

EN

WOOD STOVE

INSTALLATION, USE AND MAINTENANCE MANUAL



CARINA - DORA








Summary

1	MANUAL SIMBOLOGY	3	14.1 PROBLEM SOLVING	19
2	DEAR CUSTOMER	3	15 TECHNICAL DATAS	21
3	CAUTIONS	3	15.1 WIRING SCHEME	21
4	SAFETY REQUIREMENTS	4	15.2 FEATURES	22
5	WARRANTY CONDITIONS	4		
6	SPARE PARTS	5		
7	WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT	5		
8	PACKAGING AND HANDLING	6		
	8.1 PACKAGING	6		
	8.2 STOVE HANDLING	6		
9	CHIMNEY FLUE	6		
	9.1 INTRODUCTION	6		
	9.2 CHIMNEY FLUE.....	6		
	9.3 TECHNICAL FEATURES	6		
	9.4 HEIGHT-DEPRESSION	7		
	9.5 MAINTENANCE.....	7		
	9.6 CHIMNEY POT.....	8		
	9.7 CHIMNEY COMPONENTS	8		
	9.8 EXTERNAL AIR INLET.....	9		
	9.9 COMBUSTION AIR DRAWN DIRECTLY FROM OUTSIDE	9		
	9.10 CHIMNEY FLUE CONNECTION	10		
	9.11 EXAMPLES OF CORRECT INSTALLATION.....	11		
10	FUEL	12		
	10.1 FUEL	12		
11	INSTALLATION	13		
	11.1 INTRODUCTION	13		
	11.2 OVERALL DIMENSIONS	14		
	11.3 GENERAL INSTALLATION	14		
	11.4 ELECTRIC CONNECTION	15		
12	USE	15		
	12.1 INTRODUCTION	15		
	12.2 IGNITION	15		
	12.3 STOVE REFILLING	16		
	12.4 VENTILATION.....	17		
	12.5 ADVERSE WEATHER CONDITIONS	17		
	12.6 CREOSOTE DANGER	17		
	12.7 FIRE EXTINGUISHING IN CASE OF FIRE	17		
13	MAINTENANCE	17		
	13.1 INTRODUCTION	17		
	13.2 BURNING POT AND ASH TRAY CLEANING....	18		
	13.3 FUME PIPES ANNUAL CLEANING	18		
	13.4 FANS CLEANING	18		
	13.5 GENERAL CLEANING	18		
	13.6 CLEANING OF PAINTED METAL PANELS.....	18		
	13.7 CLEANING OF CERAMIC PANELS.....	18		
	13.8 FAN REPLACEMENT.....	19		
	13.9 GASKET REPLACEMENT.....	19		
	13.10 GLASS CLEANING.....	19		
	13.11 HEART BREAK	19		
14	IN CASE OF ANOMALY	19		

1 MANUAL SIMBOLOGY

- The icons with the stylized figures indicates whom the subject dealt in the paragraph is addressed to (between the User and/or the Authorized Technician and/or the Specialized Stove-repairer).
- WARNING symbols indicates an important note.

	USER
	AUTHORISED TECHNICIAN (ONLY to interpret or the Stove-manufacturer or the Authorized Technician of Technical Assistance Service approved by the Stove-manufacturer)
	SPECIALIZED STOVE-REPAIRER
	CAUTION: READ CAREFULLY THE NOTE
	CAUTION: DANGER OR IRREVERSIBLE DAMAGE POSSIBILITY

2 DEAR CUSTOMER

- Our products are designed and manufactured in compliance with standards EN 13240 for wood stoves, EN 14785 for pellet stoves, EN 13229 for fire places, EN 12815 for wood cooker stoves, C.P.R. 305/2011 for manufacturing products, Re n.1935/2004 for materials and objects which are in contact with foods, Dir. 2006/95/CEE for low tension, Dir.2004/108/EC for Electromagnetic compatibility.
- Read carefully the instruction contained in this manual to obtain the best efficiency.
- This instruction manual is an integral part of the product: make sure it is delivered with the appliance also in case of sold to others. In case of loss please ask a copy to your local Technical Assistance Service.



In Italy biomass system installation below 35 kW must comply with MD 37/08. Every qualified installer who own these requirements, has to issue the certificate of conformity for the installed system ("system" means: stove + chimney + air inlet).

- According to (EU) No. 305/2011 regulation, the " Declaration of Performance" is available online at the web sites:
- www.cadelsrl.com
- www.free-point.it

3 CAUTIONS

- All the pictures carried in this manual are only for indicative and explanatory purpose and could therefore slightly differ from your appliance.
- The referring appliance is those you purchased.
- In case of doubts or difficulties in the comprehension or for problems not described in this manual, please promptly contact your distributor or installer.

4



SAFETY REQUIREMENTS



- Packaging are not toys and could cause suffocation or strangulation and other health hazards! People (children included) with reduced mobility, psychological diseases or without experience and knowledge must be kept away from packaging. The stove is not a toy.
- Please check with your local authorities if exists any restrictive regulation which regards the combustible air inlet, the fumes exhaust system, the chimney flue and the chimney pot.
- The company declines any responsibility regarding the bad running of the stove if it is due to the use of a no correctly dimensioned chimney flue which does not respect current regulations.
- It is forbidden to use any type of liquid combustible!
- It is forbidden to burn wood processing waste containing glue or paint, waste in general and cardboard!
- Intallation, electric connection, operation test and maintenance must be carried out by an authorized and skilled technician.
- This appliance must not be used by people (children included) with reduced mobility, psychological diseases or without experience and knowledge except in case of supervision or instruction about the use of the appliance by people responsible for their safety.
- Children must be constantly overseen in order to assure that they do not play with the appliance.
- Do not use flammable liquids during the ignition (alcohol, petrol, oil, etc...).
- Do not sibject the cast iron cooktop to too high temperature (cherry red) because there is the risk of breakage!
- During stove refilling do not wear flammable or large clothing.
- Do not open and close the fire door violently: the glass can brake!
- During regular working is dangerous to keep open the ash drawer and/or the fire box to increase air draught! There are appropriate instruments to adjust combustion air (primary air valve, register, etc...).
- Before any movement let the fire inside the combustion chamber extinguish till the total cooling and always disconnect the plug from the socket (if there are).
- **During its running, the stove reaches high temperatures! Keep away children and animals and for your safety please use appropriate fireproof devices, such as heatprotecting gloves.**



Fig. 1 - Attention: hot surfaces!

