

LUNA GOLD CORNER WOOD FIREPLACES 900 CL/CR - 800 DC



INSTALATION MANUAL AND USE

VERY IMPORTANT

INSTALLATION INSTRUCTIONS FOR THE M-DESIGN GAS FIREPLACES

**THE SUPPLIER TAKES NO
RESPONSIBILITY FOR ANY
POSSIBLE DAMAGE, POOR WORKING
APPLIANCES AND ACCIDENT AS A
RESULT OF INCORRECT INSTALLATION**



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1. GENERAL

1.1. TRANSPORT AND INSTALLATION

- The LUNA is transported in a horizontal position or if there are some problems - angle-wise 45°.
- For facilitate transport can use a set of solid rubber belts.
- Before the installation is important to unlock /put out/ transport plug. Plug is placed behind covers on face sheet.
- **Promotion of unlocking:** Unscrew the cover 1. a 2. /pic. 1a/
Behind screws are placed plugs which is necessary to pull out towards you /see pic 1b, 1c/
After pulling out the plugs is essential to screw on covers back on primary place.
- Before installing the furnace, please check lifting door- lifting up and down and opening /pic.2a,2b,2c./



1.2. FUEL

1.2.1. Recommended fuel: Wood – hard, soft – damp cca 16%

The quality of the wood is extremely important for the optimal functioning of the stove /output, clear glass, etc.../. The idea is to use dried wood with a moisture content 12% to 18%. Damp wood gives off less heat, clogs the chimney and the glass of the fireplace's door. You can also use briquettes and it is the best to use them in combination with wood. Damage as a result of excessive temperature is not under guarantee, two halves of woods of the 2kg weight are equal 5-7kW.

1.2.1.1. Optimal operation

Optimal use of fuel and optimal operation of the stove reach loading cca 3,5kg of the wood (3pieces cca 33cm long) ,lying horizontal on the raft in the middle of the combustion room. The chimney effect 12Pa and the regulator supply air on maximum.

1.2.2. Forbidden fuel

The use of treated wood /painted,etc./ and all types of household waste, which can disperse hazardous gases, is FORBIDDEN and CANCELS OUT ANY CLAIM ON THE GUARANTEE. The use of fluid fuel /petrol, etc./ is also forbidden.

1.3. STARTING THE FIRE

- Regulation at maximum /see pic.14/
- Open the door /pic.2a /.
- Put a bed of tinder(paper or firelighters) with a little kindling (small twigs or pieces of wood) in the stove and light the tinder. Let the door a little open /+3cm/, so as chimney effect arose, which helps the kindling start the fire.
- After the kindling has caught fire and burns well, the logs maybe placed on the fire. When the logs are burning, the door can be closed.

NOTE: When a fire is made for the first time, the paint will harden and that give off smoke and a smell, which starts after the fire has bourned for about 10 minutes and lasts for about 15 minutes. See to it that there is ample ventilation in the room. The combustion chamber should be kept closed except for fuelling to prevent entry of gases into the room.

CAUTION:

It is not necessary to overload the fireplace with wood. 1kg dried wood gives a 4kW power.

Example: a fireplace with 80% return gives a power for about 3,2kW for 1kg dry wood. If you want a power about 6-7kW, it is just enough to put 2kg wood in the fireplace. This is like two normal pieces of wood. We are not responsible for the bad use of fireplace and any consequence for not following this guideline. External surfaces of the stove are hot during operation, which has to be paid due attention to avoid an accident burns.

2. INSTALLATION

2.1. INSTALLATION

For your own safety and satisfaction, we advise you to entrust specialist with the installation. **The appliance has to be installed according to certain prescribes rules and local regulations.** The device must be built in an area with an adequate capacity, on the board, which can spread the weight of the device. The device must be positioned so as to maintain the safety distance from any flammable materials that could not fire. However, if you decide to carry out the work on your own, we advise you to do the following:

- Refer to the terms and conditions of our contract of guarantee
- Ask your supplier for advice.

1.1 LIST OF STANDARDS TO BE OBSERVED DURING ASSEMBLY AND OPERATIONS

The fireplace type „LUNA HC“ complies with STN EN 13229. For installation and operation of the fireplace type „LUNA HC“ should proceed in accordance with STN 92 0300 „Local fire safety appliances and heat sources“ and STN 73 4201 „The design of chimneys and flues“.

1.2 SAFE DISTANCE FIREPLACE STOVES TYPE „LUNA HC“ FROM FLAMMABLE MATERIALS, LOCATION FIREPLACE STOVES AND SMOKE EXTRACT

Fireplace type series „LUNA HC“ must be installed in accordance with Decree MV SR No. 95/2004 statute, coll establishing specifications and requirements for fire safety during instalations and operation of heating appliances, electrothermal appliances and central heating installations and the constructions and use of chimneys and flues. It is also necessary to respect the STN 73 4210 „Running of the chimneys and flues and connecting fuel appliances.“ The manufacturer recommends the installation of the fireplace furnace type series „LUNA HC“ conducted by qualified Professional who is responsible for the material used for installation. The manufacturer is responsible for the delivered product.

When installing the fireplace type series „LUNA HC“ must be complied with 1000 mm safety clearance from combustible materials.

The fireplace type series „LUNA HC“ must be installed so that before it left space on the layout, about 1 x 1 m.

Basis respectively base under fireplace type series „LUNA HC“ must be straight fire material and must withstand heat stress. Also, wall and ceiling material, which the fireplace type series „LUNA HC“ may not be from combustible materials, respectively should be used for good thermal insulation

Combustion pipe must be fitted to the fireplace chimney's mounthpiece furnace type series „LUNA HC“ so that it is firmly and tightly connected.

The combustion pipe might be of black respectively stainless steel pipes and elbows. The flue connection must be made by the shortest route to the flue by STN 73 4210. The combustion pipe should be implemented and consolidated in order to be released accidentally or spontaneously. Pipes that are plugged into each other, should be inserted in the direction of flow of exhaust gases. Where the flue passes through building structure, which contains flammable materials, or surface modified flammable materials should be insulated to protect the crossing design and implement in accordance with Decree MV SR No. 95/2004 statute.

Connection the combustion pipe of the furnace type series „LUNA HC“ can only be the chimney, which has been expertly tested. Based on expert examination of the appliance flue connection and issue a professionally qualified person „Certificate examination on implementation of the chimney, where a professionally qualified person to deliver state of the chimney and flue for their safe and reliable operation.

2.2. LOCATION THE FIREPLACE FURNACE TYPE SERIES „ZINO“ ON THE FLOOR

In the place of installation fireplace insert type series „LUNA HC“ on the floor must be ensured a minimum floor load 1000 kg.m⁻². The floor before the fireplace insert type series „LUNA HC“ must be fire-resistant material at a distance of at least 1000 mm from front wall of the fireplace insert type series „LUNA HC“.

2.3. REQUIREMENTS FOR PASSING COMBUSTION AIS

The fireplace furnace type series „LUNA HC“ can be placed directly in the heated respectively outside the heated space. The combustion of fuel used air from the area where is the fireplace furnace, or it is possible to transport external admission of air and connect it according to the point 2.10. In case of insufficient ventilation of this area is necessary to ensure sufficient fresh air.

