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INSTRUCTIONS FOR USE AND SAFETY INFORMATION FOR SOLID FUEL ENERGY FIREPLACES

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1. Introduction

1.1 Company details

COMPANY NAME	MISAILIDI FOUNDRY
ADDRESS	FOUNDRY: 7.5th KM OF THESSALONIKI – KAVALA INDUSTRY: PERIVOLAKI LAGKADA
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1.2 Product description and technical specifications

The appliance must be used exclusively for heating internal spaces of buildings (excluding bedrooms) that comply with the provisions of the Building Regulations and other relevant legal and regulatory provisions.

The device is equipped with a double wall, both around the perimeter and on the roof of the combustion chamber. The air chamber created by the double wall heats the cold air that enters with the help of the suction device (fan) installed under the stove. The air during its circulation in the air chambers is gradually heated and while it has reached the maximum temperature value, it is extracted from the hot air outlet ducts to the surrounding space.

The device has an inlet air adjustment lever (primary air). At the same time, on the back of the firebox as well as on the frame of the firebox there are holes for the flow of secondary and tertiary combustion air respectively.

The ceramic glass of the door is resistant to temperatures up to 750°C, allowing visual contact with the combustion chamber without the need to open the door.

The device is used exclusively for heating indoor spaces of buildings (excluding bedrooms) that meet the provisions of the General Code of Civil Procedure, the ELOT Standard HD 384 and other relevant provisions.

The energy center consists of the following main parts:
- Steel combustion chamber (double-walled).
- Door with ceramic glass.
- Sliding door mechanism with sliding guides and counterweight.
- Fixed flue gas deflector inside the firebox
- Lever for adjusting the flow of incoming air (primary combustion air).
- Secondary combustion air device, located on the back of the firebox.
- Tertiary combustion air device, located on the frame of the firebox.
- Lever for adjusting the flue gas outlet damper.
- Mechanical (forced) cold air flow device (fan).
- Air chamber with up to four openings on the roof of the device for connection to ducts for bringing hot air to the installation site or to adjacent areas.
- Ashtray under the firebox for collecting ash.

Also, the device has the ability to work with ducts for:
- The entry of primary combustion air from the external environment,
- The exit of hot air to the area where the device is used and
- The exit of flue gases from the combustion area to the external environment.

The types of solid fuel energy fireplaces and their technical characteristics are presented in the tables below:

	AIR 65 FLAT	**AIR 45-75 FLAT**	**AIR 80 FLAT**	**AIR 90 FLAT**
NOMINAL THERMAL POWER (kW)	14,18	14,12	14,56	15,26
THERMAL POWER RANGE (kW)	7,09-21,27	7,06-21,18	7,28-21,84	7,63-22,88
PERFORMANCE RATE (%)	75,1	74,7	75,2	75,1
NOMINAL FUEL CONSUMPTION (Kg/h)	4,00	4,00	4,10	4,30
AVERAGE FLUE GAS TEMPERATURE (oC)	230	225	215	240
CO CONCENTRATION AT 13% O2 (%)	0,1149	0,1165	0,1161	0,1157
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	188x74x55	183x88x56	180x87,7x59	183x97x70
	AIR 55-90 FLAT	**AIR 115 FLAT**	**AIR 75 FLAT DOUBLE**	**AIR 90 FLAT DOUBLE**
NOMINAL THERMAL POWER (kW)	26,69	28,95	13,54	25,57
THERMAL POWER RANGE (kW)	13,34-40,03	14,48-43,43	6,77-20,31	12,78-38,35
PERFORMANCE RATE (%)	74,3	74,8	74,7	74,5
NOMINAL FUEL CONSUMPTION (Kg/h)	7,60	8,20	3,84	7,27
AVERAGE FLUE GAS TEMPERATURE (oC)	310	345	215	310
CO CONCENTRATION AT 13% O2 (%)	0,1176	0,1150	0,1197	0,1187
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	188x102,5x70	185x121x70	187x87,7x62	188x102x70
	AIR 115 FLAT DOUBLE	**AIR 65 PRISMA**	**AIR 80 PRISMA**	**AIR 60 CORNER**
NOMINAL THERMAL POWER (kW)	27,78	14,48	15,54	14,62
THERMAL POWER RANGE (kW)	13,89-41,67	7,24-21,72	7,77-23,31	7,31-21,93
PERFORMANCE RATE (%)	74,5	74,8	74,8	74,6
NOMINAL FUEL CONSUMPTION (Kg/h)	7,90	4,10	4,40	4,15
AVERAGE FLUE GAS TEMPERATURE (oC)	330	215	220	180
CO CONCENTRATION AT 13% O2 (%)	0,1190	0,1163	0,1159	0,1164
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	188x121x72	190x79,5x70	187x97x74,5	188x65,5x65,5

	AIR 75 CORNER 45-75	AIR 75 CORNER 45-75 BG	AIR 90 CORNER 55-90	AIR 90 CORNER 45-90 BG
NOMINAL THERMAL POWER (kW)	14,53	15,0	26,76	24,61
THERMAL POWER RANGE (kW)	7,27-21,80	7,50-22,50	13,38-40,14	12,30-36,91
PERFORMANCE RATE (%)	74,8	74,7	74,3	74,3
NOMINAL FUEL CONSUMPTION (Kg/h)	4,12	4,25	7,63	7,01
AVERAGE FLUE GAS TEMPERATURE (oC)	185	195	272	271
CO CONCENTRATION AT 13% O2 (%)	0,1177	0,1177	0,1186	0,1180
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	183x90x56	187x90x59	182x103x70	186x106x60

	AIR 75 PANORAMA	AIR 75 PANORAMA 45-75 BG	AIR 90 PANORAMA	AIR 90 PANORAMA 45-90 BG
NOMINAL THERMAL POWER (kW)	15,00	14,6	24,01	23,56
THERMAL POWER RANGE (kW)	7,50-22,50	7,30-21,90	12,00-36,01	11,78-35,34
PERFORMANCE RATE (%)	75,3	74,7	74,8	74,3
NOMINAL FUEL CONSUMPTION (Kg/h)	4,22	4,14	6,80	6,71
AVERAGE FLUE GAS TEMPERATURE (oC)	200	200	270	270
CO CONCENTRATION AT 13% O2 (%)	0,1162	0,1190	0,1156	0,1190
FLUE DIAMETER (mm)	250	250	250	250
EXTERNAL DIMENSIONS (mm)	188x94x55	188x94x59	189x108x70	189x108x60