5

WARRANTY CONDITIONS

The company guarantees the product, **with the exception of elements subject to normal wear** listed below, for a period of **2 (two) years** from the date of purchase attested by:

- a document to serve as proof of purchase (invoice and/or receipt) that shows the name of the vendor and the date on which the purchase was made;
- forwarding of the completed certificate of guarantee within 8 days of purchase.

Furthermore, the product must be installed and started by specialised personnel who must, where provided, issue a declaration of conformity of the plant and of the proper functioning of the product, for the warranty to be valid and effective.

We recommend testing the product before completion with the relative finishes (claddings, painting of walls, etc.).

Installations not meeting the current standards, improper use and lack of maintenance as expected by the manufacturer, void the product warranty.

The guarantee is valid on the condition that the instructions and warnings contained in the use and maintenance manual are observed, and therefore the product is used correctly.

The replacement of the entire system or the repair of one of its components does not extend the guarantee period, and the original expiry date remains unchanged.

The guarantee covers the replacement or free repair **of parts recognised as being faulty at source due to manufacturing defects.**

To benefit from the guarantee, in the event of a fault, the customer must have the guarantee certificate and present it with the proof of purchase document to the Technical Assistance Office.

The guarantee does not cover malfunctions and/or damage to the appliance that arise due to the following causes:

- Damage caused during transportation or relocation.
- All parts that develop faults due to negligence or improper use, incorrect maintenance, installation that does not comply with the manufacturer's instructions (always refer to the installation and use manual provided with the appliance).
- Incorrect dimensioning with regards to the use or faults in the installation or failure to adopt the necessary devices to guarantee proper execution.
- Improper overheating of the equipment, use of fuels not conforming to the types and quantities indicated in the instructions provided.
- Further damage caused by incorrect user interventions in an attempt to fix the initial fault.
- Worsening of the damage due to the continued use of the equipment by the user, once the defect has been noticed.
- In the presence of a boiler, any corrosions, incrustations or breaks caused by water flow, condensation, hardness or acidity of the water, improperly performed descaling treatments, lack of water, mud or limescale deposits.
- Inefficiency of chimneys, flues or parts of the plant affecting the equipment.
- Damage caused by tampering with the appliance, atmospheric agents, natural disasters, vandalism, electrical discharges, fires, faults in the electric and/or hydraulic system.
- Failure to have the stove cleaned on an annual basis by an authorised technician or qualified personnel will result in the loss of the warranty.

Also excluded from this guarantee are:

- Parts subject to normal wear such as gaskets, glass, claddings and cast iron grids, painted, chrome-plated or gilded parts, handles and electric cables, bulbs, indicator lights, knobs, all parts which can be removed from the hearth.
- Variations in colour of the painted or ceramic/serpentine parts and craquelure ceramics as they are natural characteristics of the material and product use.
- Masonry work.
- Plant parts (if present) not supplied by the manufacturer.

Any technical interventions on the product to eliminate the above-said defects and consequent damages must be agreed upon with the Technical Assistance Centre, who reserves the right to accept the relative appointment or not. However, said interventions will not be carried out under warranty but as technical assistance to be granted at part of any eventual and specific agreed conditions and in accordance with the fee in force for the work to be carried out.

The user will also be charged for any costs incurred to remedy the incorrect technical interventions, tampering or damage to the appliance, not attributable to original faults.

Save for the legal or regulatory limits, the guarantee does not cover the containment of atmospheric and acoustic pollution.

The company declines all liability for any damage which may be caused, directly or indirectly, to persons, animals or objects as a consequence of non compliance with any prescription specified in the manual, especially warnings regarding installation, use and maintenance of the appliance.

6 SPARE PARTS

For each repair or adjustment which should be necessary, please contact the dealer where you purchased your stove or your nearest Technical Assistance Service, specifying:

- Appliance model
- Serial number
- Type of problem

Use only original spare parts which you can find at our Technical Assistance Services.

7 WARNINGS FOR THE CORRECT DISPOSAL OF THE PRODUCT

The owner is the sole party responsible for demolishing and disposing of the product. This must be performed in compliance with laws related to safety and environmental protection in force in his/her country.

At the end of its working life, the product must not be disposed of as urban waste.

It must be taken to a special differentiated waste collection centre set up by the local authorities or to a retailer that provides this service.

Separating and recycling prevents potential negative effects on the environment and health (often caused by inappropriately disposing of product parts). It also allows materials to be recovered in order to obtain significant savings in energy and resources.



Fig. 2 - Disposal

8 PACKAGING AND HANDLING



8.1 PACKAGING

- The packaging is made up of recyclable cardboard boxes according to RESY standards, recyclable expanded polystyrene inserts and wooden pallets.
- All packaging materials can be re-used for a similar use or eventually discharged as waste assimilable to the municipal solid ones, in accordance with current regulations.
- After having removed the packaging please assure you about the integrity of the product.

8.2 STOVE HANDLING

Both whether the stove is packed or not it is necessary to observe the following instructions for handling and transporting the stove from its sale point to its installation point and for any future movements:

- The stove must be handled with idoneous means paying attention to the existing safety regulations;
- do not turn the stove upside down and/or upset it on one side, but keep it in vertical position or as accorded with the constructor instructions;
- if the stove is made up of ceramic, stone, glass or any particularly fragile material components, all must be moved with the utmost care.

Two people are needed for handling operations of the stove. It is strongly recommended to reduce the weight by removing: refractory of the fire place.

9 CHIMNEY FLUE



9.1 INTRODUCTION

This chapter about the Chimney Flue has been drawn up in cooperation with Assocosma (www.assocosma.org) and is based on European Standards (EN 15287 - EN 13384 - EN 1856 - EN 1443) and UNI 10683:2012.

It provides instructions for a good and correct execution of the chimney flue but it does not absolutely replace the current standards which the qualified manufacturer/installer should comply with.

9.2 CHIMNEY FLUE



The chimney flue or chimney is of great importance for the correct running of the heating appliance.

- It is fundamental that the chimney flue is perfectly built and always maintained with a perfect efficiency.
- The chimney flue must be sole with insulated stainless-steel pipes or installed on the existing chimney flue.
- Both this solutions must be endowed with an inspection door.