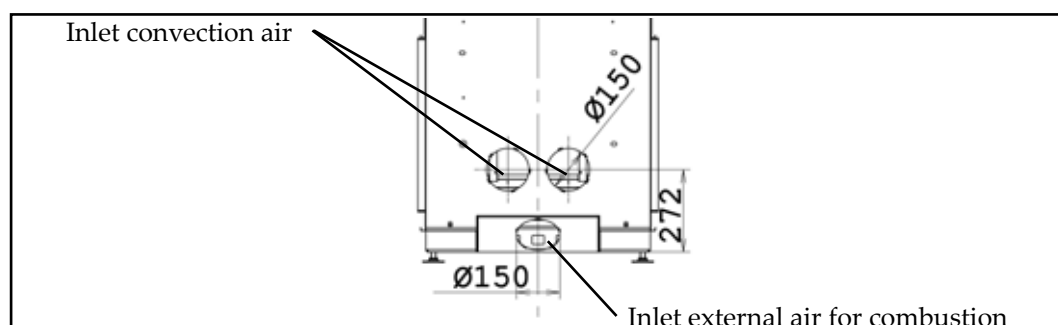
2.4. INSTALLATION THE FIREPLACE MODEL SERIES „LUNA HC“ ON THE PLACE OF USE

Fireplace type series "LUNA HC" is installed in the heated or outside of heated space. For the location of the fireplace insert type series "LUNA HC" in the heated space, the operator must decide whether to implement the distribution of heated air or not. If the operator decides that yes, it is necessary to ensure the distribution of heated air from the space garnishment fireplace insert type series "LUNA HC" by flexible tube respectively. through appropriate pipes for the heated air inlet temperature of 150 ° C to the desired location. If the operator decides that no heated air is to be exported from the area Converted fireplace insert with a hot air diffusers, in order to ensure air circulation.

2.5. LOCATION FIREPLACE FURNACE

FIREPLACE INSERT SHOULD NOT BE LAID ON THE FLOOR DUE TO THE NATURAL FLOW OF AIR.

AIR-INTAKE OPEN IS LOCATED AT THE REAR OF FIREPLACE FURNACE./PIC. 3A/



**PLEASE, ATTENTION TO PRESERVING APPROXIMATELY 2-3 MM CLEARANCE BETWEEN
THE FRAME AND THE MATERIALS FOR SURROUNDING
(HEAT = EXPANSION)**

Example:

The total size of the LUNA 900HC is 474 x 888 mm

The thickness of 3-sided frame is 4 mm

The calculation is following: $888 + 2 \times 4 \text{ mm (3-sided frame)} + 2 \times 2 \text{ mm (expansion)} = 900 \text{ mm}$.

For this measurement using a 3-sided frame in combination with marble or other materials.

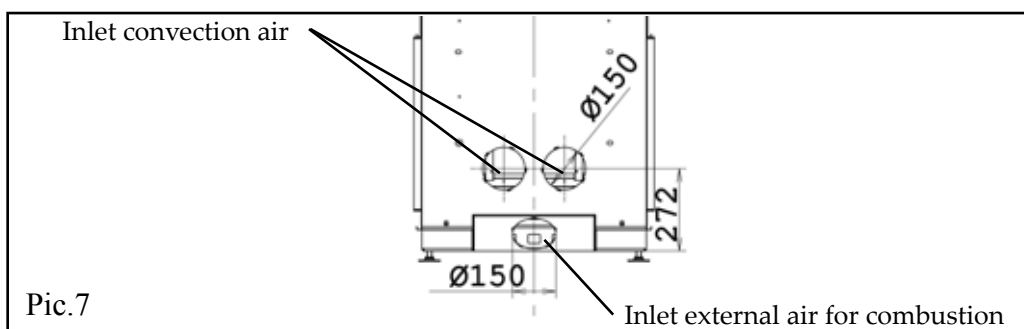
Height is measured from the bottom bar on the top 3-sided frame. This is 474mm. Thus $474 \text{ mm} + 2 \text{ mm}$.

2.8. COMBUSTION AIR INTAKES

Any type of combustion using air. If enclosure is an additional air supply is very important. It is very important always to avoid creating negative pressure inside the room. Need air intake with a diameter of 150 mm coming from outside or ventilated place. The air supply can be connected to Luna HC DC / see pic.3/. On the hole, attach the mouthpiece / see pic.6 and 7 /. This new system is the air that is required to burn completely separated from the airflow in the room.



Pic.6



Pic.7

2.9. VENTILATION

2.11.1 Natural convection

It must be open at least two of the three holes for warm air at the top of the fireplace furnace/Pic.8 /. Openings for air supply are in the bottom of the rear / Pic.7 /. Fireplace should be located at least 20 mm above the floor / when it is placed on the floor / so as to permit the bottom of the natural flow of air. For a sufficient circulation of heated air must be ensured that surround the bottom opening with at least 4 dm^2 , excluding dust filter, including filter or 6 dm^2 .

2.11.2 The hot-air distribution

The heat-insulated pipes are essential for optimal functioning of the device. (Causing air flow - move) Using a larger number of tubes (minimum 2) is better traction and noise caused by a stroke is reduced. The installation of these tubes is best to keep them upright for at least one meter up then change direction, rather do a wide bend and the exhaust grille with less resistance to air flow, because the lower velocity means lower efficiency heat register. We recommend that you use the exhaust grille M-design, which have many advantages.

NOTE: The circulation of hot air is required to be in the room does not produce any vacuum. Grid in the floor sucking cold air/pic.12/. Do not connect it through a tube. The air itself will find a way to get to the right place. If it is possible to mount all the accessories you use the same shape and angles, otherwise it may happen that a grid can make much more heat than others. The hot-air distribution work on a similar principle as the chimney, one that is warm as the first, the biggest move, and therefore becomes warm much faster. Grills should be placed so as not to be blocked.

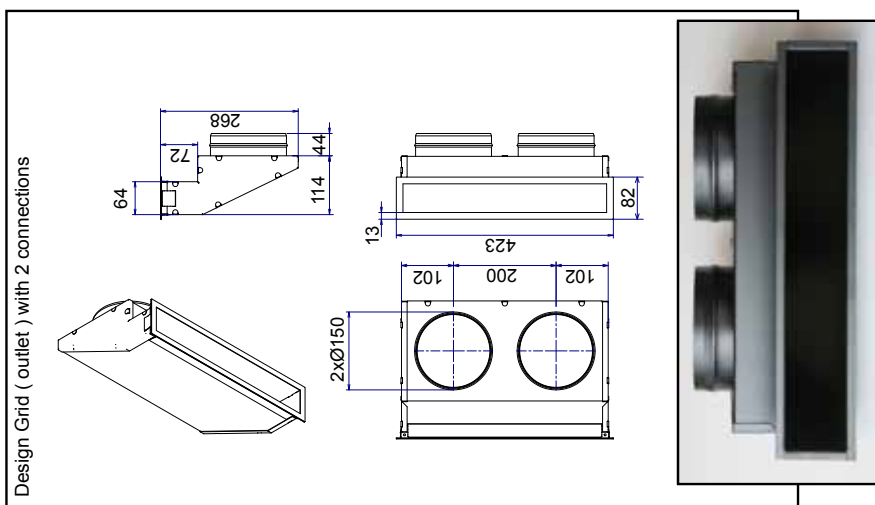
The exhaust grill Pic.11 is providing two connections. To simplify installation, you can use the angle profile, which is bundled to the grid. This profile is mounted on the inside of the exhaust grill