	AIR PANORAMA PI 55-90
NOMINAL THERMAL POWER (kW)	19,5
THERMAL POWER RANGE (kW)	9,75-29,25
PERFORMANCE RATE (%)	74,5
NOMINAL FUEL CONSUMPTION (Kg/h)	5,55
AVERAGE FLUE GAS TEMPERATURE (oC)	270
CO CONCENTRATION AT 13% O2 (%)	0,1182
FLUE DIAMETER (mm)	250
EXTERNAL DIMENSIONS (mm)	188x76,5x106

1.3 Purpose and objective

The purpose of this document is to provide detailed information and guidance to ensure safety during the various phases of the life cycle of solid fuel fireplaces. It identifies hazards, protective measures, and procedures required for the safe handling of these products.

Solid fuel fireplaces require special care during installation, use, maintenance, as well as during dismantling or demolition, in order to ensure their safety and efficiency throughout their life. The manufacturer provides specific instructions for all these procedures, as well as for the risks associated with their operation.

1.4 Scope

The scope of application covers the transportation, installation, use, operation, removal, maintenance, dismantling and demolition of solid fuel fireplaces, and is addressed to consumers, installers and maintainers.

1.5 Importance and safety instructions

Safety at all stages of the product life cycle is crucial to avoid accidents, damage and risks to health and the environment. Each stage must follow strict guidelines to ensure the safety of users and professionals involved.
The safety requirements for fireplaces concern both professionals (workers) and non-professionals (consumers, users) at all stages of the product life cycle. During transport, installation, maintenance, use or dismantling, strict adherence to technical specifications and safety rules is required to reduce the risks of accidents, such as fire, carbon monoxide poisoning or damage to users and the environment. In particular, professional installers and maintainers must have the necessary knowledge and certifications to ensure the correct operation and safety of fireplaces. For consumers, it is important to use the fireplace correctly, perform regular maintenance and follow the operating instructions in order to avoid accidents. Also, in the case of processing the product at the end of its life cycle, attention is required to the safe disassembly and recycling of materials, in order to prevent pollution and ensure the protection of the environment and public health.

These installation and operating instructions are intended for users and qualified technicians. We recommend that users read all instructions carefully. Installation work and the first use of the fireplace must be carried out exclusively by a qualified technician.

Danger :

Failure to follow the safety instructions may result in serious injury – even death – as well as material and environmental damage. Read the safety instructions and follow the instructions they contain.

- Read these fireplace installation and operating instructions carefully.
- Keep these instructions for later reference.

Proper installation, regular maintenance and safe use of solid fuel fireplaces are essential to ensure their efficient and safe operation. It is crucial to follow the manufacturer's instructions and take appropriate measures to avoid risks such as carbon monoxide poisoning, fires and mechanical damage. In the event of damage, professional assistance should be sought to properly repair the product.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children must be supervised to ensure that they do not use the appliance as a toy.

1.6 General safety recommendations

The device must be operated in accordance with this technical manual. The equipment used with the device must be suitable and carry the required certifications, where required by applicable legislation & regulations.

It is **FORBIDDEN** to operate the device without the guards in their intended position.

Any maintenance or repair work should only be carried out by qualified technical personnel with the approval of the manufacturer or its representative. Any maintenance or repair work should only be carried out after the device has been isolated from its electrical supply source and has cooled to ambient temperature.

ATTENTION!
Any electrical work must be performed by a licensed electrician in accordance with applicable legislation.
The spare parts that may be used must be approved by the manufacturer.

ATTENTION!
The installation and operation of the device in bedrooms should be avoided. It is recommended that the hot air ducts do NOT end in areas used as bedrooms. Otherwise, an appropriate detection and warning system for flue gas leaks should be installed.

The fireplace can be transported safely using the appropriate means.

The various parts of the appliance, especially its external surfaces, are extremely hot during operation and therefore the necessary precautions must be taken.

- Use appropriate gloves.
- Inform your children about the risk of burns when the energy fireplace is in operation and make sure they stay at a safe distance, supervising them.
- Do not place objects that are not heat-resistant near the device.
- Do not place flammable or explosive materials near the device. If you want to carry out work with flammable materials in the surrounding area, turn off the device and wait for it to cool down before carrying out these works.
- The device must not be altered or modified in any way.
- Use only genuine spare parts from the manufacturer. The company is not responsible for any damage caused by spare parts not approved by the company.

! Never leave children alone or unsupervised near the fireplace when it is in use.

! Teach children how to handle the fireplace correctly and safely.

! Do not touch the external surfaces and glass when the fireplace is in use, there is a high risk of burns.

! It is forbidden to use the fireplace as a waste incinerator.

! Do not burn used or painted wood.

! Dispose of ashes only after they have cooled completely.

! Ashes must be placed outdoors or disposed of in a place where there is no risk of ignition.

! Immediately inform your local specialist dealer if you detect any malfunction.

! Do not use chemicals or liquids to light a fire.

! Do not use ANY other fuels than those indicated.

1.7 Fire hazard

Fire prevention measures

1. The appliance must not be operated with the combustion chamber door open.
2. There must be no flammable or heat-sensitive objects or materials within 100cm of the burner.
3. Safety distances must be maintained at all times. Within these safety distances from the appliance, no flammable objects must be placed.
1. If the appliance is intended to be installed on a floor without fireproof properties, a fireproof substrate must be placed between the appliance and the floor, in dimensions specified by local regulations.
4. For optimal operation of the appliance and to prevent the risk of fire, the chimney must be cleaned regularly.
5. Ashes must be removed regularly. Dispose of in a fireproof container.
6. Do not operate the appliance if you notice gas emissions.
7. Do not place flammable materials near the appliance.
8. Suitable fire extinguishers should be available in close proximity to extinguish a fire in the appliance in a dangerous situation.

Fire extinguishing instructions
If you notice a fire in your fireplace or chimney, IMMEDIATELY perform the following steps, where they can be performed safely:

1. Close the appliance door.
2. Close the primary combustion air inlet regulator – move it to the left to the closed position.
3. Close the flue gas flow regulator – push it to the closed position.
4. Use appropriate fire extinguishers to extinguish the fire.
5. Call the FIRE DEPARTMENT immediately (telephone for Greece: 199)

Avoid extinguishing the fire using water.
The use of water will likely result in cracking/warping of the metal surfaces of the stove due to the sudden change in temperature. **However, if no other extinguishing agent is available, use water**.