9.3 TECHNICAL FEATURES

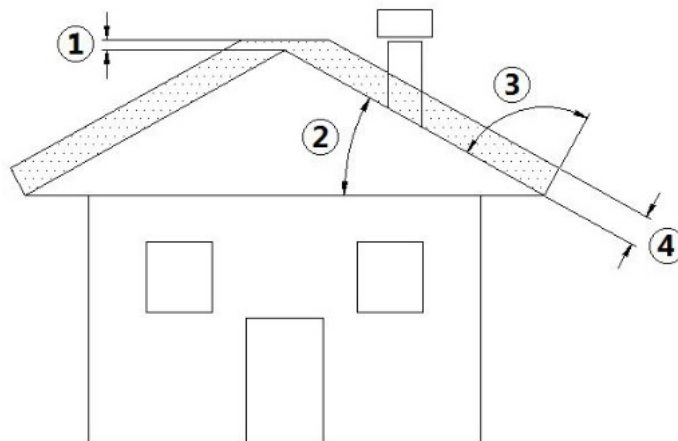


Fig. 3 - Inclined roof

LEGEND Fig. 3 page 6

1	Height over the ridge of the roof = 0,5 mt
2	Roof inclination $\geq 10^\circ$
3	90°
4	Measured distance at 90° from the roof surface = 1,3 mt

- The chimney flue must be sealed from fumes.
- It must have a vertical run without narrowing. It must be realized with fume and condensation resistant materials with thermal insulation and able to last against usual mechanical stresses.



It must be insulated to avoid condensation and to reduce fume cooling effects.

- The stove must be spaced out from fuels or flammable materials with an air gap or with insulating materials. Check the distance with the chimney manufacturer.
- The chimney entrance must be placed in the same room where the appliance is installed or otherwise in the adjacent room and it must be provided with a solid and condensation collection chamber under the entrance, accessible through the sealed metal gate.
- The inner section of the chimney flue can be round (the best one) or square and the jointed sides must have a minimum radius of 20 mm.
- The section dimension must be minimum $\varnothing 150$ mm and maximum $\varnothing 240$ mm.
- Made the efficiency of the chimney flue overhauled by an expert stove-repairer and if necessary cover the chimney flue with materials in compliance with current regulations.
- The flue system must be placed on the roof.
- The chimney flue must be provided CE in accordance with EN 1443 regulation. Please find attached an example of label:

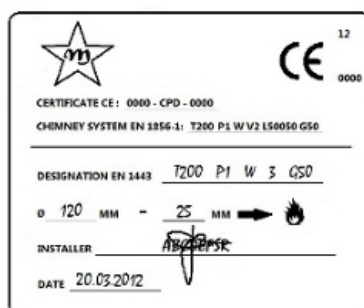


Fig. 4 - Example of label

9.4 HEIGHT-DEPRESSION

- The depression (draught) of a chimney flue depends also on its height. Minimum height 3,5 meters.
- Installations with the exhaust at the back make flue gas evacuation very difficult.
- For installations with the exhaust at the back, we advise round AISI 316 flues with double insulated chamber.
- Check the depression with the values provided at **FEATURES page 22**.



We disclaim any liability for poor operation of the stove if it is due to the use of a flue of the incorrect size or installed so as not to meet the requirements.

9.5 MAINTENANCE

- The fumes extraction pipes (fumes conduit + chimney flue + chimney pot) must always be cleaned, scrubbed and checked by an expert stove-repairer, in compliance with current regulations, with the instructions of the stove-manufacturer and the directives of your insurance company.
- In case of doubts, please follow the most restrictive regulations.
- Have your chimney flue and chimney pot checked and cleaned by an expert chimney sweep at least once a week. The chimney sweep has to release a written declaration about the security of the system.
- Not cleaning compromise safety.

9.6 CHIMNEY POT

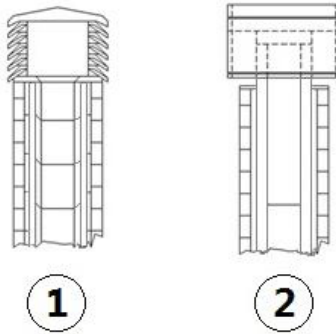


Fig. 5 - Anti-wind chimney pots

The chimney pot is important for the correct running of the heating appliance:

- We recommend using an anti-wind chimney pot, see **Fig. 5 page 8**.
- The hole width for fumes exhaust must be the double of the chimney flue width and fitted in a way that the fume exhaust is assured also in case of wind.
- It should prevent the infiltration of rain, snow and animals.
- The outlet height in the atmosphere must be away from the reflux area caused by the roof structure or by obstacles laying nearby (see **TECHNICAL FEATURES page 6**).

9.7 CHIMNEY COMPONENTS

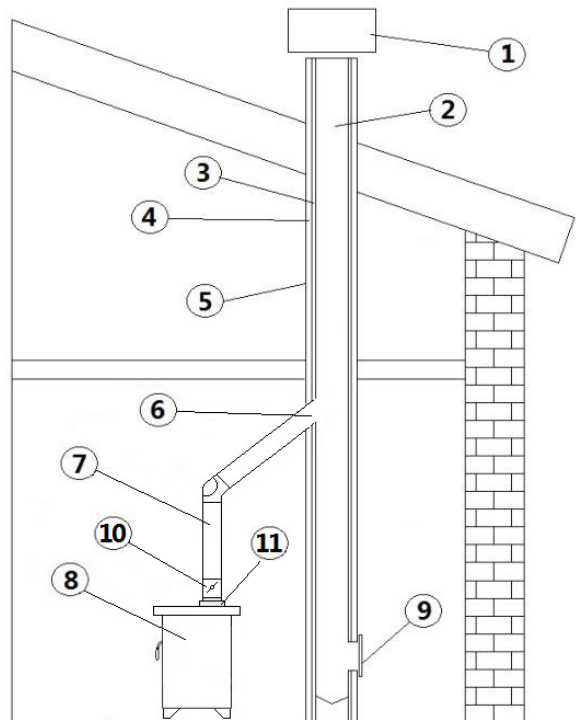


Fig. 6 - Chimney components

LEGEND Fig. 6 page 8

1	Chimney pot
2	Fume outlet
3	Chimney flue
4	Thermal insulation
5	External wall
6	Chimney union
7	Fume pipe
8	Heat generator
9	Inspection door
10	Damper
11	Exhaust stub pipe