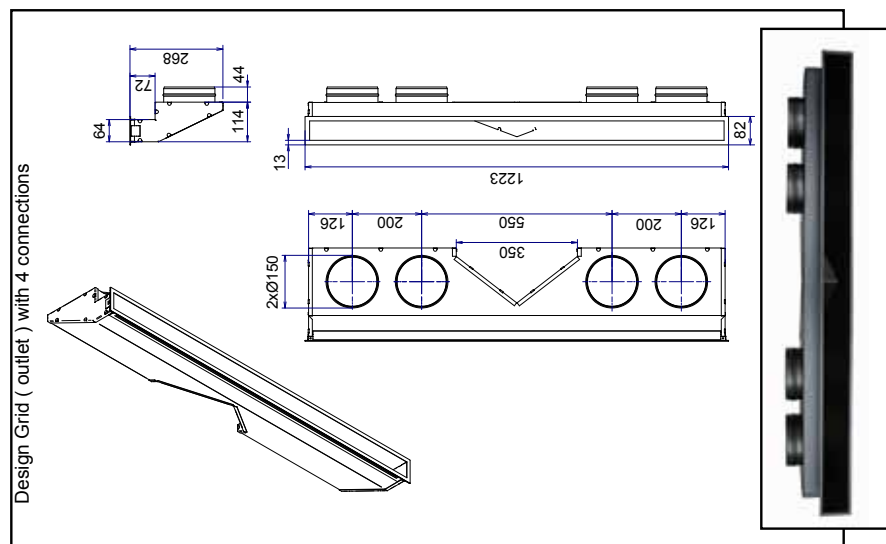
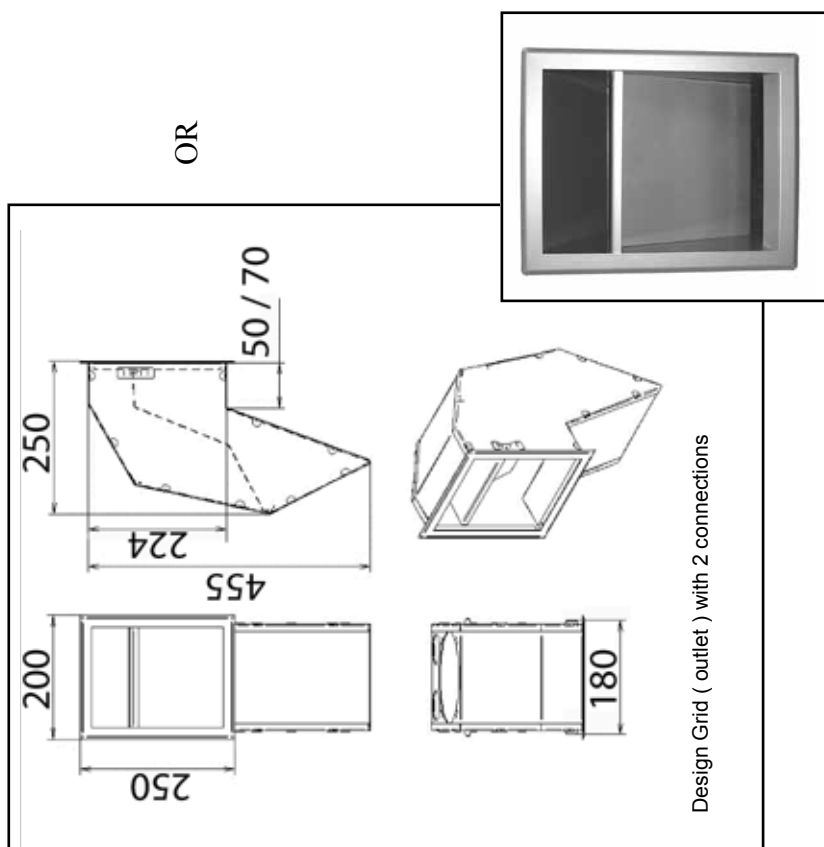
Pic.11



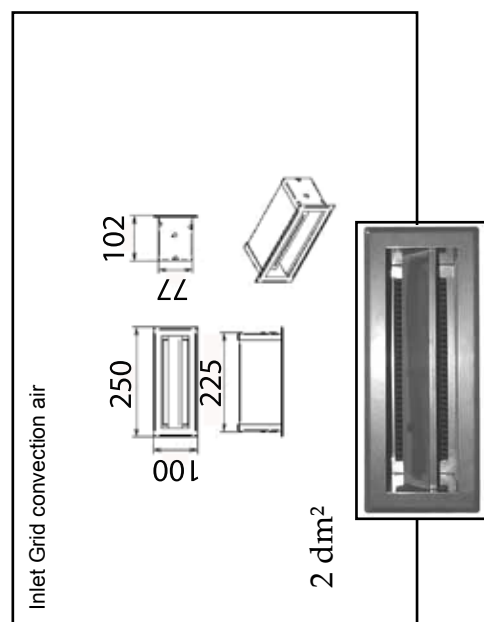
Pic.12



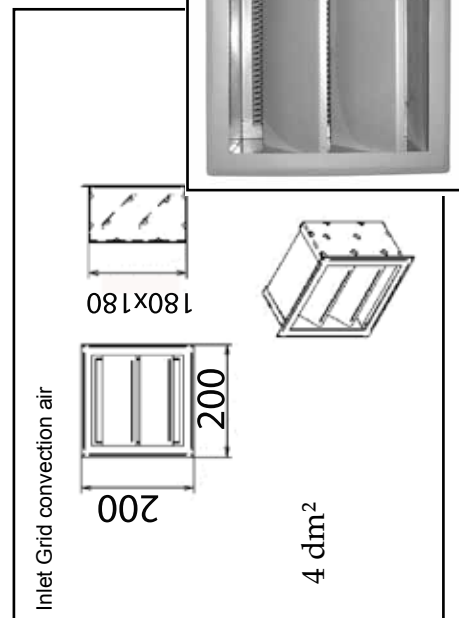
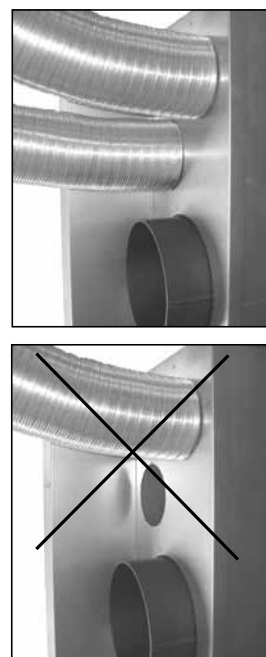
OR



OR



EACH APPERTURE YOU MAKE, MUST BE CONNECTED WITH FLEXIBLE



2.10 FLUE

The construction of chimney must comply with strict conditions:

All the Luna stoves have a standard flue opening of 250 mm. in diameter. Certain chimney configurations may require different standard diameters. In that case, look at table for the height of the flue and the possibility of reducing the diameter with the help of a reduction piece.

Note : per 45° change of direction, one must keep to within 1m of this table.

- The flue must be thermally insulated.

The opening into the flue and its position are very important.

- One individual flue does not have more than two changes of direction.

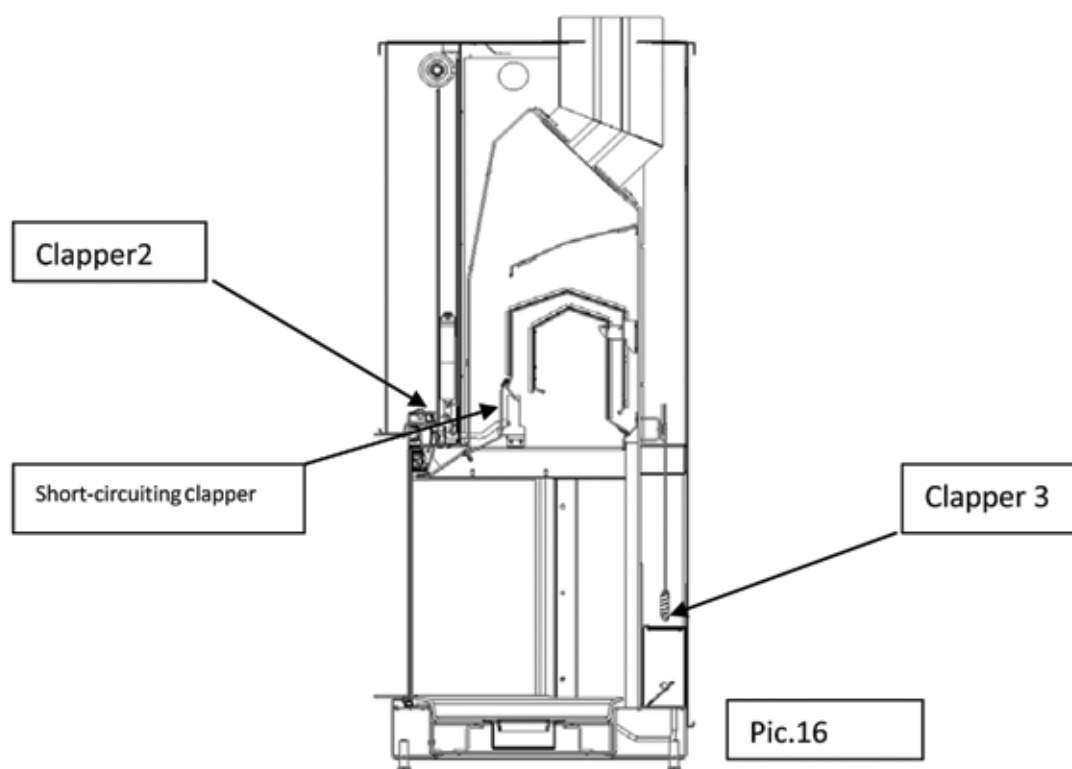
The angle of the corner of these changes of direction may not be greater than 45 ° with the perpendicular.

