechanical loads. This affects the ceramic glass window, seals and cast-iron grate and other parts of the firebox.

Wear parts

Wear refers to the progressive loss of material from the surface of a solid body (base). This is caused by mechanical causes, i.e. contact and relative movement of a solid, liquid or gaseous counter-body, that is the loss of mass (removal of the surface) or a surface by grinding, rolling, beating, scratching, chemical and thermal loads. In general parlance, wear is used to describe other types of wear.

Costs for testing, measuring and adjustment work

Costs for testing, measuring and adjustment work, unless they are directly related to damage under warranty.

Reimbursement for indirect or direct consequential damages

Reimbursement of indirect or direct consequential damages (e.g. air/freight, disposal costs and compensation for lost use, consequential damage on components not covered by the warranty etc.)

Maintenance costs

Costs for maintenance, inspection, care, painting, cleaning and futile expenditure.

Rectification of defects

If the defects are recognised by Camina & Schmid as being under warranty, the defective parts will be repaired free of charge at our discretion or replaced by perfect parts. In doing so, the warranty does not include the costs incurred by the removal and installation of parts. The defects will be rectified either by a specialist company authorised by us or by Camina & Schmid Service. The guarantee does not justify claims for withdrawal (cancellation of the purchase contract), reduction (reduction of the purchase price) and recovery of damages in place of performance from the purchase contract.

Please note that the warranty period of the product cannot be extended nor restarted in the event of repair or replacement of diverse elements.

Parts removed and taken back by Camina & Schmid become the property of Camina & Schmid.

Liability

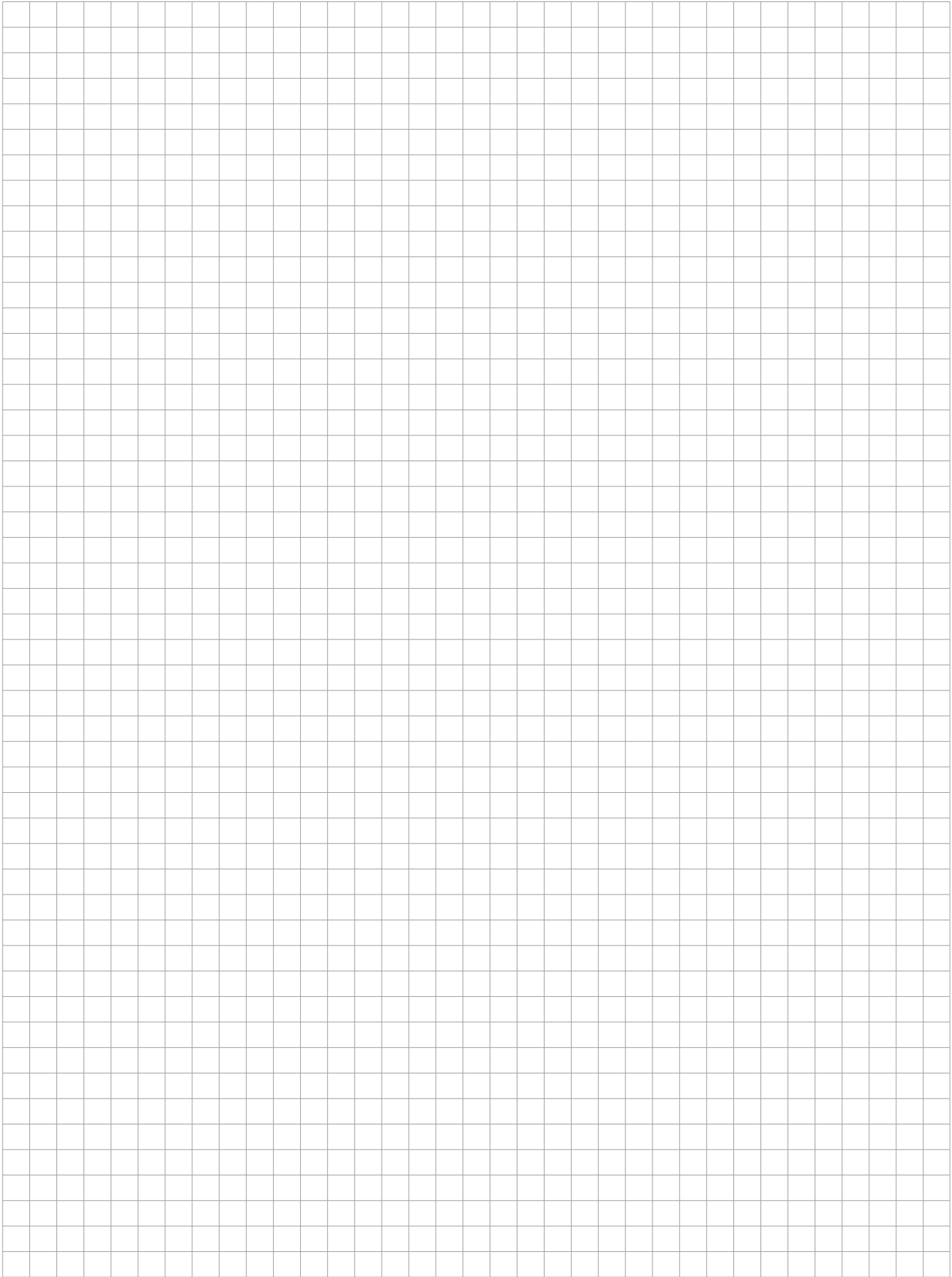
Please refer to our Terms and Conditions of Sale for the regulation relating to liability in the event of damage: www.camina-schmid.de