9.8 EXTERNAL AIR INLET

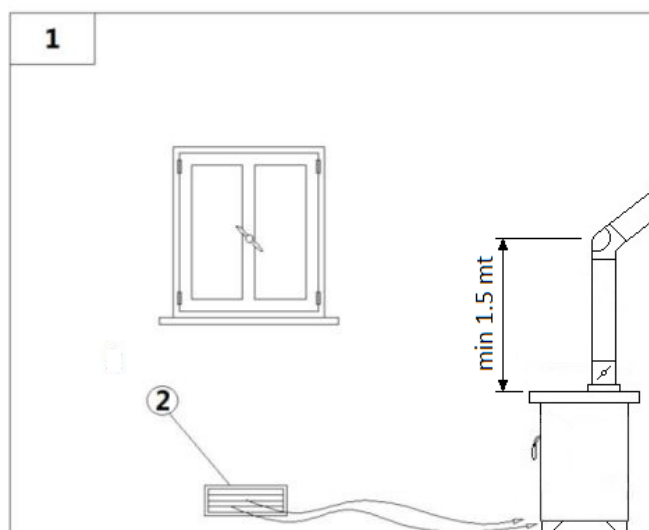


Fig. 7 - Direct air inflow

LEGEND Fig. 7 page 9

1	Room to ventilate
2	External air inlet

- The room must be endowed with an external air recycling for a good climate in your ambient.
- The air inflow from outside to the inner occurs directly, through an opening on the external wall of the room (see Fig. 7 page 9).
- The air inlet should have a total net surface of 100 sqcm²; the aforesaid surface is to widen if inside the room there are other activated appliances (for example: electric ventilators for foul air suction, cooker hoods, other stoves, etc...) which depress the environment.
- At switched on appliance it is necessary to check that the pressure fall between the room and the outside does not exceed 4,0 Pa value; if necessary widen the air inlet (EN 13384).
- The air inlet must be realized at a height close to the floor with an external grid against birds. In such a way it cannot be obstructed by any object.
- In case of installation with sealed-chamber the air inlet is not necessary.

9.9 COMBUSTION AIR DRAWN DIRECTLY FROM OUTSIDE

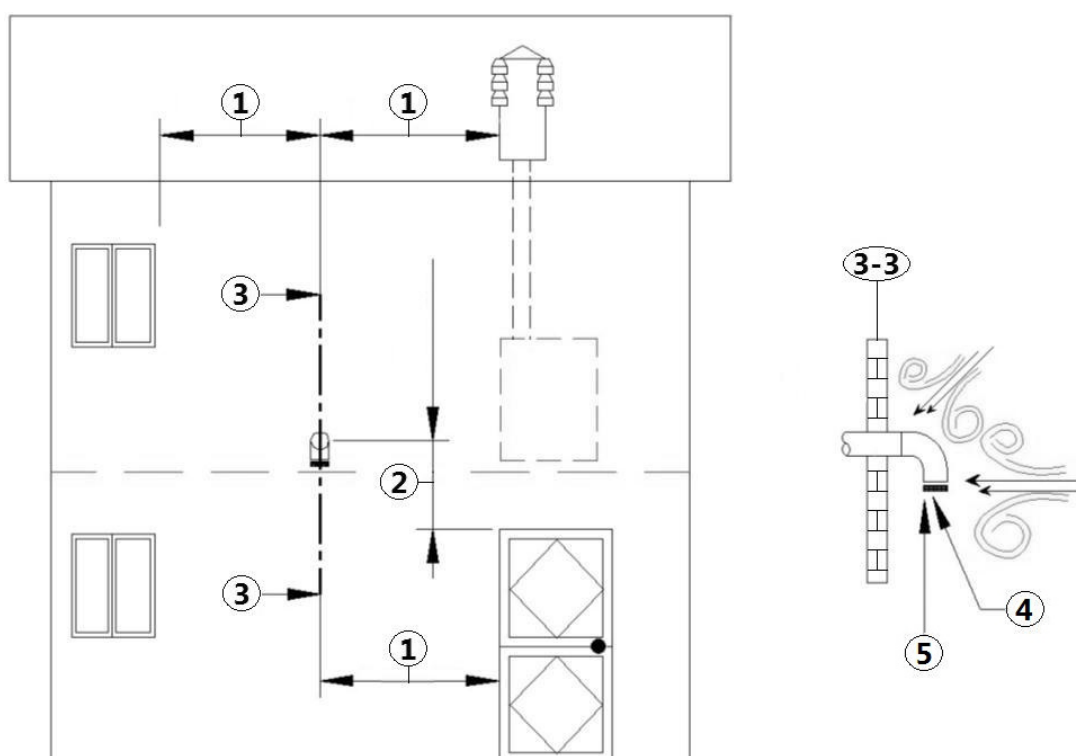


Fig. 8 - Combustion air

LEGEND	Fig. 8 page 9
1	$\geq 1,5 \text{ mt}$
2	$\geq 0,3 \text{ mt}$
3-3	Sectional view
4	Shield grid
5	Curve inlet to turn downwards

On all our stoves there is the possibility to draw the combustion air directly from outside. With this type of installation the ventilation grid is no longer necessary, thus eliminating the flows of cold air that compromise the efficiency of the system.

- Use a pipe with minimum $\text{Ø}80 \text{ mm}$ pipe and a maximum length of 2 metres; to connect the pipe see the back of the stove.
- During installation step is necessary to verify the minimum distances required for the combustible air inlet as (for example) an open door or window causes a vortex which could remove the combustible air necessary to the stove (see the underlying scheme).
- On the external wall it is necessary to install a curve at 90° to protect the combustible air inflow from wind effects: turn the curve inlet downwards, see **Fig. 8 page 9**.
- Endow the curve with an external shield grid against birds in such a way that it cannot be obstructed by any object.



Check with your local authorities if exists any restrictive regulation regarding the combustible air inlet: if present, they must be applied.

9.10 CHIMNEY FLUE CONNECTION

Your stove works through a natural draught. It is obligatory to check that all pipes are realized in compliance with the following regulation on material selection: EN 1856-1, EN 1856-2 e UNI/TS 11278. All must be effected by specialized personnel or companies as provided by UNI 10683:2012.

- The connection between the appliance and the chimney flue should be short in order to favor the draught and to avoid condensation in the pipes.
- The fume conduit should be equivalent or longer than the outlet joint ones.
- Some stove models are endowed with a lateral and/or back exhaust. Check that the unused exhaust is sealed with the plug given with standard equipment.

