

THERMOROSSI S.P.A.

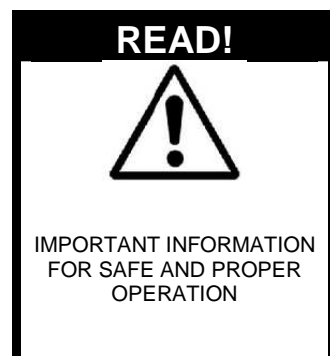
PELLET, WOOD & SUN TECHNOLOGIES

INSTALLATION, USE AND
MAINTENANCE GUIDE

models:

- **6000**
- **8000**

Thermocomfort



INDEX

1. INTRODUCTION	3
1.1. GENERAL WARNINGS	3
1.2. SAFETY GUIDELINES	4
1.3. STANDARDS AND RECOMMENDATIONS	4
1.4. TRANSPORTATION AND STORAGE	4
2. TECHNICAL CHARACTERISTICS	5
3. GENERAL DESCRIPTION	6
3.1. OPERATING TECHNOLOGY	6
3.2. PELLETS	6
3.3. THE FEEDBOX	6
4. INSTALLATION	6
4.1. HEATER LOCATION	6
4.1.1. ASSEMBLING THE KICKPLATES	6
4.1.2. MOUNTING CERAMIC CASING	7
4.1.3. ASSEMBLING THE STEEL CASING	7
4.1.4. ASSEMBLING THE UPPER FRAME	7
5. DESCRIPTIONS OF CONTROLS	8
5.1. DESCRIPTION OF CONTROL PANEL AND HEATER REAR PANEL	8
5.1.1. DESCRIPTION OF THE CONTROL PANEL	8
5.1.2. BACK PANEL OF HEATER	8
5.2. DAY AND TIME SETTING	9
5.3. ON/OFF PROGRAMMING	9
5.3.1. ON/OFF PROGRAMMING DISPLAY	10
5.4. OPERATING LEVEL SETTING	10
6. USE OF THE HEATER	11
6.1. SWITCHING ON THE HEATER	11
6.2. HEATER COMBUSTION AND VENTILATION ADJUSTMENTS	11
6.3. INFRARED REMOTE CONTROL	11
6.4. OPERATION OF THE WHITE HANDHELD RADIO CONTROL (OPTIONAL)	11
6.4.1. Indicators of the handheld radio control	12
6.4.2. TRANSMISSION CODES SETTINGS	13
6.4.3. CARE AND MAINTENANCE OF THE RADIO CONTROL	14
7. ADDITIONAL ROOM TEMPERATURE THERMOSTAT (not supplied) ADDITIONAL CHRONOTHERMOSTAT (not supplied)	14
7.1. OPERATING WITH THE ADDITIONAL ROOM TEMPERATURE THERMOSTAT (NOT SUPPLIED)	15
7.2. OPERATING WITH THE ADDITIONAL CHRONOTHERMOSTAT (NOT SUPPLIED)	15
8. CLEANING AND MAINTENANCE	15
8.1. FOREWORD	15
8.2. CLEANING AND MAINTAINING THE HEATER	15
8.3. CHARGING THE BATTERY OF THE HANDHELD RADIO CONTROL (optional)	17
8.4. BATTERY REPLACEMENT FOR INFRARED REMOTE CONTROL	17
8.5. REPLACING THE BUFFER BATTERY OF THE CONTROL PANEL	17
9. SMOKE DISCHARGE TUBE	17
9.1. VENTILATION OF THE ROOMS	17
9.1.1. COMBUSTION AIR INTAKE	18
9.2. SMOKE OUTLET	18
10. ALARMS	19
11. ELECTRICAL WIRING	20
12. INFORMATION FOR THE SKILLED TECHNICIAN	21
12.1. MAIN COMPONENTS AND THEIR OPERATION	21
12.2. USEFUL ADVICE FOR INSTALLATION AND OPERATION	21
12.3. TROUBLESHOOTING CAUSE-SOLUTION	22
13. SPARE PARTS	24
13.1. SPARE PARTS 6000 (PAGE 1/3)	24
13.2. SPARE PARTS 6000 (PAGE 2/3)	25
13.3. SPARE PARTS 6000 (PAGE 3/3)	26
13.4. SPARE PARTS 8000 (PAGE 1/3)	27
13.5. SPARE PARTS 8000 (PAGE 2/3)	28
13.6. SPARE PARTS 8000 (PAGE 3/3)	29



THERMOROSSI S.p.A.