Contact

Camina & Schmid
Feuerdesign und Technik
GmbH & Co. KG

Gewerbepark 18
DE-49143 Bissendorf, Germany

www.camina-schmid.de
info@camina-schmid.de





Warranty Certificate

Thank you for choosing original Camina & Schmid fireplace technology. We offer a **5-year warranty** on this product and 10-year spare parts warranty. That is our promise for putting your trust in our products.

The **warranty** applies from delivery ex-factory.

We require your proof of purchase or your invoice and this warranty certificate for our warranty to come into force. Please note our General Terms and Conditions of Sale. Please also note that this certificate must carry a registration number and a dealer's stamp.

Only use original Camina & Schmid Feuerungstechnik spare parts. (Purchase from your dealer).

Wishing you many cosy hours with your product.

Reg. no.

(Please enter the order number)



year's warranty



For the sake of
the environment

Dealer

Appliance type

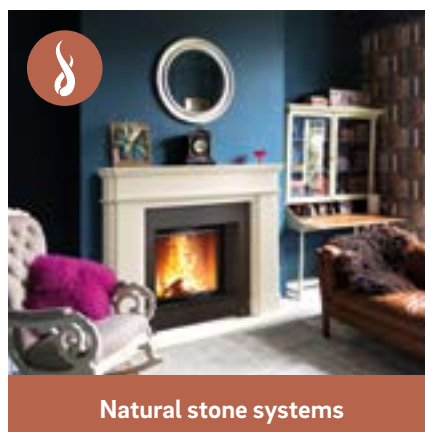
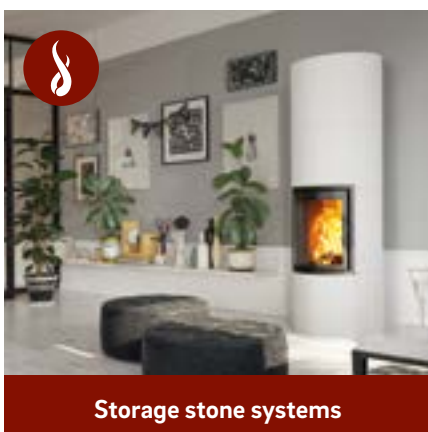
Controller