SYSTEM TYPE	Ø150 mm PIPE	Ø240 mm PIPE
Minimum vertical length	1,5 mt	2 mt
Maximum length (with 1 union)	6,5 mt	10 mt
Maximum length (with 3 unions)	4,5 mt	8 mt
Maximum number of unions	3	3
Level section (minimum inclination 3%)	2 mt	2 mt
Installation at a height above 1200 m a.s.l.	NO	Obligatory

- Use a specific plate pipe for stoves.
- It is forbidden to use metal, fibre cement or aluminium flexible pipes.
- For change of direction it is obligatory always to use a T-union (or a curve not with right angle) with inspection plug which enables an easy periodic cleaning of the pipes.
- Please assure you that after the cleaning the inspection plugs are sealed with its efficient gasket.
- It is forbidden to connect more appliances to the same fume conduit.
- It is forbidden to convey in the same fume conduit exhausts from overhanging cooker hoods.
- It is forbidden to exhaust flue gases directly from the wall towards the outside and closed spaces also at open top.
- It is forbidden to connect any other appliance (wood stoves, cooker hoods, boilers, etc...).
- The fume conduit must be placed at a distance of minimum 500 mm from flammable or heat-susceptible components.
- The fume conduit must be connected with stove exhaust in a fixed and tight manner, and if required with the insertion of a damper (see).

9.11 EXAMPLES OF CORRECT INSTALLATION

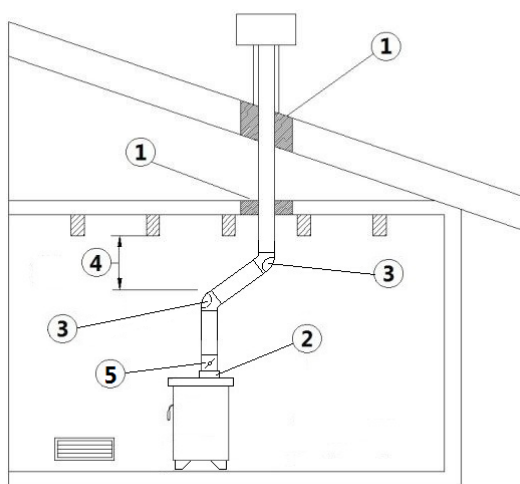


Fig. 9 - Example 1

LEGEND Fig. 9 page 11

1	Insulating material
2	Exhaust stub pipe
3	Inspection plug
4	Minimum safety distance = 0,5 mt
5	Damper

- Chimney flue installation $\varnothing 150$ mm with an enlarged drilling for pipe transit.

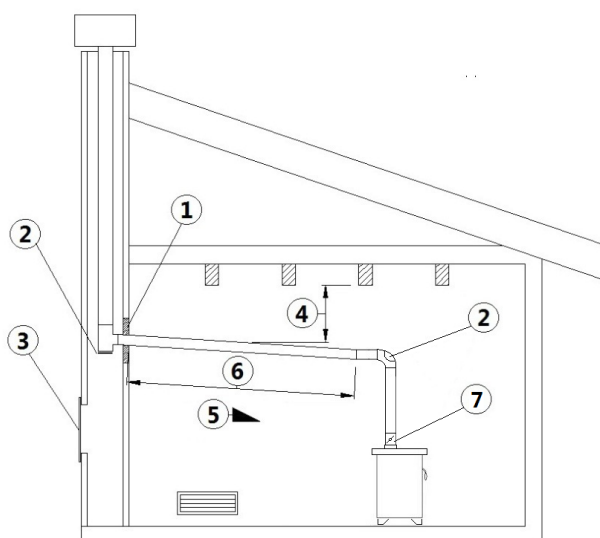


Fig. 10 - Example 2

LEGEND Fig. 10 page 11

1	Insulating material
2	Inspection plug
3	Chimney inspection entrance
4	Minimum safety distance = 0,5 mt
5	Inclination $\geq 3^\circ$
6	Level section ≤ 1 mt
7	Damper

- Old chimney flue with an inserted pipe of minimum $\varnothing 150$ mm and with an external door which enables the chimney cleaning.

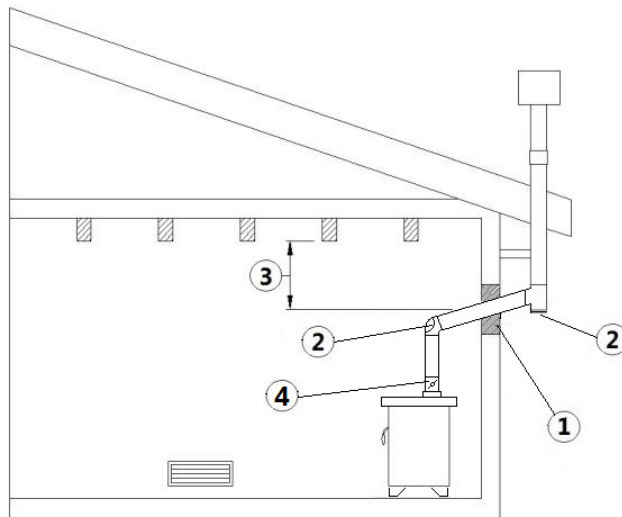


Fig. 11 - Example 3

LEGEND	Fig. 11 page 12
1	Insulating material
2	Inspection plug
3	Minimum safety distance = 0,5 mt
4	Damper

- External chimney flue entirely made up of insulated stainless steel pipes, i.e. with double wall of minimum Ø150 mm: all must be firmly attached to the wall. For chimney against wind effects please (see Fig. 5 page 8).
- Ducting system through T-unions which enables an easy cleaning without disassembling the pipes.



We recommend to check with your chimney flue manufacturer the safety distances which must be respected and the type of insulating material. The aforesaid regulations are valid also for holes made on the wall (EN 13501 - EN 13063 - EN 1856 - EN 1806 - EN 15827).

10 FUEL



10.1 FUEL

- The allowed fuel is firewood and its derivatives (lignite blocks, compressed sawdust, etc.) with a maximum water content of 20%.
- To obtain good firewood, it must be seasoned outside for at least 2 years in a place protected from the weather.
- If the wood is purchased it must comply with standard EN 14961.



Using damp wood or scraps of bark results in the formation of creosote in the ducts and in the hearth. The heat output of damp wood is much lower than the heat output of dry wood and pollutes a lot more.