- The existing obstacles in the vicinity of the opening into the flue must be taken into account.
- Do not connect more than one stove to a chimney flue.

MINIMUM HEIGHT OF THE FLUE IN TERMS OF ITS REDUCTION.

	ø 300	ø 250	ø 200	ø 180
Luna Gold 900CL/CR	-----	≥ 5m	> 7m	
Luna Gold 800DC	-----		> 6m	

The closed door is a slow, directed the flow of gases into the chimney. Short-circuiting valve opens and closes the doors. Fireplace Luna HC still has two flaps which are not related to the fire but the flow between the heater jacket and chamber. These valves are located in the rear of the fireplace insert of the air supply and / or above the upper beam in the front door. These two valves are also controlled the doors (see Pic. 16).



3. CONTROL

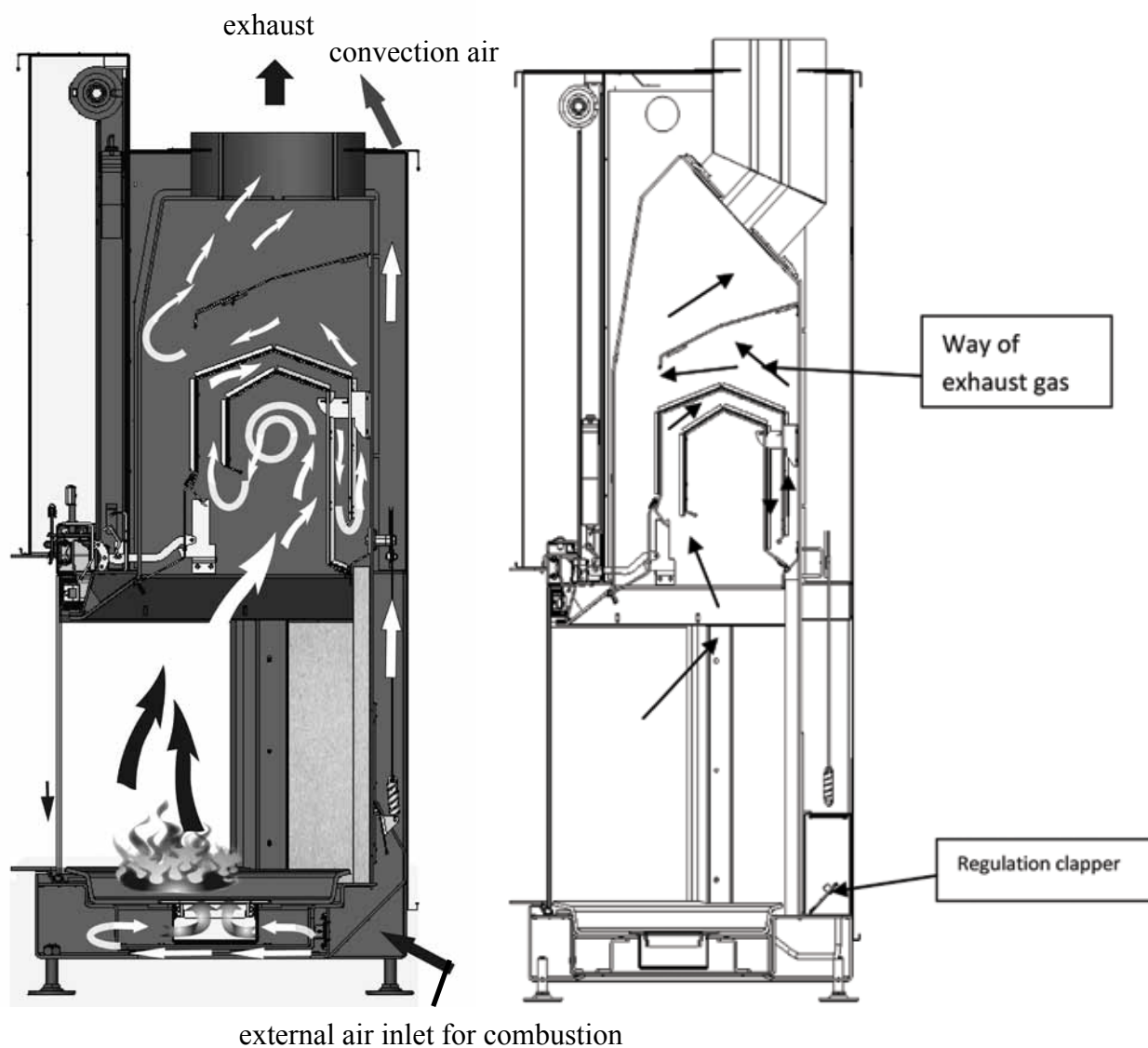
Control the fireplace furnace Luna HC driver controls the front bar/see pic.14a /by help of key/pic.14b/. By controllin the flow of air to control your heater /secondary,primary/, /pic.15/. Open the door control does not affect the combustion.



Pic.14a



Pic.14b

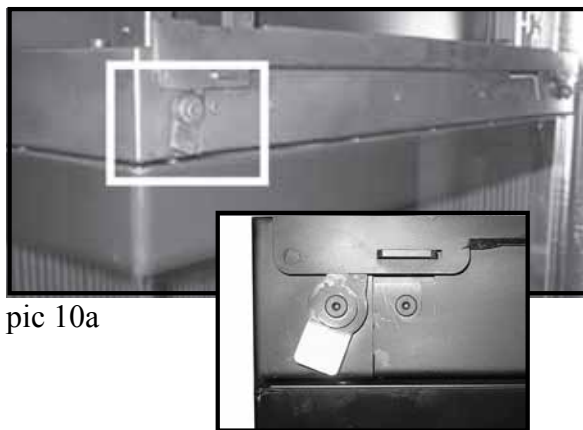


3.1 "HIGH BURNING" Position

If chimney does not have enough draught or if you want a more bigger flame, you can regulate the fireplace on "high burning" position.

On pic.10a you'll find the lever (on the right position for the 900CR) to actionate to the direction like on pic. 10b and 10c (on the 900CR , to the other direction).