Via Grumolo. 4
36011 ARSIERO
tel. 0445.741310
fax 0445.741657

“EC” DECLARATION OF CONFORMITY

In accordance with the following directives:

European Directive	73/23/EEC and its amending directive	93/68/EEC
	89/336/EEC and its amending directives	93/68/EEC 92/31/EEC 93/97/EEC

Thermorossi S.p.A., Via Grumolo 4 - ARSIERO (VI), declares that the heaters of the series have been designed and manufactured in compliance with the safety requirements of the standards for EC marking. This declaration refers to the entire range of the specified series.

ARSIERO, January 1999

THERMOROSSI S.p.A.

1. INTRODUCTION

1.1. GENERAL WARNINGS

This installation, use and maintenance guide is an integral and essential part of the product and must be kept by the user. Before commencing with the installation, use and maintenance of the product, carefully read all the instructions contained in this booklet. At the time of installation of the appliance all local regulations, including those that refer to national and European regulations, must be observed. The Manufacturer recommends carrying out all the maintenance operations described in this manual. This appliance must only be used as intended by the manufacturer. Any other use is considered incorrect and therefore hazardous; consequently, the user shall be totally liable for the product if used improperly. Installation, maintenance and repairs must be carried out by professionally qualified personnel, professionally certified according to Decree no. 37 of 22 January 2008 and in compliance with current regulations and in accordance with the instructions provided by the manufacturer of the appliance. Use only original spare parts. Incorrect installation or poor maintenance could injure or damage people, animals or things; in this case the manufacturer shall be relieved of all responsibility.

Before commencing any cleaning or maintenance operation ensure that the appliance has been disconnected from the mains power supply by means of the main system switch or some other disconnecting device installed upstream from the appliance. The product must be installed in locations suitable for fire-fighting and furnished with all the services (power and outlets) which the appliance requires for a correct and safe operation. Any repairs or actions carried out on any systems, components or internal or external parts of the appliance, or on any of the accessories supplied with it, that are not specifically authorised by Thermorossi s.p.a, will automatically void the warranty and the manufacturer's responsibility, pursuant to D.P.R. 224 of 24/05/1988, art. 6/b. Use only original Thermorossi spare parts. If the appliance is sold or transferred to another user ensure that the guide is handed over with it.

Thermorossi S.p.A. retains copyright on these service instructions. These instructions may not be reproduced or communicated to third parties or used in any other way without the necessary authorisation.

1.2. SAFETY GUIDELINES

PERSONAL INJURY

This safety symbol identifies important messages throughout the manual. Read the information marked by this symbol carefully as non-observance of this message can cause serious injury to persons using the heater.

DAMAGE TO PROPERTY

This safety symbol identifies messages or instructions that are fundamental for the heater and system to function well. To avoid serious damage to the heater adhere strictly to these instructions.

INFORMATION

This symbol indicates important instructions for good functioning of the heater. If this information is not correctly observed, the performance of the heater and/or system will not be satisfactory.



1.3. STANDARDS AND RECOMMENDATIONS

NORMATIVE REFERENCES :national and international standards used as reference guides for the design, industrialization and production of the products as follows:

- European directive 73/23/EEC
- Standard CEI EN 60204
- European directive EN 14785 : 2006
- Standard CEI 61/50
- European Directive 89/336/EEC
- European Directive 93/68/EEC
- Standard CEI 64-8 (IEC 364)

RECOMMENDATIONS

Before using the appliance, carefully read every section of this instruction manual as knowledge of the information and the regulations contained in it are essential for a correct use of the appliance. The entire operation concerning the connection of the electric panel must be carried out by expert personnel; no responsibility will be accepted for damages, even to third parties, if the instructions for installation, use and maintenance of the appliance are not followed scrupulously. Modifications made to the appliance by the user or on his behalf, must be considered to be under his complete responsibility. The user is responsible for all the operations required for the installation and maintenance of the appliance before and during its use.

GENERAL WARNINGS

Caution: the appliance must be connected to a system provided with a PE conductor (in compliance with the specifications of 73/23/EEC, 93/98/EEC, concerning low voltage equipment).

Before installing the appliance check the efficiency of the earth circuit of the power supply system.

Caution: the power supply line must have a section which is suitable for the power of the equipment. The cable section must in any case be no less than 1.5 mm². The stove must be powered with 220-240 V voltage and 50 Hz. Voltage variations greater than 10% of the nominal value can cause irregular operation or damage the electrical device. Position the appliance so that the electric power plug is easily accessible. Voltage variations less than 10% of the nominal value can cause lighting and use problems. Apply a current regulator.

Ensure that a suitable differential switch is installed upstream from the equipment.

CAUTION: the heater must not come into contact with water, do not touch the electrical parts with wet hands.