- To know the length of wood log to use, check the dimensions of stove combustion chamber.
- Here following some information about the quality of different type of woods:

TYPE OF WOOD	QUALITY	% PERFORMANCE
Oak	Excellent	100
Hornbeam	Excellent	100
Ash	Very good	92
Maple	Very good	91
Birch	Good	89

TYPE OF WOOD	QUALITY	% PERFORMANCE
Elm	Good	84
Beech	Good	80
Willow	Sufficient	71
Spruce	Sufficient	70
Red deal	Fair	67
Larch	Fair	66
Lime	Worst	57
Poplar	Worst	50

11

INSTALLATION



11.1 INTRODUCTION

- The assembly position depends on on environment, exhaust, chimney flue.
- Check with local authorities if there are any restrictive regulations which regard the combustible air inlet, room ventilation, fume exhaust system together with chimney flue and chimney pot.
- The manufacturer declines any responsibility in case of installation which are not in compliance with current regulations, in case of a wrong room ventilation system, in case of an electric connection which is not in compliance with regulations and in case of a wrong use of the appliance.
- Intallation, electric connection, operation test and maintenance must be carried out by an authorized and skilled technician.
- Check if there is the combustible air inlet.
- Check the probable presence of other stoves or appliances which could depress the room.
- Check at switched on stove if there is the presence of CO in the room.
- Check if the chimney has the necessary draught.
- Check if during the fume passage all has been executed in safety (probable fume losses and distances from flammable materials, etc....).
- The installation of the appliance must enable an easy access for appliance, fume exhaust pipes and chimney flue cleaning.
- The installation must enable en easy access to the electric connection plug (see **ELECTRIC CONNECTION page 15**).
- It is forbidden to install the stove in bedrooms, bathrooms and in rooms used for storing combustible materials and in one-room flats.
- In any case the stove must not be installed in rooms where it can get in touch with water or water splashes because this can cause burn hazards and short-circuit.
- To install more appliances, the external air inlet must be correctly dimensioned.
- Only in room used as kitchen is possible to use appliances for cooking with its hood without steam extractor.
- Only type "C" appliances are allowed and not type "B": make reference to regulations active in the country where the appliance is installed.

11.2 OVERALL DIMENSIONS

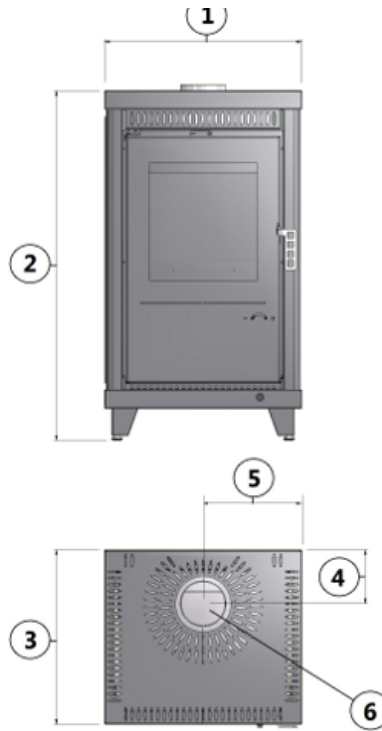


Fig. 12 - Overall dimensions

LEGEND Fig. 12 page 14

1	52 cm
2	92,5 cm
3	45,8 cm
4	14 cm
5	26 cm
6	Exhaust fumes d.12 cm

11.3 GENERAL INSTALLATION

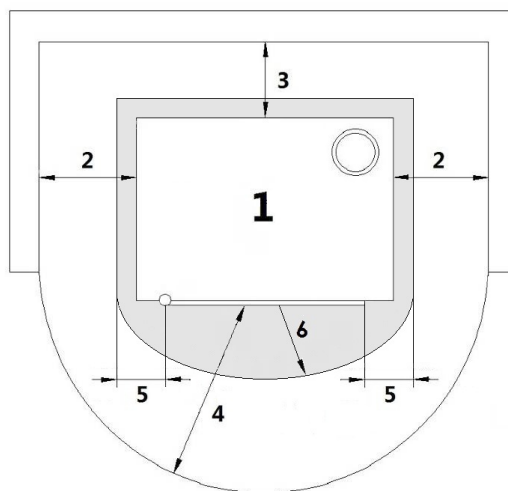


Fig. 13 - General installation

LEGEND Fig. 13 page 14

1	Stove
2	Minimum lateral distance = 300 mm
3	Minimum rear distance = 300 mm
4	Minimum front distance = 1000 mm

- Please check that the floor has an adequate load capacity. If the existing one does not satisfy this requirement, appropriate measure should be provided (for example a plate for distributing the load).
- It is obligatory to install the stove away from walls and/or pieces of furniture, with a minimum air flow of 300 mm on the sides and 300 mm on the back, to enable an efficient appliance cooling and a good distribution of heat in the room (see **Fig. 13 page 14**).
- For safety fire regulations the distances from flammable or sensible to heat objects (sofas, pieces of furniture, wooden covering, etc...) must be respected, as described in **Fig. 13 page 14**.
- If there are highly flammable objects (curtains, fitted carpet, etc...), all these distances must be further increased with 1 meter.
- If the walls are made up of flammable materials, check the safety distances (see **Fig. 13 page 14**).
- At maximum power check that the wall temperature does not ever exceed 80°C. If it would be necessary please install a fire resistant plate on the concerned walls.
- In some countries also masonry load-bearing walls are considered flammable.

11.4 ELECTRIC CONNECTION

Some wood stove models are endowed with a forced ventilation system, so they need an electric connection.



Warning: the appliance must be installed by an authorized technician!

- The electric connection occurs through a cable with plug put in an electric socket which is able to support charge and tension specific of every model, as described in the technical datas table (see **FEATURES page 22**).
- The plug must be easily accessible when the appliance is installed.



The cable must not get in touch with the fume exhaust pipe and nor with every other part of the stove.

- Please further assure you that your network is endowed with an efficient earth connection: if it does not exist or if it is not efficient, please endow you with one in compliance with the law.
- Do not use extension cables.
- If the feeder cable is damaged, it must be replaced by an authorized technician.
- When the stove is not going to be used for a long period of time, it is advisable to remove the plug from the socket on the wall.

12 USE



12.1 INTRODUCTION

To have the best performance with the lowest consumption please follow the here described instructions.

- Wood ignition occurs very easily if the installation is correct and if the chimney flue is efficient.
- By first ignition of the stove hold a slow fire for at least 4-5 hours in order to allow the material of which the heater and the hearth are made up of to adjust the inner mechanical stresses. This operation must be executed at least 3-4 times a year.
- Plant fat waste and varnishes can release bad smells and smoke during first working hours: it is advisable to ventilate the room because they can be noxious to people and animals.
- If inside the combustion chamber there are booklets, manuals, etc..., remove them.
- Check that the plug is inserted in the power socket (this only applies to forced ventilation stoves).