ATTENTION!
After successfully extinguishing the fire, contact a qualified person to check the fireplace and chimney to verify that the device is still suitable for use.

1.8 Use and terms of use
Use refers to the purposes for which the fireplace is designed and approved to operate. Solid fuel fireplaces are used for heating indoor spaces. It is important for the user to be aware of the declared uses of the fireplace, as exceeding these uses may lead to performance problems, overheating or even dangerous situations.

The terms of use refer to the restrictions and instructions that the user must follow for the safe and efficient operation of the fireplace. These terms include operating conditions (e.g. temperatures, fuel types, ventilation), restricted or inappropriate uses (e.g. prohibition of the use of unapproved fuels), as well as maintenance and inspection requirements.

It is important to note that violating these conditions may lead to damage to the fireplace, poor performance, and risks to the health and safety of users (e.g. carbon monoxide emission or fire).

2. Transport

2.1 Potential risks during transportation
Risks include injuries due to accidents or falling products, damage to packaging, and damage to products. Workers or users moving the product are also at risk if proper transportation methods are not used.

2.2 Proper packaging methods
To ensure safety during transport, the product must be properly packaged in materials that will protect it from shocks and abrasions. It is recommended to use stable wooden or plastic pallets and protective plastic or foam materials.

2.3 Precautions during installation and transportation to high altitudes
Safe handling instructions during transport, such as the use of lifting machinery or equipment, to avoid injury or damage to the products.

2.4 Hazard marking and warnings
Marking with signs warning of the need for caution, indicating the nature of the hazards (e.g., “Heavy product”, “Fragile”, “Risk of injury”).

3. Installation

The manufacturer's liability is limited to the supply of the device.

The device is delivered ready for installation without the need for assembly.

The installation of the appliance must comply with all local regulations, including those referring to national and European standards.

The company that installs the energy fireplace is responsible for delivering it in a suitable position so that it is ready for use. This includes its configuration as well as the final checks and tests to verify the safe operation of the entire assembly (fireplace).

3.1 Potential risks during installation
Risks include accidents due to improper placement, gas or smoke emissions during installation, as well as risks from contact with hazardous materials or overloading the space.

Warning:

Entrust the installation of the device to a specially trained technician.

Professional Installation: Solid fuel fireplaces must be installed by a certified technician or professional who meets applicable technical specifications and safety regulations. The technician should ensure that the fireplace is placed in a safe location, away from flammable materials and in an area with adequate ventilation.

3.2 Installation site preparation

It is important to check the area where the fireplace or heater will be installed for any structural defects or other hazards (e.g., flammable materials, inadequate ventilation).

The space in which the fireplace is placed must meet the minimum distance requirements from walls, furniture and other objects, and have a proper ventilation system.

Warning:

The appliance is not suitable for installation in a shared flue system.

Floor

Place the fireplace on a floor that is flat, fire-resistant, non-flammable (tile, marble, etc.) and has sufficient load-bearing capacity.

Warning:

Fire hazard due to improper floor covering!

In case the above conditions are not met, place the fireplace on a non-combustible base made of ceramic, steel or glass material, with dimensions that protrude from the fireplace by 30 cm around the perimeter and 50 cm from the firebox door.

Area

Make sure that the room where the appliance is to be installed is adequately ventilated and that the air intended for combustion enters directly from the outside environment (e.g. with a suitable air inlet).
Avoid installing the appliance in a room where central ventilation ducts, hoods, type B gas appliances, heat pumps or, in general, appliances that can cause a negative pressure when operating simultaneously with the hob.

Safety distances

Safety distances from flammable materials should be 50 cm around and 80 cm in front of the device.

Warning :

Fire hazard due to flammable objects within safety distances!

Do not place flammable objects and materials within the safety distance.

3.3 Installation instructions

The installation of the device must comply with all local regulations in force including those referring to national and European standards.

Chimney

A key factor for the proper operation of the device is the choice of the chimney.
Its dimensions, its height, and its insulation are the factors that affect the draft.

According to the building regulations, each appliance must have its own chimney. It is allowed to connect more than one appliance to the same chimney, if the exhaust gases are removed by mechanical means. The chimney must be made of durable and non-combustible materials and have a fire resistance index of not less than two hours. It must be securely supported along its entire length on a wall, floor or ground.

The construction of the chimney must be such as to ensure:

- The smooth flow of exhaust gases under normal operating conditions.
- Its construction ensures its resistance to high temperature, combustion products and possible condensate.
- It is insulated and watertight.
- The tightness of the walls, so that gases do not escape.
- The resistance to the loads it receives.
- The resistance to conditions created by any ignition of deposits inside the chimneys.
- Their resistance to chemical attacks caused by combustion products.
- Thermal insulation, so that the external surface temperature is below 50 degrees C at the base of the chimney, regardless of whether it is accessible or not.
- The internal walls of the chimney must be smooth without cracks and corrosion.
- It is vertical and does not show a reduction in the internal cross-section at any point.
- If there is a change of direction, this does not exceed 45 degrees.
- In internal chimneys, its free expansion must be ensured. The chimney must be located as much as possible inside the building and exit at the highest point of it. Bends must be avoided in the chimney route. The connection of the horizontal part of the chimney with its vertical part must be made at an angle of at least 100 degrees.

The free cross-section of the chimney must be as circular or rectangular as possible and must be kept constant throughout its entire length. It is prohibited to change the cross-section of the chimney for any reason. In rectangular chimney cross-sections, the side ratio must be a maximum of 1/1.5. The calculation of the chimney cross-section is made in accordance with the corresponding ELOT 447 standard.

The chimney must end at least 1 m. from its exit point, 0.70 m. from any edge of a building located within a radius of less than 3 m. from it and 1.50 m. from flammable materials. For each chimney, a cleaning opening is provided at its base, which must be hermetically closed.

The chimney must protrude from the highest point of the roof at least 1 m. Around the head and within a radius of 10 meters, there must be no obstacles such as walls, slopes and trees. If this is not possible, then the head must be raised at least one meter above the obstacle. In case there are side chimneys, the end of one must be at least 50cm higher than the other, in order to avoid pressure transfer between them..