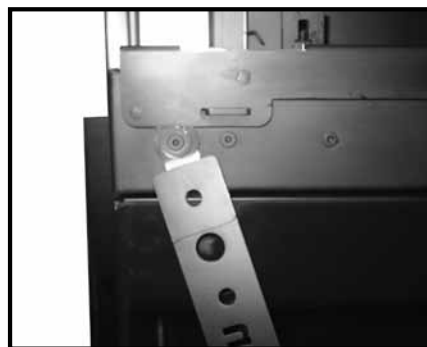
The door will keep a little open on a fixed position to get some more air for combustion (pic 10d)



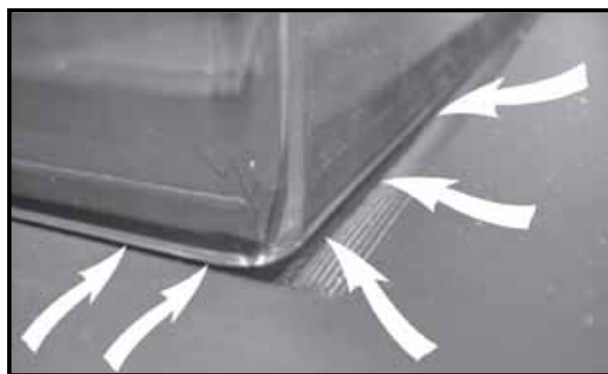
pic 10a



pic 10b



pic 10c



pic 10d

5. SECURITY CONDITIONS

In operating the fireplace furnace type series "LUNA" should observe the following precautions:

- The fireplace furnace type series "LUNA" can serve only an adult.
- At a distance of 1000 mm before the fireplace furnace type series "LUNA" will not place flammable objects and materials.
- The Fireplace type series "LUNA" shall operate under conditions in which a fire or explosion.
- Comply with fire regulations of general application.
- When operating the fireplace furnace type series "LUNA" rise to the surface of the walls of high temperature at which it could be burning. It is therefore prohibited during the operation, touch the walls.
- When operating the fireplace type stoves Council "LUNA" rise to the surface of high temperature controls, in which could cause burns. It is therefore necessary drivers to use with gloves or protective. auxiliary tools that are included fireplace furnace type series "LUNA".
- During working the fireplace furnace type series „LUNA“ is forbidden – give the hand to the flow of heated air of the reason its too high temperature.
- Fire in the fireplace furnace type series "LUNA" never extinguish with water.
- The space where it is located fireplace type series "LUNA" must be ensured adequate supply of air for combustion of fuel.
- Loading doors must be kept running the fireplace furnace type series "LUNA" always closed except placing unit in service and refueling.
- They are allowed no interference with the fireplace furnace type series "LUNA" that could endanger the safe operation.
- The ignition of fuel in the aggregate is not permitted to use flammable liquids.
- In the event of any problems with the operation of the fireplace furnace type series "LUNA" must be authorized to call the supplier or manufacturer.
- In carrying out the fireplace furnace type series "LUNA" fuel use gloves with sufficient protective property from excessive heat.

6. SUPLIED ACCESSORIES

- door opener 1pc
- hub 5 pc
- taker of ash 1pc
- operating instrctions, guarrantee and certificate of quality and completeness of the product

Warning!!!

The correct and safe operation of the fireplace furnace type series „LUNA“ it is imperative to observe the operating instructions and installation!!!

7. SIGN

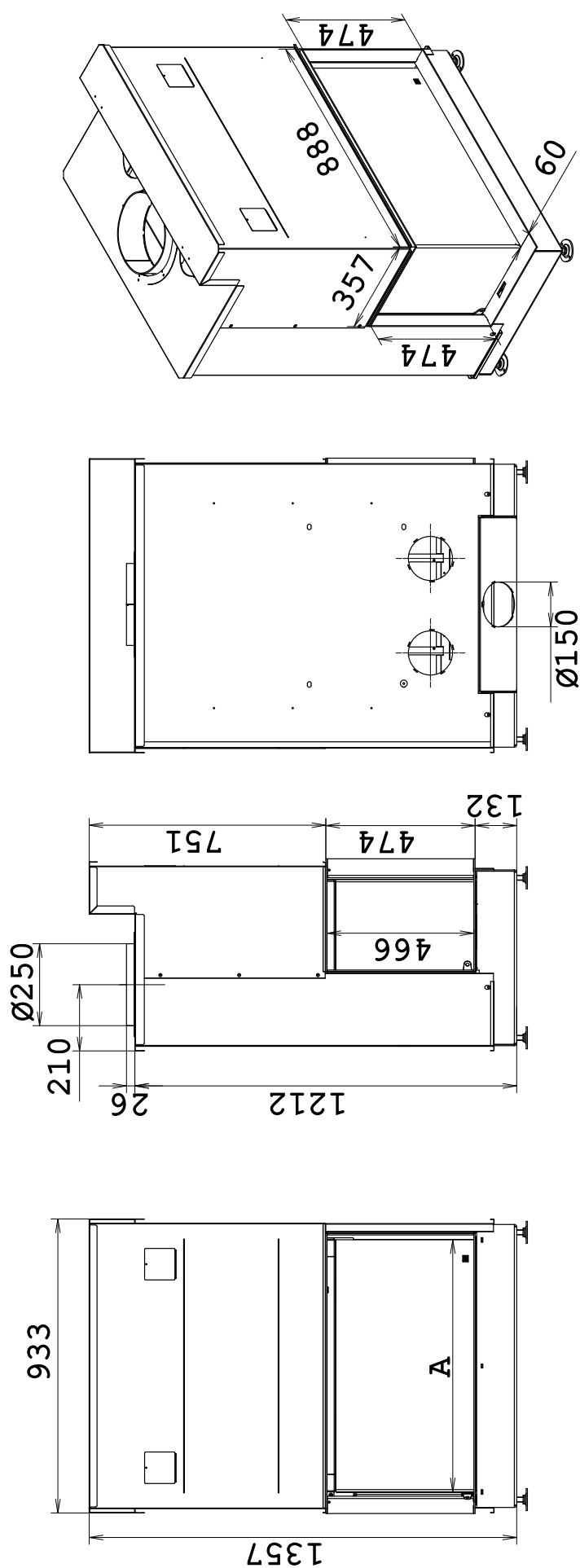
Identification of the type of fireplace type „LUNA“ is as follows:

- manufacturer: HT design, s.r.o., 01318 Podhorie 71, Slovensko
- type : „LUNA HC “,
- usable power range: 10 kW
- heat flow into the space: 10 kW
- standard : STN EN 13229
- keep operating instructions
- the unit can be connected to a common chimney
- use only recommended fuels
- the appliance is designed for: shor-term operation
- serial number/see Pic.18/

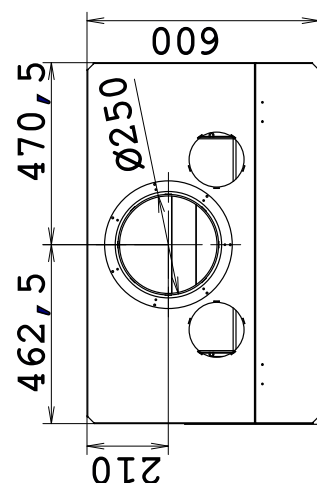


TYPE- fireplace	900 HC
Rated thermal power (kW)	10
Average efficiency (%)	78
Heat flow into the space (kW)	10
Power range (kW)	5 - 12
Flue gas temperature at rated output (°C)	195
Avg. CO concentration at 13% O2 (%)	0,10
The average volume concentration of CO at 13% O2 (mg.m-3)	1200
Minimum blast (Pa)	12
The weight of the fireplace furnace (kg)	300
Minimum distance from flammable materials from the flanks and rear of (mm)	300
Minimum distance from flammable materials from the front (mm)	1000
Fuel delivery interval (h)	1
Recommeded fuel – dry wood Beech, oak, spruce	
Consumption of fuel at usable power range (kg/h)	3,5