12.2 IGNITION

- If inside the combustion chamber there are booklets, manuals, etc..., remove them.
- Check if the plug is correctly inserted in the electric socket (only for stoves with forced ventilation).
- Completely open the primary air inlet register and the damper.
- Put the fire-starter bars and seasoned wood logs into the burning pot.
- Ignite the bars and right after insert well seasoned wood logs and close the oven door.



Fig. 14 - Wood positioning

For a better yield, as soon as there is a live flame, it is advisable to close the primary air valve to the minimum and keep the damper at 45° in order to have the maximum performance (nominal output) with the lowest fuel consumption.



Fig. 15 - Hot register grips

12.3 STOVE REFILLING



During stove refilling do not wear flammable or large clothing.



Do not open and close the fire door violently: the glass can break!



Open the fire door with naked flames can be dangerous for user and/or home.



During operation some external parts can reach high temperatures. During refilling phases use proper protection gloves given as equipment.

- It is advisable to refill the stove only when on the firebox are only embers.
- Please proceed as follows: close the primary air valve, open the fire door slowly, shake the ash with the appropriate instrument, insert wood in the hearth, close the door and adjust again the primary air valve.



During regular working is dangerous to keep open the ash drawer and/or the fire box to increase air draught! There are appropriate instruments to adjust combustion air (primary air valve, register, etc...).

12.4 VENTILATION

Some models are endowed with a forced ventilation system with a manual reset: turn it on and off through the switch.

The air blown by fans keeps the stove at a lower temperature thus avoiding excessive stresses to materials of which the stove is made up and at the same time heats the environment homogeneously.

Make periodically sure about the effective operation on the fan.

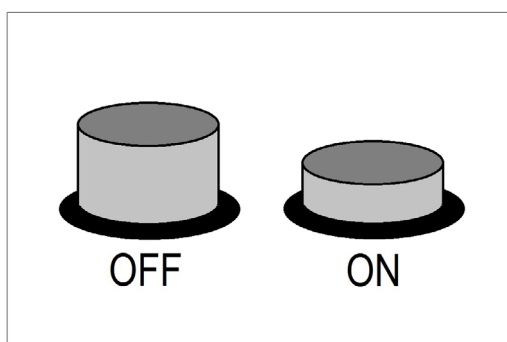


Fig. 16 - Switch



In case of black out or if the ventilation is out of order, the stove can work in the same way provided that using a low flame. Thus do not load the hearth with wood excessively. In case that the fan is out of order, contact an authorized technician who will replace it with an original spare part.

12.5 ADVERSE WEATHER CONDITIONS

When the external temperatures are severe and/or there are adverse weather conditions (strong wind), the chimney is subjected to a lack in draught thus impeding a correct fume expulsion.

- Fill the heart with few wood logs and keep air register valves opened completely.

12.6 CREOSOTE DANGER



The use of humid and/or bad quality wood (for example resinous wood) cause creation of creosote along the chimney flue obstructing fume passages.



The creosote is flammable and if amassed over the time it must be removed in order to prevent the risk of fire of the chimney flue.

12.7 FIRE EXTINGUISHING IN CASE OF FIRE

- In the event of fire, close the air regulating valve and call the fire brigade immediately.
- Never use water to put out the fire inside the combustion chamber.
- Use an extinguisher and call the fire brigade immediately.
- When the fire has stopped burning, have the flue inspected by a specialised heating engineer.

13 MAINTENANCE



13.1 INTRODUCTION

For a long working life of the stove, have a periodic cleaning of the stove as described in the following paragraphs.

- Fume outlet pipes (fume conduit + chimney flue + chimney pot) must always be cleaned, scrubbed and checked by an authorized technician in compliance with local regulations, with the instructions of the manufacturer and those of your insurance company.
- If there are no local regulations and no instruction from your insurance company, it is necessary to have your fume pipe, chimney flue and chimney pot cleaned at least once a year.
- It is also necessary to have the combustion chamber, motors and fans cleaned and to have the gaskets and the electrical elements (if there are) checked at least once a year.



All these operations must be planned in time with your Authorized Technical Assistance Service.

- After a long ineffective time, before turning on the stove check if there are obstructions in the fume exhaust.
- If the stove had been using continuously and intensely, the whole system (chimney included), must be cleaned and checked more frequently.
- In case of replacement of damaged pieces please ask for the original spare part at the Authorized Retailer.

13.2 BURNING POT AND ASH TRAY CLEANING



For a good combustion, before of every stove ignition, remove the ash which has settled in the burning pot. The abundant ash obstructs the primary air flow which is fundamental for a good combustion.

- Remove ash from the burning pot by shaking it to let it fall in the ash tray.
- If full, the ash tray must be empty.
- Ash must be kept in a metal container with sealed cap, the same container must not ever be in contact with flammable materials (for example lent over a wooden floor), as ash inside keeps embers glowing for a long time.
- Only when the ash is completely extinguished can be thrown in the organic waste.
- Clean the ash also in the ash compartment.

13.3 FUME PIPES ANNUAL CLEANING



Clean once a year from soot with brushes.

The cleaning operation must be executed by a specialized stove-repairer who will provide for the cleaning of fume pipe, chimney flue and chimney pot. He will also check their efficiency and will release a written declaration of the safety of the appliance. This operation must be executed at least once a year.

13.4 FANS CLEANING



For models with ventilation, clean every year the room fan from ash or dust which can cause a blade unbalance and a greater noise.



As this operation is so delicate it must therefore be executed by an Authorized Technician.

13.5 GENERAL CLEANING



For cleaning external and inner parts of the stove do not use steel wools, muriatic acid or other corrosive and abrasive materials.

13.6 CLEANING OF PAINTED METAL PANELS



To clean painted metal panels use a soft cloth. Do not use degreasant agents like alcohol, diluents, acetone, gasoline because these could irremediably damage the varnish.

13.7 CLEANING OF CERAMIC PANELS



Some stove models has an external lining made up of ceramic. These pieces are handmade therefore they could inevitably present crazings, seedinesses, shadings.

To clean ceramic panels use a soft and dry cloth. If using any cleaners this will seep through the crazings putting them in evidence.

13.8 FAN REPLACEMENT

For fan replacement proceed as follows:

- Extract the plug from the socket.
- Remove the ceramics to prevent breakage.
- Disconnect the chimney, tilt the stove and place it on the floor on the back side.
- Unscrew the 4 screws at the sides of the casing of the fan.
- Disconnect the faston and unscrew the failure fan screws.
- Replace the fan and repeat the inverse operation.