The minimum chimney draft must be 12 Pa or 0.12 mbar

Before installing the appliance, make sure that the chimney meets the following:
1. Its construction ensures its resistance to high temperature, combustion products and possible condensate.
2. It is insulated and watertight.
3. It is vertical and does not show a reduction in the internal cross-section at any point.
4. If there is a change in direction, this does not exceed 450.
5. Its construction must comply with any technical specifications of the European Union Directives and the relevant national provisions (Regulation 305/2011, etc.). 4.2 Chimney end

Chimneys installed outside the building must have adequate insulation along their entire length.

It is PROHIBITED to connect two or more appliances to one chimney. It is PROHIBITED to pass air supply ducts through the chimney.

In case of a chimney fire

The chimney may catch fire if unsuitable or liquid fuels are used.

The measures to be taken in the event of a chimney fire are as follows:

1. Close all air vents.
2. Call the fire department at 199.
3. Clear the access routes to the cleaning openings (e.g. basement, attic, etc.)

4. Move all flammable objects away from the chimney.
5. When the appliance is put back into operation, a specialist technician must check the chimney.
6. A specialist technician must investigate the cause of the chimney fire and take the necessary corrective measures.

Avoid extinguishing the fire using water.
The use of water will likely result in cracking/warping of the metal surfaces of the stove due to the sudden change in temperature. **However, if no other extinguishing agent is available, use water**.

ATTENTION!
After successfully extinguishing the fire, contact a qualified person to check the fireplace and chimney to verify that the device is still suitable for use.

The following standard measures must be taken into account to avoid a fire::
1. The appliance must not be operated with the combustion chamber door open.
2. There must be no flammable or heat-sensitive objects or materials within a distance of less than 100cm in front of the hearth.
3. The specified safety distances must be maintained at all times. Within these safety distances from the appliance, no flammable objects must be placed.
4. If the appliance is intended to be installed on a floor without fireproof properties, a fireproof substrate must be placed between the appliance and the floor, in dimensions specified by local regulations.
5. For optimal operation of the appliance and to prevent the risk of fire, the chimney must be cleaned regularly.
6. Ashes must be removed regularly. Dispose of in a container with fireproof properties.
7. You should not operate the appliance if you notice gas emissions.
8. You should not place flammable materials near the appliance.
9. Suitable fire extinguishers should be available in close proximity to extinguish a fire in the appliance in a dangerous situation.

Air ducts
Hot air exhaust ducts
The device is equipped with up to four (4) circular cross-section outlets on its roof from which up to four (4) suitable Σ air ducts can be connected (see next figure).

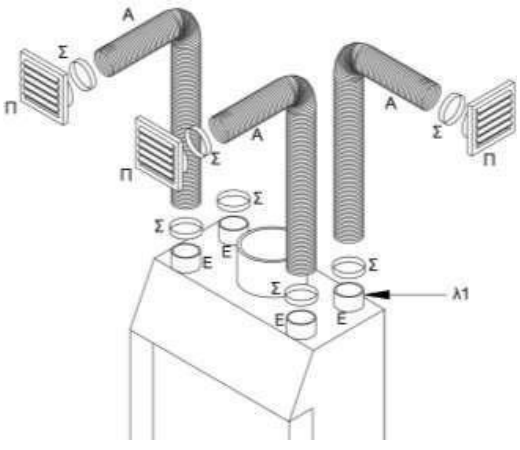
The air is forced out using the centrifugal fan through the air ducts Σ.

The outlets of the Σ air ducts can be installed above the fireplace or in another remote area depending on the heating needs, at a distance of less than 3m from the device. For distances greater than 3m, the temperature of the outgoing air decreases proportionally to the distance.

The installation of the air ducts must be completed before the installation of the decorative fireplace trim.

To install the air ducts, follow the steps below:

1) Fix one end of the air ducts Σ to the corresponding outlet ports E. Use the appropriate clamps K to secure them.
2) Fix the other end of the air ducts S to the louvers Π that are installed in the structural elements of the building. Use the appropriate clamps K to secure them to the louvers.



Each air duct must be insulated to prevent noise and heat transmission.

Combustion air intake duct
At the installation location of the device, oxygen supply must be ensured to start and maintain the combustion of the wooden logs, directly from the external environment and not indirectly from the space where the device is installed. This is achieved by installing a suitable air intake. The opening of the intake that communicates with the external environment must be covered with a suitable shutter that on the one hand allows the supply of air and on the other hand prevents the entry of birds, rodents or other animals.

The air inlet must be positioned so that it cannot be covered and protected by suitable blinds. Where the inlet cannot communicate directly with the outside environment, it may communicate with adjacent spaces

provided that these adjacent spaces are not used as garages, kitchens, toilets, engine rooms and boiler rooms.

Exhaust gas extraction flue
The flue that will be used to connect the appliance to the chimney must be suitable for this use (meet the technical specifications of the Building Regulations and the relevant national provisions) and bear the required **CE** certification.

The flue must not be inclined more than 45° (to the vertical axis) and must be connected to the chimney in a completely airtight manner. The flue is connected to the top of the appliance at the central outlet of circular cross-section. When connecting, appropriate fire-resistant material must be used and the necessary tightness must be ensured. The flue must be properly insulated and must not come into contact with flammable materials.

ATTENTION!
If the flue is not connected to the appliance with absolute tightness, then the release of dangerous gases from the combustion of the wooden logs (e.g. CO, CO2) and/or a fire may occur.

Natural flow hot air exhaust louver (expansion)
The area around the appliance, within the decorative fireplace surround, must be constantly and adequately ventilated. Ventilation helps prevent the appliance from overheating, while the heated air is naturally distributed throughout the interior through the expansion louver that must be placed on the ceiling of the decorative fireplace surround.

Decorative fireplace lining
The material used to construct the decorative cladding must be suitable (sufficiently fire-resistant) for the high temperatures expected to develop inside the cladding.

It is **FORBIDDEN** for the decorative fireplace lining to rest on the hearth. The support must be ensured with a metal independent frame, which will disperse the load directly to the ground and not through the hearth.

Thermostat - fan arrangement
The centrifugal fan is installed at the bottom of the hob. The fan is operated automatically by a special electronic thermostat.