Date of purchase

Stamp / Signature

Our product range

Camina  Schmid



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Commissioning Report

Operator		Contractor	
Name		Name	
Address		Address	
Town/City/Postcode		Town/City/Postcode	
System data			
Appliance type	<input type="checkbox"/> Masonry insert	<input type="checkbox"/> Fireplace insert	<input type="checkbox"/> Masonry stove
Description			
Additional circuit	<input type="checkbox"/> Heat exchanger	Type	
	<input type="checkbox"/> Ceramic flues	Length (m)	
	<input type="checkbox"/> Top mounted heat exchanger	<input type="checkbox"/> Rotary chimney	
	<input type="checkbox"/> Hot air top-mounted heat exchanger	<input type="checkbox"/> Other	
Hydronic technology	<input type="checkbox"/> Hot water top-mounted heat exchanger (HWAR)	<input type="checkbox"/> Top-mounted heat exchanger/type	
Connecting line/chimney			
Connecting line	Diameter (mm)		
	Extended length (m)		
	Bend		
Chimney	Manufacturer	Type	
	Effective height (m)		
	Diameter (mm)		
	<input type="checkbox"/> single-wall	<input type="checkbox"/> multi-wall	<input type="checkbox"/> outer wall (stainless steel)
Combustion air supply			
Operating mode	<input type="checkbox"/> room air composite	<input type="checkbox"/> external combustion air	
Combustion air conduit	Diameter (mm)		
	Extended length (m)		
	Bend		
Ventilation system (controlled room ventilation, exhaust-air extractor fan hood etc.)			
During commissioning	<input type="checkbox"/> no system fitted	<input type="checkbox"/> system fitted	
Safety equipment	<input type="checkbox"/> not fitted	<input type="checkbox"/> fitted/type	
Controls			
Combustion control	<input type="checkbox"/> not fitted	<input type="checkbox"/> fitted/type	
Other controls	<input type="checkbox"/> Water control/type		
	<input type="checkbox"/> Other		
Instruction and handover			
The operator of the appliance has been instructed in the operation and maintenance of the appliance.			<input type="checkbox"/> yes
The operator of the appliance has been advised about dangers when operating the appliance.			<input type="checkbox"/> yes
The operator of the appliance has been handed the installation and operating instructions.			<input type="checkbox"/> yes

Commissioning Report for Heating Integration

Installation firm (if different)

Name

Address

Town/City/Postcode

Safety equipment

Safety valve	<input type="checkbox"/> 2.5 bar actuating pressure	<input type="checkbox"/> 3.0 bar actuating pressure
	<input type="checkbox"/> Installation outside of the heating chamber (in the heating flow, as close as possible to the appliance)	
	Distance between the appliance and safety valve (m)	
	<input type="checkbox"/> Vent line connected (min. 0.5 % slope, free outlet, visible)	
	<input type="checkbox"/> max. length of discharge line noted (DN20: 2 m, 2 bends; DN25: 4 m, 3 bends)	
	<input type="checkbox"/> Safety valve fitted easily accessible (poss. inspection opening)	
Thermal discharge safety device	<input type="checkbox"/> Installation outside the heating chamber	
	Distance between the appliance and thermal discharge safety device (m)	
	<input type="checkbox"/> Drain line connected (min. 0.5 % slope, free outlet, visible)	
	<input type="checkbox"/> Thermal discharge safety device fitted easily accessible (poss. inspection opening)	
Expansion tank	<input type="checkbox"/> Appliance protected by its own expansion tank	
	<input type="checkbox"/> Cap valve fitted	
	<input type="checkbox"/> System pressure checked and adjusted (bar)	

Pipework/connections

Temperature resistance	<input type="checkbox"/> All components within the heating chamber are made of solid metal
	<input type="checkbox"/>
DVGW approval	<input type="checkbox"/> Components that come into contact with potable water have DVGW approval
Insulation	<input type="checkbox"/> Insulation outside the heating chamber conforms to EnEV 2014

Pump/Return flow temperature increase

Pump	<input type="checkbox"/> High-efficiency pump	<input type="checkbox"/> set to (l/h)
Return flow temperature increase	<input type="checkbox"/> fitted	<input type="checkbox"/> set to (°C)

Pressure test (before walling in the appliance)

The pressure test has been professionally carried out and documented	<input type="checkbox"/> yes
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Start-up

The system has been professionally filled and fully vented	<input type="checkbox"/> yes
The correct operation of all components has been inspected/tested	<input type="checkbox"/> yes

Location _____	Date _____
Signature of appliance operator	Signature of installation company