HOEK MODEL HOUT / MODEL BOIS COIN



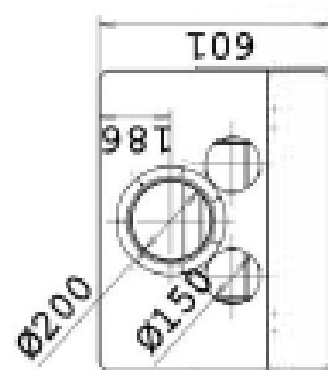
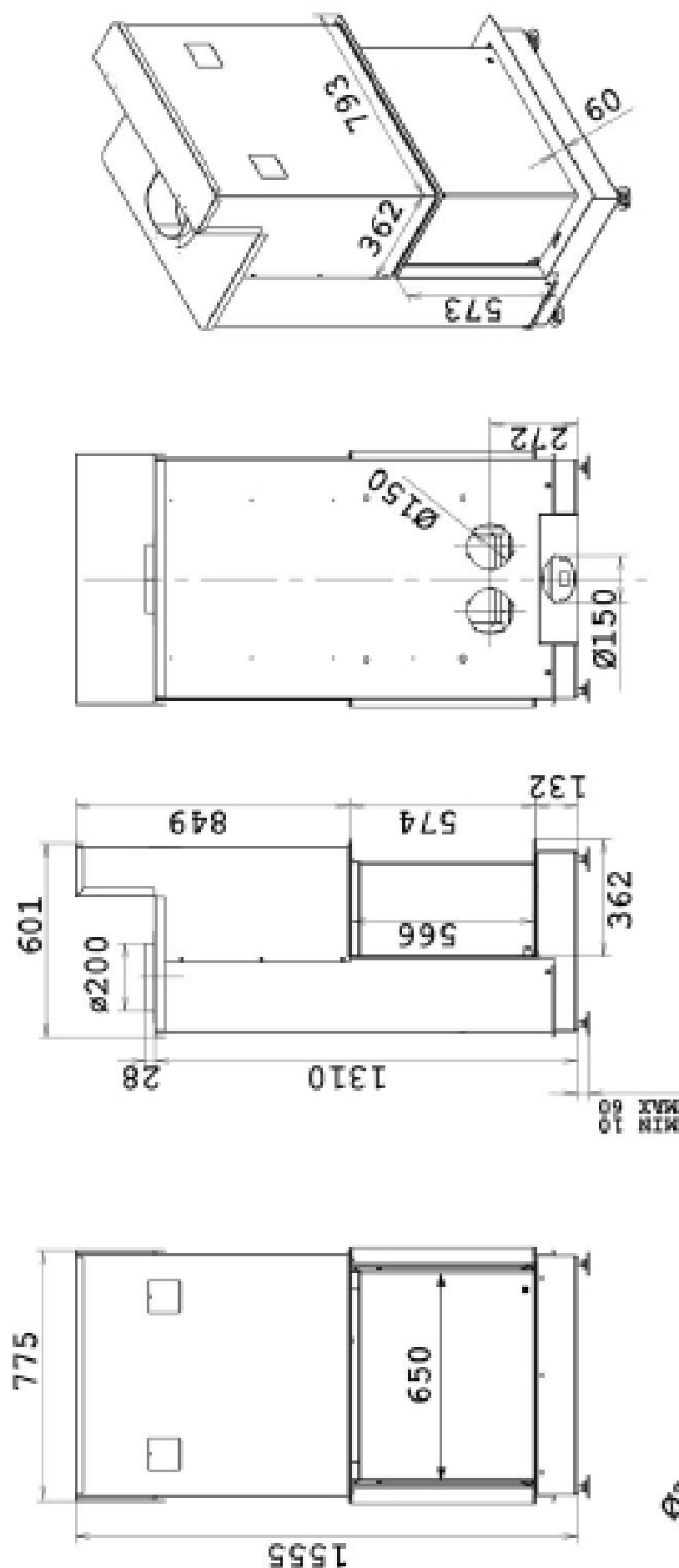
LUNA 900 CL gold+
model 2010