The electrical connection of the device to the power supply must be made by a competent person (licensed electrician), in accordance with current national regulations.

ATTENTION!
The power cord **MUST NOT** come into contact with hot surfaces. Special cables suitable for high temperatures must be used.

ATTENTION!
During installation, it must be ensured that the device is properly grounded. Verification of suitability must be carried out by a competent person (licensed electrician) and must be carried out at regular intervals (e.g. annually) in accordance with the instructions of the competent person.

WARNING!
The device's control and operating device ensures its proper operation. The manufacturer bears no responsibility in case of assembly with another type of fan without its written approval.

4. Tips for proper operation
The fireplace is not a household waste incineration unit. Anyone who uses it to burn household waste, chemically treated wood residues, waste paper, pollutes the environment and may be prosecuted.
The fireplace is not suitable for burning liquid fuels.

In addition to uncontrolled air pollution and the emission of harmful pollutants, burning unsuitable fuels has a negative effect on the operation and lifespan of the fireplace and chimney.

Burning unsuitable fuels can also cause a chimney and house fire.

Acceptable fuels
Only dry wood logs with a moisture content of approximately 8%, approximately 30cm long and a maximum circumference of 30cm are permitted for burning. Smaller logs can be used for kindling.

It is permitted to burn compressed pieces of wood without resin. These should be used with particular care. This type of fuel has a high calorific value and if used in large quantities, the appliance may overheat**.**

It is dangerous and FORBIDDEN to use as fuel: charcoal, paper, pieces of bark and panels, green or painted wood and plastic materials. In case of damage to the device caused by the use of unauthorized fuels, the manufacturer bears no responsibility. The warranty provided with the purchase of the device is canceled in these cases.

The use of paper and cardboard is only **permitted** as kindling.
Attention!
Paper and cardboard with printed materials on their surfaces are dangerous as when burned, dangerous chemicals contained in the ink are released.

NOTE!
It must be taken into account that it is not possible to continuously heat the space from the fireplace during the night without regular fuel supply.

Advice:
Do not cut firewood too small because very thin wood burns for only a very short time.

Different types of wood have different calorific values. Hardwoods, such as oak and beech, are particularly suitable for burning, as they burn slowly with a low flame and create a longer burning time. Resinous woods, which are rich in resin, burn faster and tend to create sparks.

Warning:

Never burn plastics, household waste, chemically treated wood residues, bark and chipboard waste.

The use of unsuitable fuels can cause damage to the appliance's chimney and can also cause harm to health and the environment.

Attention:

Use only dry firewood.

5. Handling means

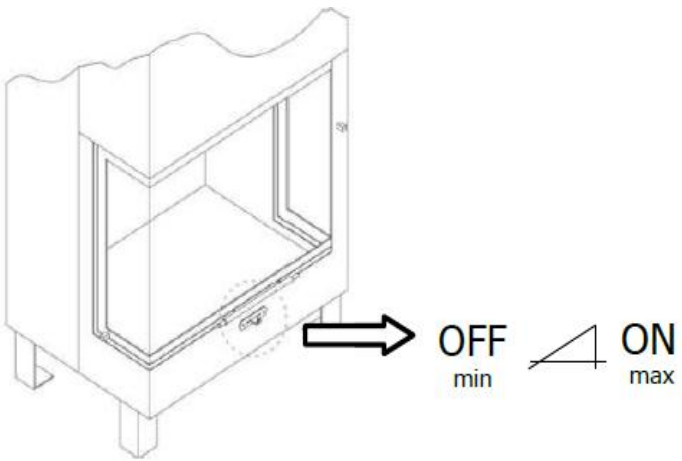
5.1 Adjusting the incoming combustion air flow

The device located in the middle, under the flame port, achieves regulation of the intake air flow.

The intake air enters under the combustion chamber and is preheated within the double wall of the base before entering the combustion chamber, in front of the fireproof glass of the door and under the combustion bed through the lower grate.

It is recommended that when lighting the fireplace, the device be placed in its fully open position (ON) in order to ensure the inflow of a large amount of combustion air.

During combustion and depending on the heating needs of the space, the device can be moved from its fully open position (ON) to its fully closed position (OFF) and/or vice versa, regulating (increasing or decreasing respectively) the amount of air entering the combustion chamber and by extension the intensity of the combustion of the wooden logs.

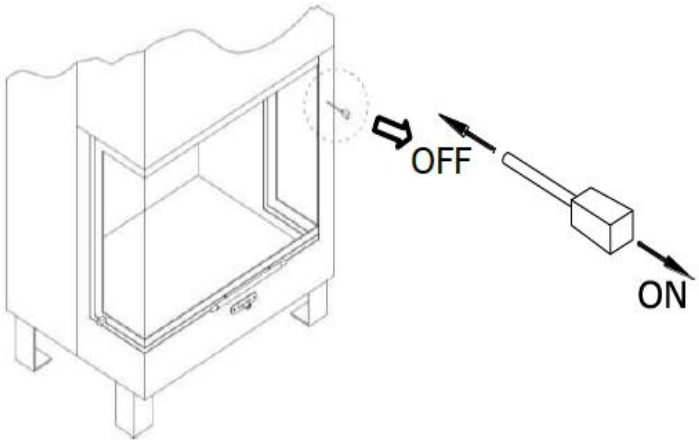


During normal operation of the stove, this lever should not be in its fully closed position (OFF), in order to achieve a constant air flow to maintain combustion.

5.2 Flue gas flow adjustment

The lever regulates the flow of flue gases exiting the mouth. During combustion and depending on the heating needs of the space, the lever can be moved from its fully open position (ON) to its fully closed position (OFF) and/or vice versa, respectively increasing or decreasing the rate of escape of flue gases towards the flue and the chimney afterwards.

The adjustment position of the lever affects the time the hot flue gases remain inside the fireplace for a longer or shorter period of time respectively. Thus, the air in the fireplace's air chambers is heated more or less before it exits into the building through the air ducts with the louvers.



The flue gas flow adjustment device is constructed in such a way that even when the relevant lever is in its fully closed position (OFF), the flue gases are allowed to escape through the chimney, ensuring in any case that the combustion chamber will not be filled with smoke.