13.9 GASKET REPLACEMENT

In case of deterioration of fire door gasket and/or ash door gasket it is necessary to replace them by an authorized technician in order to guarantee the good running of the stove.



Use exclusively original spare parts.

13.10 GLASS CLEANING

The glass-ceramic of the fire door is able to stand till 700°C but not to thermal shocks. The probable cleaning with usual sale product for glass cleaning must be effected at cool glass in order to avoid explosions.

13.11 HEART BREAK

Probable cast iron or refractory heart break are due to an excessive overheating caused by too much fuel or by too much combustion air. Have the damaged elements immediately replaced in order to avoid feather damages to the stove.







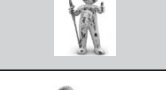



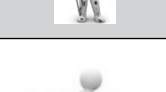

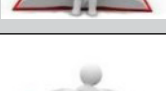



Use exclusively original spare parts.

14 IN CASE OF ANOMALY

14.1 PROBLEM SOLVING



In case of doubts regarding the use of the stove, please contact ALWAYS the Authorized Technician in order to avoid irreparable damages!

PROBLEM	CAUSE	SOLUTION	INTERVENTION
Ignition difficulties	Too large wood	Use small and well dried wood logs during ignition, before bigger wood logs.	
	Too humid wood	Use well seasoned wood.	
	Lack of chimney draught	Open the registers completely. (If the problem persists, contact and expert stove repairer who will check the chimney flue efficiency).	
	Ambient without air recycling	Create immediately a ventilation grid.	
Creation of condensation	Large chimney flue section	Reduce the chimney flue section with thermal insulater pipes.	
	No insulated chimney flue	Cover the chimney flue with insulating material.	
	Too slow combustion	Open air registers in order to increase the fire and fume output temperature.	
Fume leakage from the heart	No insulated chimney flue	Cover the chimney flue with insulating material.	
	Adverse wheather conditions	No windproof chimney pot: have it replaced.	
	Too humid wood	Use well seasoned wood.	
The glass blackens excessively	Lack of chimney draught	Open the registers completely. (If the problem persists, contact and expert stove repairer who will check the chimney flue efficiency).	
	Too humid wood	Use well seasoned wood	
	Too slow combustion	Open air registers in order to increase the fire and fume output temperature.	
	Bad quality fuel	Use fuel described in	

15 TECHNICAL DATAS



15.1 WIRING SCHEME

For models endowed with ventilation system, please follow the following wiring scheme:

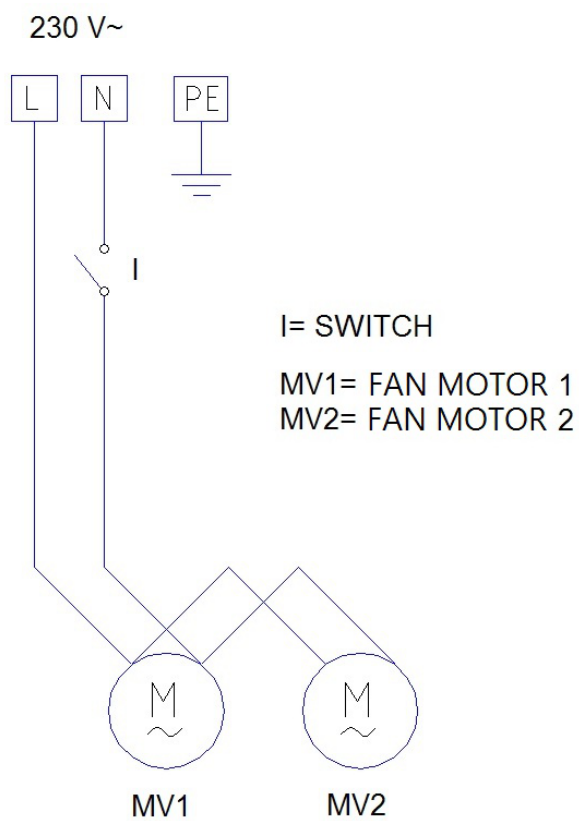


Fig. 17 - Wiring scheme

15.2 FEATURES

DESCRIPTION	CARINA 9,5 kW	DORA 9,5 kW
WIDTH	52 cm	52 cm
DEPTH	45,8 cm	46 cm
HEIGHT	92,5 cm	92,5 cm
WEIGHT	81,8 - 87 kg	81,8 - 87 kg
NOMINAL THERMIC POWER (Max)	9,5 kW	9,5 kW
EFICIENCY (Max)	75 %	75 %
FUME TEMPERATURE (Max)	444 °C	444 °C
FUME MAXIMUM LOADING CAPACITY (Max)	7,76 g/s	7,76 g/s
CO EMISSIONS (13% O ₂) (Max)	0,18 %	0,18 %
CHIMNEY DEPRESSION (Max)	12 Pa	12 Pa
FUME OUTLET DIAMETER	12 cm	12 cm
FUME OUTLET POSITION	Upper	Upper
DAMPER REQUIRED	YES	YES
FUEL	WOOD	WOOD
WOOD HUMIDITY	< 13%	< 13%
HEATING VOLUME 18/20°C Coeff. 0,045 kW (Max)	228 m ³	228 m ³
HOURLY CONSUMPTION	2,60 kg/h	2,60 kg/h
BURNING POT VOLUME	31,7 dm ³	31,7 dm ³
BURNING POT OPENING	7,4 dm ²	7,4 dm ²
ASH TRAY CAPACITY	6,3 dm ³	6,3 dm ³
BURNING POT GRID SHAKER	YES	YES
ADJUSTABLE PRIMARY AIR	YES	YES
ADJUSTABLE SECONDARY AIR	NO	NO
FAN	YES	NO
SUPPLY	230 V - 50 Hz	-
POWER INPUT (Max)	85 W	-
MINIMUM EXTERNAL AIR INLET (last effective area)	100 cm ²	100 cm ²

**PELLET STOVES · WOOD STOVES · WOOD COOKING STOVES
THERMOSTOVES · PELLET FIREPLACE INSERTS**

**PELETKACHELS · HOUTKACHELS · HOUTKEUKENS
THERMOKACHEL · OPEN HAARD PELLETS**

CADEL srl

FREEPOINT by Cadel

Via Foresto Sud, 7
31025 Santa Lucia di Piave (TV) - ITALY

tel. +39.0438.738669

fax +39.0438.73343

www.cadelsrl.com



89013071

Partner of:



Rev.03 - 2013