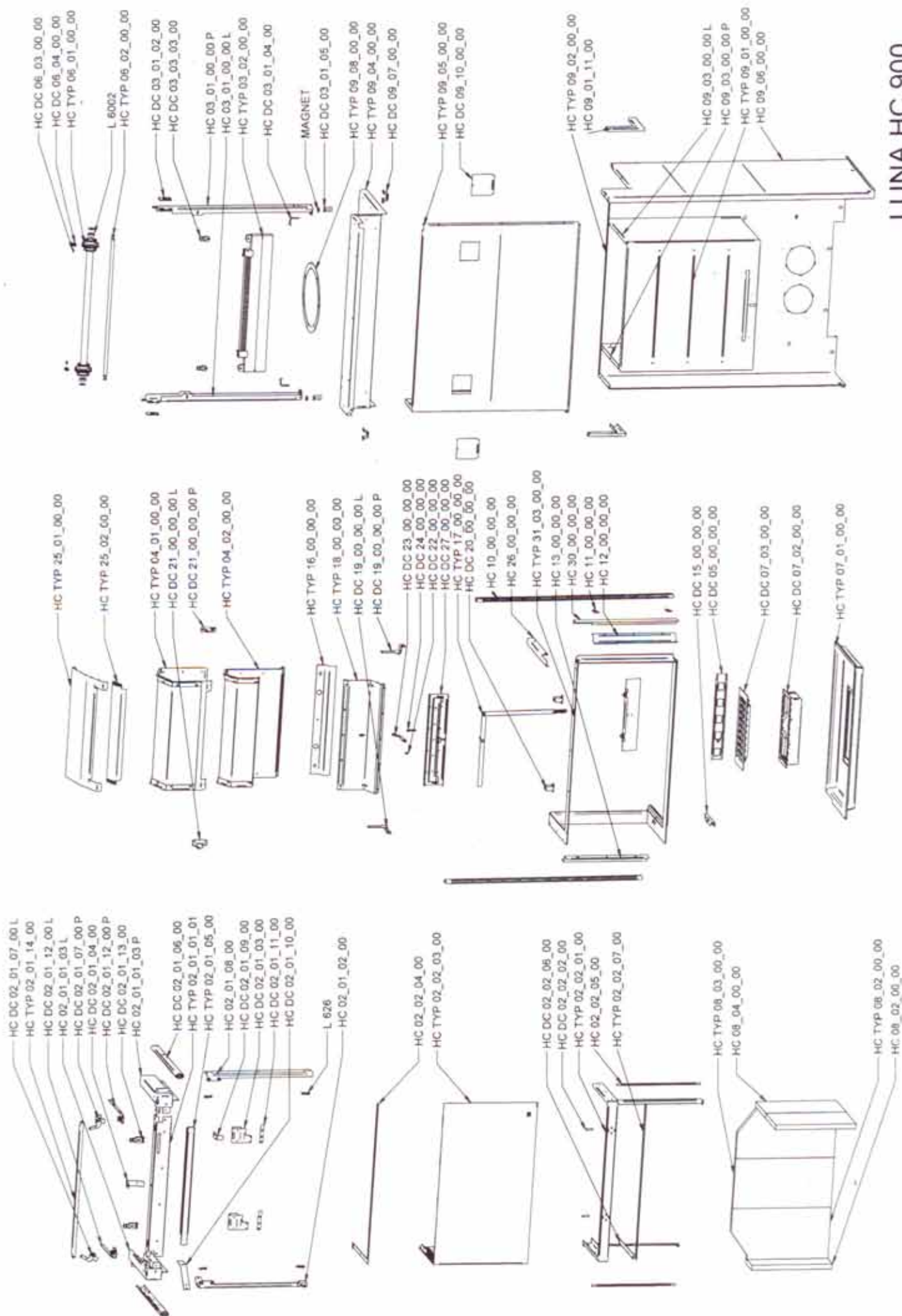




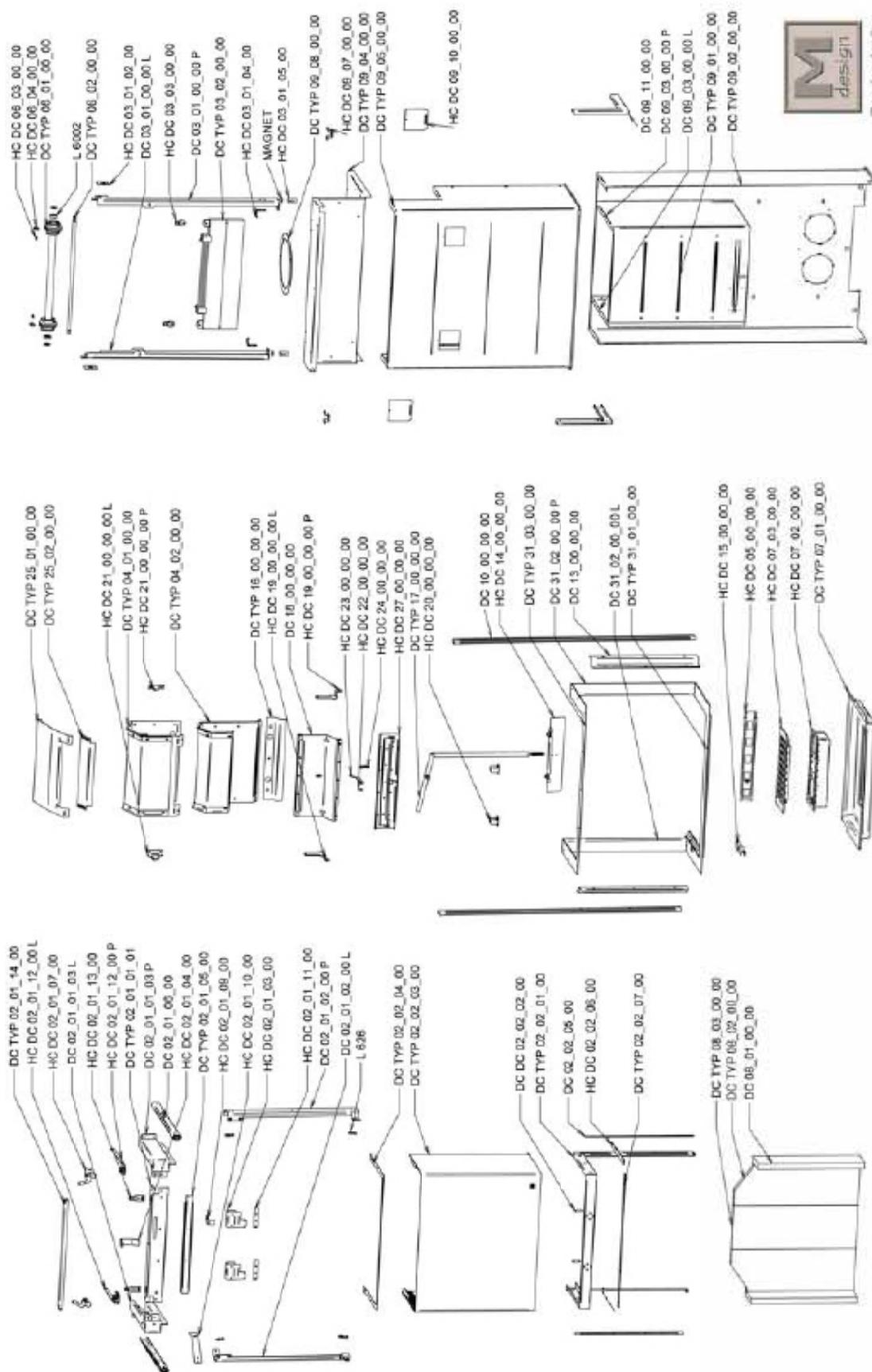
LUNA 800 DC gold+

model 2010





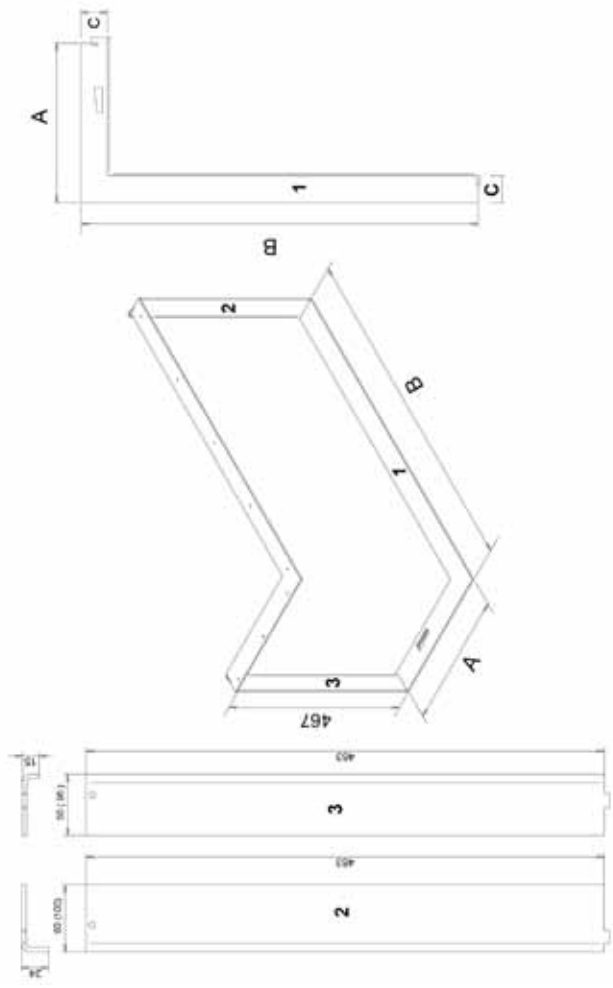
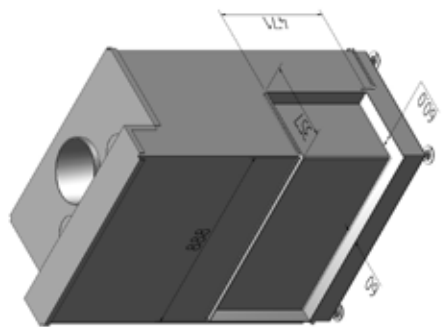
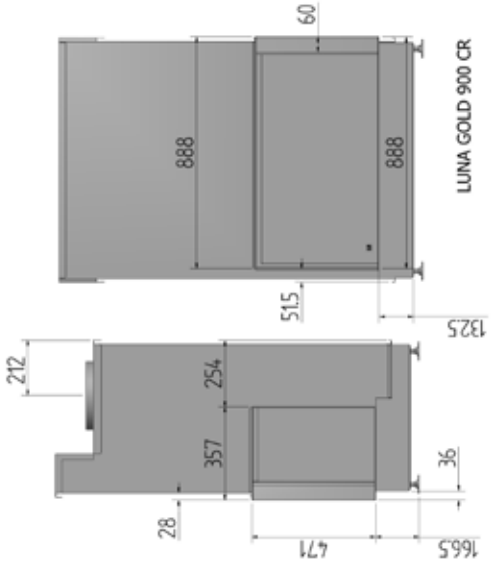
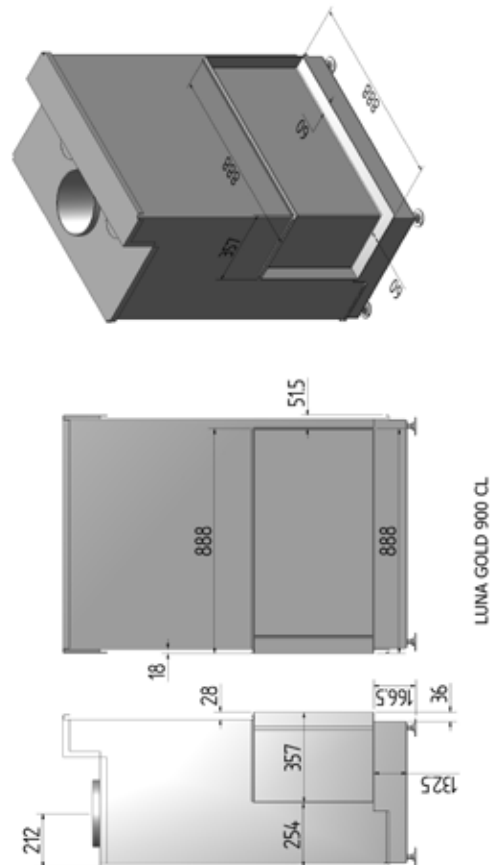
LUNA HC 900