5.3 Hot air flow adjustment

The stove is equipped with a centrifugal fan located under the combustion chamber and which is automatically activated by a thermostat-rheostat. The sensor controls the temperature of the air exiting the air chamber and when the initial thermostat setting (40°C) is exceeded, a command is given for the automatic operation of the fans. At the same time, the operator is provided with the possibility, through the thermostat, to give a command to start the fan operation before its automatic activation.

6. Device operation

6.1 Lighting instructions

To light the fireplace, follow the steps below:

1. Open the firebox and place sheets of newspaper in the center of the hearth. Place about ten kindlings in a crisscross pattern on top of the newspaper. Open the flue bypass by pulling the handle.
2. Fully open the primary air control.
3. Light the newspaper under the kindling
4. Close the door and let the fire burn.
5. Once the kindling starts to burn, open the door and add wood.
6. Only return the air control handle to its original position if you want to use the oven. Otherwise, the handle should be pulled out.
7. Once the fire is burning well, use the primary air control to adjust the desired combustion.

Warning:

When you use the fireplace for the first time, you will notice water droplets (condensation) on the bottom of the heater. Don't worry, this is normal and only happens when the fireplace is lit for the first time. Wipe the water off with a cloth.

Warning:

When you use the fireplace for the first time you will notice some smell or fumes. Don't worry, this is normal and inevitable due to the baking of the paint and oils used to build the fireplace. If necessary, open the window for a few minutes. The smell will quickly fade and disappear after a few hours of operation.

The area where the appliance is used must be adequately ventilated. Never turn on the appliance when there are flammable gases in the room.

Warning:

Use only small amounts of fuel and keep the air supply ducts open so that the fuel burns faster..

Danger:

Never use alcohol, gasoline or other flammable materials as lighters. Use paper, small pieces of wood and kindling.

Attention:

- **The fireplace must be used with the firebox door closed. The oven doors must also be closed when the stove is not in use..**
- **Do not overload the fireplace.**

Only the type of fuel stated in this Technical Manual should be used.

It is **PROHIBITED** to use accelerants (alcohol, gasoline, oil, etc.) to ignite the device.

When the kindling is lit, place wooden logs (suitable fuel), close the door and adjust the combustion.

For the correct and problem-free operation of the device, the user must observe the following:

1. Ensure adequate ventilation of the room throughout the entire operation of the device.
2. Operate the device during the first ignitions (3 ~ 4 times) with a reduced amount of fuel for a sufficient period of time (6 ~ 10 hours) and adjust the exhaust gas extraction to the "ON" position (fully open)
3. In subsequent ignitions, gradually larger amounts of fuel are used, until the device operates at maximum load. During this phase, long periods of ignition and shutdown should be maintained as much as possible so that the device can adapt smoothly.

Danger :

Do not touch the hot parts of the heater. Take precautions (fireproof gloves, etc.). Warn children of such danger and make sure they do not stay near the heater when it is in operation.

The above steps must be completed before the decorative lining of the fireplace is installed, so that it is possible to check the correct connection of the flue with the fireplace and the chimney. After the above procedure has been successfully completed, the decorative lining can be installed.

When the materials and connections of the decorative lining have dried, the device can operate at normal rates, avoiding excessive loads or the use of fuels that can lead to sudden fluctuations in the temperature of the fireplace surfaces.

When the device is used, high temperatures develop that can cause burns to people or animals or cause fire to objects that are in contact with the device or are located in close proximity. Safety distances should be maintained for adjacent objects, measures should be taken to restrict access for children, pets or other animals and contact with its hot surfaces should not be attempted until they have cooled sufficiently.

6.2 Operation under normal conditions

During normal operation of the device, the primary combustion air flow adjustment device can take any position from fully closed to fully open, depending on the heating needs of the space.

WARNING!
The appliance must not be operated with a large amount of fuel or with an excessive inflow of combustion air, as it may overheat and cause damage.

Ash should be regularly removed to allow combustion air to enter the combustion chamber unhindered

It is **PROHIBITED** to use the appliance with the combustion chamber door open because it creates a risk of fire and the emission of dangerous fumes in the area of use.

If you notice a malfunction during operation of the device (e.g. release of flue gases, overheating of the device, etc.), take the following necessary measures:

- Move the primary combustion air adjustment device to the left to the closed position
- Push the flue gas flow adjustment lever to the closed position
- Do not supply the device with additional fuel

If required, apply fire extinguishing measures

6.3 Extinguishing a fireplace

To reduce or extinguish the fire in the appliance, set the air supply lever to a low level or close it completely. This way, the appliance is not supplied with air, so the fire decreases and gradually goes out. **DO NOT EXTINGUISH THE FIRE WITH WATER!**

Attention:

When wood burns slowly in a closed stove, moisture and tar are produced, which will cause condensation and deposits in the chimney. This can be minimized by burning the stove vigorously for 15 to 20 minutes twice a day.

WARNING:

The fireplace does not emit fumes or smoke into the home if it has been properly installed by a specialist technician, according to the installation instructions, the chimney has been correctly dimensioned and the cleaning and maintenance instructions for the heater are applied. Occasionally, during ash removal or fuel replenishment, some smoke may be present.

Danger :

Stop using the fireplace if there are fumes or smoke.

In case of smoke emission:

- Open doors and windows to ventilate the area.
- Extinguish the fire and safely remove fuel from the fireplace.
- Check the flue and chimney for any obstructions and clean if necessary.
- Seek the assistance of qualified technicians.
- Do not attempt to operate the fireplace again until the cause of the exhaust emission has been investigated and corrected.

6.4 Operation during the transition period

When the external ambient temperature is above 140C, combustion disturbances may occur and the chimney draft may be reduced and the flue gas may not be completely evacuated.

Carefully remove the ash to enhance air circulation under the fireplace.

6.5. Feedback

To refuel the device with recommended fuel, follow the steps below::

1. Open the flame door.
2. Supply fuel to the combustion chamber.
3. Close the flame door and secure it.
4. Repeat the process at regular intervals for as long as you wish to keep the device running

7. Maintenance

7.1 Potential hazards during maintenance

Hazards from residual heat, handling exhaust gases or contact with hot surfaces.

7.2 Protective measures during maintenance
Use of gloves, face masks and other protective equipment during cleaning and maintenance of fireplaces

7.3 Cleaning and maintenance
It is important that the fireplace is maintained regularly and in accordance with these instructions. Maintenance should be carried out at least once a year by a qualified technician.

Danger :

The fireplace should be cleaned when it is completely cold.

Cleaning external surfaces
The exterior surfaces of the fireplace are painted with high temperature resistant paint. Use a soft brush or dry cloth to clean them. Remove moisture as surface rust may form.

Cleaning the observation window glass (flame window)
The glass of the observation window is kept clean by the air supply. In case of contamination:
- Remove light dirt from the glass with a damp cloth.
- Use a mild detergent without harsh chemicals.
- Remove stubborn dirt from the viewing glass with a special cleaner for stove and fireplace glass. Be careful and follow the instructions for using these products because they can damage the refractory coating.

Another solution for cleaning fireproof glass is the ashes themselves.
Place a slightly damp piece of newspaper or cloth on the white ashes of a cold stove and rub it on the glass. Then, rub the glass with another damp piece of newspaper or cloth. Finally, wipe with a clean, dry cloth.

Cleaning the combustion chamber lining
The firebox lining consists of refractory plates.
- Let the refractory plates cool down.
- Do not use rough metal objects for cleaning.
- Clean the firebox lining with a vacuum cleaner.

Flue and chimney cleaning
The channels, the flue pipe socket and the chimney should be cleaned at least once a year by a specialist.

The specialist should brush all the air intake parts and the chimney from ash residues and check the sealing sockets.

Cleaning should be entrusted to a competent person and is necessary to remove the soot that accumulates in the chimney. Otherwise, it may cause a malfunction of the appliance and/or a fire.

When cleaning, the appliance and the chimney must be sufficiently cooled. Cleaning should be carried out regularly, at least once a year and/or at shorter intervals depending on use.

To limit soot inside the firebox during the chimney cleaning process, the ashtray should be in place and the hearth door should be kept in its closed position.

Cleaning ceramic glass
ATTENTION!
The crystal should be cleaned after it has cooled to room temperature. Otherwise, it may crack and/or cause a burn.

The frequency of crystal cleaning depends on:
- ✓ the quality of the fuel used and the moisture content,
- ✓ the settings selected when using the device and
- ✓ the frequency of use of the device.

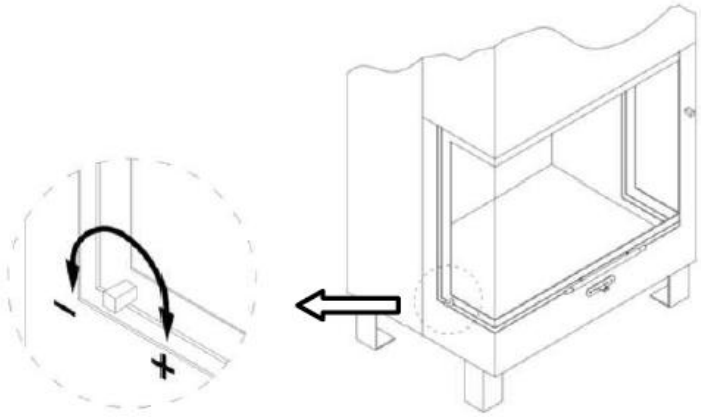
To clean the crystal, follow the steps below:
1. Lower the door to its closed position.

2. Rotate the lever located on the right side of the door frame. To unlock, rotate counterclockwise ¼ of a full turn
3. Once unlocked, pull the lever toward you to open the door. The door will open to the left and the glass will be fully exposed toward you for easier cleaning.
4. After you have finished cleaning the glass, close the door and lock it by rotating the lever clockwise.
5. Before lifting the door, make sure that it is properly locked. You should not lift it if the door is wobbling, as there is a possibility of cracking the glass.

ATTENTION!
To remove soot, you can use special cleaning products for ceramic glass and absorbent paper. If stains have formed that require rubbing to remove, a special scraper for ceramic glass is allowed, taking special care to avoid scratching the glass.

To clean the glass, do not use cloths that may scratch its surface or products (e.g. chemicals) that are not suitable for ceramic glass as they may cause the glass to fog up.

It is PROHIBITED to put the appliance into operation if the door is not properly secured. In this case, the combustion chamber is not sufficiently insulated and the appliance cannot operate properly, while flue gases may leak into the installation area.



NOTE!
The glass is made of ceramic materials that can withstand temperatures up to 7500C without creating any irregularities. Cracks may occur during cleaning if the following rules are not followed or from mechanical causes due to misuse of the device (impacts with objects, violent opening or closing of the door, etc.). The warranty does not cover the replacement of the glass, since it cannot be damaged during the appropriate operation of the device according to the instructions and limitations of this Technical Manual.

Cleaning an urn
Empty the ash container at regular intervals or daily if necessary. Do not let the ash reach the height of the grate.

Ash management & disposal

ATTENTION!
The temperature of the ashtray when the stove is in operation and for a certain period of time after it has stopped is extremely high.

Ash must be removed from the ashtray regularly. The appliance must not be operated when the ashtray is completely full as this hinders the passage of air and causes the grate to overheat.

The ashtray is equipped with a handle that allows it to be handled with a “bare hand” only after the appliance has stopped operating and all its parts, including the ashtray, have cooled sufficiently. Otherwise, the special glove that comes with the appliance must be used.

To clean the ash, follow the steps below::
1. Use a small broom to collect the ash in the ashtray.
2. Lift the grate located at the base of the fireplace.
3. Remove the ashtray located under the grate.

4. Discard the ash (it is recommended to use a special fireplace ash cleaning broom). Before discarding the ash, make sure that the ash has cooled completely and is at room temperature. Otherwise, a fire may occur in the container or the area where it is to be discarded.
5. Replace the empty ashtray in its original position.
6. Replace the grate in its original position.

Door sliding guide maintenance
The vertical movement of the door is done with the help of metal guides on which it slides, ensuring silent operation.

To maintain the correct and silent operation of the door, the lubricant must be renewed regularly. The lubricant must be suitable for the device. To lubricate the guides, follow the steps below:
1. Lift the door until it is fully open.
2. Locate the slide guides and apply the lubricant according to the manufacturer's instructions.
3. Lower and raise the door several times so that the lubricant spreads along the guides.
4. If the door still moves with difficulty or there is noise during operation, repeat the procedure..