Passion for fire

Luna Gold 800 DC

Finishing Frame 900CL / 900 CR

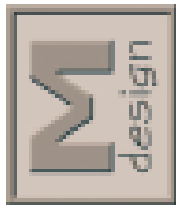


TYP	TYP	Nr.	A[mm]	B[mm]	C[mm]
900	60	1	357	888	60
CL / CR	100	1	397	928	100

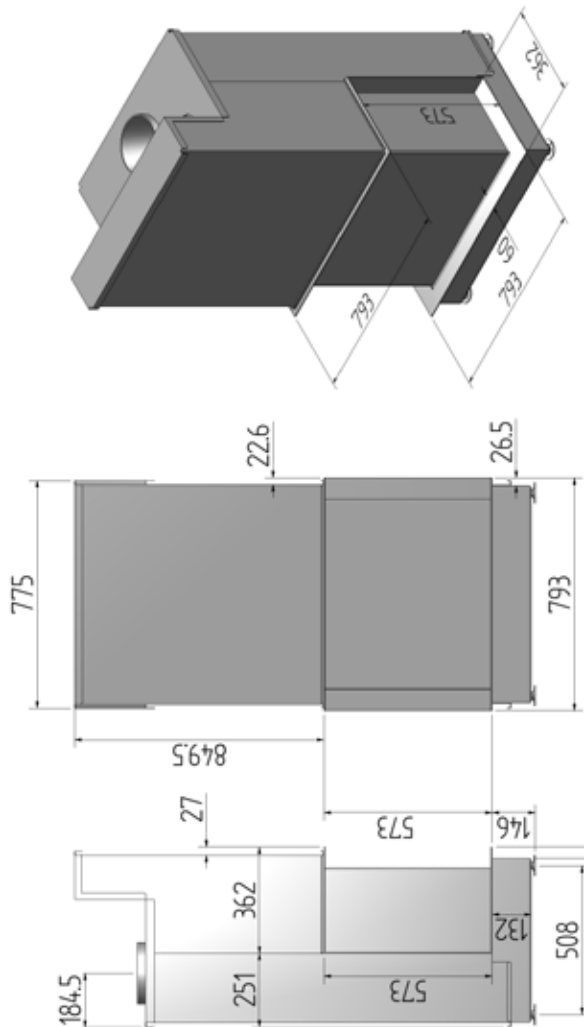
Kader 60mm is standaard geleverd met de haard
Le cadre de 60mm est livré standard avec le foyer
Frame 60mm is standard delivered with appliance
Ramhe standard 60mm mitgeliefert.



Passion for fire



Passion for fire

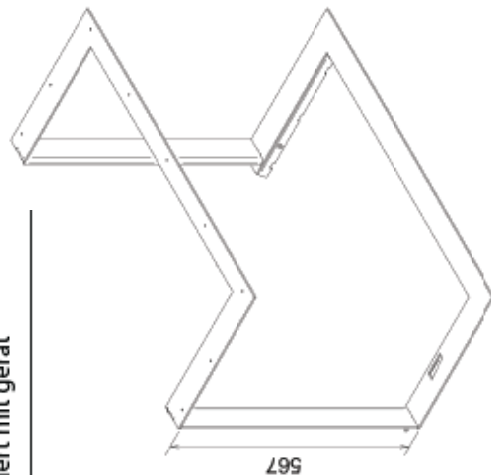
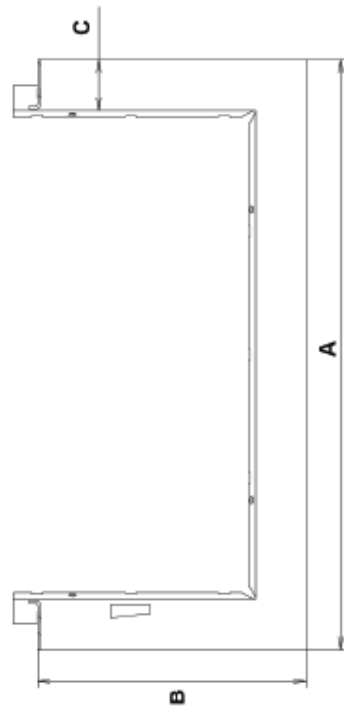
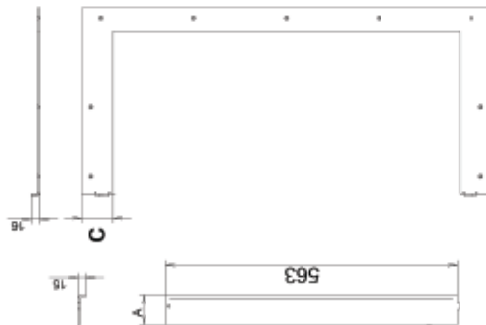


LUNA GOLD 800 DC
kader / cadre / frame / Ramhe 60mm

Kader / Cadre / Frame / Ramhen Luna Gold DC

TYP	A[mm]	B[mm]	C[mm]
800 DC	793	362	60
	873	402	100

Kader 60mm 4-zijdig : standaard geleverd met vuur
Cadre 60mm 4 cotés : livré standard avec le foyer
Frame 60mm 4-sided : delivered with appliance
Rahme 60mm 4-siete : geliefert mit gerät



10. GUARANTEE

10.1 TERMS AND ITEMS COVERED

- 8 years' guarantee on the general structure
- 2 years' guarantee on the parts
- No guarantee on glass, seals and lining the combustion chamber

10.2 GUARRANTY CONDITIONS

The claim must be submitted to the warranty, otherwise the claim is recognized.

1. The guarranty covers all defects in the fireplace furnace type series „LUNA“ and parts that are useable due to poor quality material or faulty processing.
2. The guarranty does not apply to defects resulting non-compliance with the conditions specified in the instructions for installtion, operation and maintenance or that the unit is used other than in the manner and for any purpose other than for which i tis intended under normal conditions, poor or improper handling, eg. Improrer storage, improrer handling, improrer use of fuel.
3. The guarranty does not apply to defects caused by impurities in the fuel combustion gas inappropriate, improper placement and the inevitable damage caused by the event (natural disaster, etc...)
4. The guarranty also does not apply to damages caused indirectly and damage or personal injury cases.
5. The claims for non-compliance security guarantees expire, the expiry of the guarrantee period, repair or modification of the fireplace furnace type series „LUNA“ unauthorized person.
6. The costs associated with sending a service worker to put the fireplace furnace type series „LUNA“ not covered by the guarantee shall be borne by the customer – a user.
7. The liability for defects – a claim the user applies to the production company.
8. Other rights and obligations arising from liability for product defect shall be governed by the provisions of generally binding legal regulations applicable in the Slovak Republic (Civil Code, Commercial Code, etc.).

Your serial number

.....

Date of sale

Seller:.....



M-Design
Torhoutsesteenweg 222a
8210 Zedelgem
Belgium
<http://www.m-design.be>
e-mail: info@m-design.be