ATTENTION!
Do not apply a large amount of lubricant to avoid the possibility of lubricant leaking onto the hob. Prefer most repetitions by applying a small amount of lubricant.

Not using the fireplace during the summer months
During the summer, make sure the heater is cleaned and the moving parts are lubricated.
Leave the air intake lever slightly open so that air enters through the fireplace into the flue, thus preventing moisture and condensation in the chimney.

Fireplace not in use for an extended period of time
IMPORTANT: If the fireplace is not going to be used for a while, clean it carefully and leave the air control slightly open to allow air to circulate. Make sure that rainwater cannot enter the chimney. Install a chimney cap, which should not completely block the chimney.

These measures should ensure that there is a slight movement of air through the fireplace, and that the body of the fireplace remains dry, as well as its corners.

Ash left in a fireplace when it is not in use can absorb moisture like blotting paper. If moisture settles inside the fireplace, rust forms. The more rust settles, the more it expands. This can cause excessive pressure on the joints of the fireplace, resulting in damage.

NOTE: It is recommended that you thoroughly clean your fireplace after each use. Adding a dehumidifier to the combustion chamber, such as cat litter, helps absorb moisture during the summer months. Be sure to remove it before the start of the use season.

8. Removal, disassembly and demolition

Disassembly
If the fireplace needs to be dismantled, it is recommended that it be carried out by a professional to avoid risks associated with improper dismantling of the burner or chimney. The exhaust pipes and other parts must be dismantled carefully.

Demolition
In the event of demolition of the fireplace, local regulations for the removal and recycling of materials must be followed. Many parts of the fireplace, such as metals and refractory materials, can be recycled.

8.1 Potential risks

Κατά την απεγκατάσταση, οι κυριότεροι κίνδυνοι περιλαμβάνουν την καταστροφή των συστημάτων σύνδεσης, την εκτόξευση καπνού ή σκόνης, και την πτώση μεγάλων ή βαρέων εξαρτημάτων.

8.2 Protective measures during uninstallation

Use of protective equipment (such as gloves and safety glasses) during the procedure.

8.3 Materials and Tools Required for Uninstallation

Εργαλεία για αποσυναρμολόγηση (π.χ., κλειδιά, σφυριά) και μέθοδοι ασφαλούς αφαίρεσης των εξαρτημάτων του τζακιού ή της θερμάστρας.

8.4 Potential risks during deconstruction and demolition

Risks include waste management, destruction of building materials, and the release of hazardous particles or gases.

9. Information in case of damage or danger

9.1 General

Fault Identification

- **Low-Efficiency Fireplace**: If the fireplace is not heating sufficiently, it may mean that the chimney is blocked or that combustion is not complete due to unsuitable fuel or overloading.
- **Smoke or Flue Gas Leakage**: If smoke or flue gas leakage is observed in the room, the use of the fireplace must be stopped immediately and the chimney and door seals must be checked.
- **Temperature Higher than Normal**: Overheating can be caused by poor ventilation or poor maintenance of the system.

Repair Process

- **Contact a Professional:** In the event of a fireplace malfunction, you should contact the manufacturer or a qualified technician to inspect and repair the product. Do not attempt to repair the fireplace yourself, as this may worsen the malfunction or cause additional hazards.

Component Replacement: If any component of the fireplace (such as the chimney or door) is damaged, its replacement must be done immediately to ensure its safe operation.

9.2 In case of a chimney fire

The chimney may catch fire if unsuitable or liquid fuels are used.

The measures to be taken in the event of a chimney fire are as follows:

1. Close all air vents.
2. Call the fire department at 199.
3. Clear the access routes to the cleaning openings.
4. Move all flammable objects away from the chimney.
5. When the heater is put back into operation, a qualified technician must check the chimney and the appliance.
6. A qualified technician must investigate the cause of the chimney fire and take the necessary corrective measures.

Warning:

Do not pour water on the fire!!! You will not put out the fire and cracks will probably develop due to the sudden change in temperature.

9.3 In case of power outage

ATTENTION: In the event of a power outage and when the motor is not working, there is a risk of damage to the electrical parts of the hob (thermostat - cables, etc.). In this case:

- ✓ Let the stove go out and do not supply wood.
- ✓ Close the primary and secondary air supply to reduce the intensity of the flame.
- ✓ Open the lower door that covers the thermostat to improve ventilation around it.

If the user of the device does not take the above actions, it is certain that the thermostat will be damaged due to overheating.

9.4 Possible faults and causes

MALFUNCTION	CAUSE	SOLUTION
The fire is not burning properly and the room is not heated.	The wood has moisture..	Check the wood. Moisture content should be <20%.
	Wrong fuel.	Use the right woods.
	The chimney is not "pulling" well.	Check that the flue gas discharge lever is open. Close any open doors of other appliances connected to the chimney. Close the cleaning openings. If necessary, clean the flue.
	Insufficient combustion air.	Check the air supply and open the air intake and adjustment lever. Open the fan or window. Clean the ash from the hearth.
Smoke nuisance.	Insufficient combustion air.	Check the air supply and open the air intake and adjustment lever Open the fan or window. Clean the ash from the hearth.
	Unused fuel.	Do not add additional wood when the fire has an orange flame.
Fire in the chimney.	Wrong fuel. Overloading with wood. Inadequate maintenance.	Close the air intakes and call the fire department immediately.
The glass gets dirty very quickly.	The wood has moisture.	Check the wood. The moisture content should be <20%.
	Wrong fuel.	The size of the wood is quite large. Use the appropriate wood.
	Excessive fuel.	Do not use more than 2 to 3 sticks at the same time.
	Insufficient combustion air.	Check the air supply and open the air intake and adjustment lever Open the fan or window. Clean the ash from the hearth.

10. Warranty

MISAILIDI FOUNDRY
WARRANTY

✓ Warranty 2 years from date of purchase.

The warranty ceases to be valid if:

- The product was used for a use other than that for which it was intended.
- Damage was caused by accidents, incorrect use, maintenance, etc.
- An attempt was made to use it by third parties and generally unauthorized persons, without the manufacturer's approval.
- The product was installed, maintained, used or stored in a manner other than that recommended in the instruction manual that accompanies it.
- Parts were used for a given construction of a different origin than that of the manufacturing plant.

The warranty does not include the ceramic crystals.

THE MANUFACTURER