Caution! Warning for Swiss users

Refer to the local cantonal regulations imposed by the Fire Department (Mandatory signalling and safety distances) and the Note concerning installation of heaters issued by the Association of Cantonal Fire Agencies (VKF - AEAI).

1.4. TRANSPORTATION AND STORAGE

TRANSPORTATION AND HANDLING

The heater body must always be in a vertical position when handled and exclusively by means of trolleys. Take special care to protect the electric panel, the glass, the ceramics and all the fragile parts from mechanical impact which could damage them and their correct functioning.

STORAGE

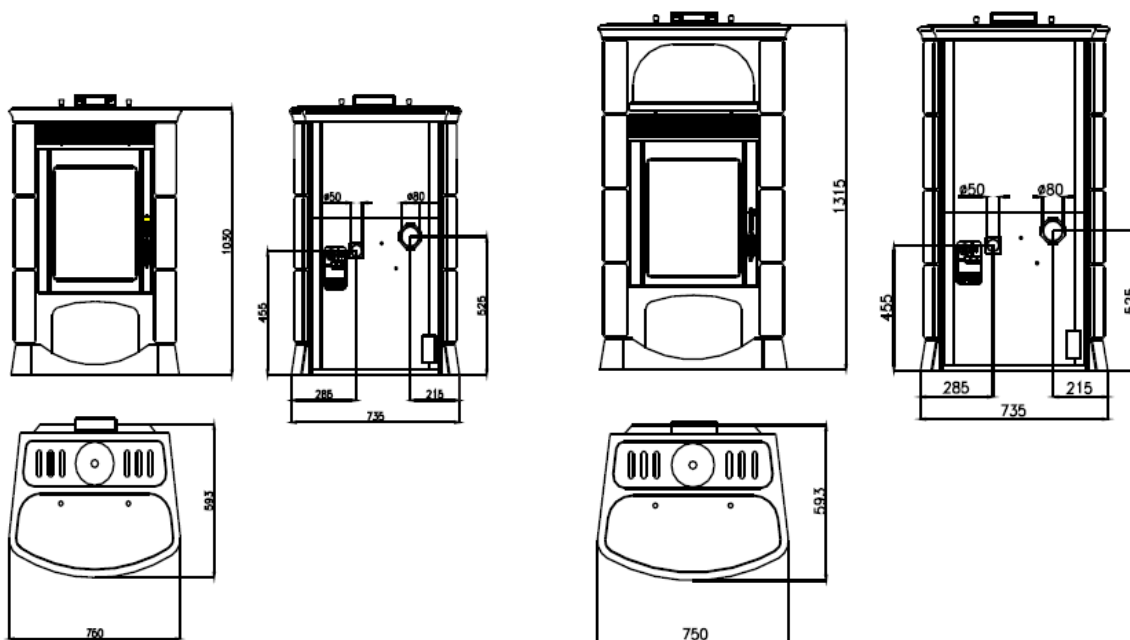
The heater must be stored in a humid-free environment and sheltered from the weather; it is inadvisable to store the heater directly on the floor.

The Company denies all responsibility for damage caused to wood floors or floors made from any other material.

It is inadvisable to store the heater for long periods of time.

2. TECHNICAL CHARACTERISTICS

	6000 Ceramic element Stainless steel	8000 Ceramic element Stainless steel
Height (mm)	1030	1315
Depth (mm)	593	593
Width (mm)	750	750
Weight (Kg)	206 / 186	233 / 207
Total rated power (Kw)	11	11
Total reduced rated power (Kw)	3.1	3.1
Min/Max consumption (Kg/ h)	0.9 / 2.3	0.9 / 2.3
Autonomy (min hours - max hours)	25 / 10	25 / 10
Smoke outlet tube D. (mm)	80	80
Min. draught at rated power (Pa)	12	12
Hopper capacity (Kg)	23	53
Electricity	220V-50Hz	220V-50Hz



* All the data are based on the appliance fuelled with Austrian standard ÖNORM M 7135 type-approved pellets.



3. GENERAL DESCRIPTION

3.1. OPERATING TECHNOLOGY

Your heater has been built to fully satisfy all your heating and practical requirements. Top-grade components and functions managed with microprocessor technology guarantee high reliability and optimal performance.

3.2. PELLETS

- The appliance is fuelled by pellets, that is, cylinders of compressed sawdust; this will make it possible for you to enjoy to the full the heat of the flame without having to manually stoke the combustion.
- The pellets are cylinders of compressed sawdust having a 6 mm diameter and a maximum length of 15 mm. They have a maximum moisture content of 8%, a thermal value of 4000/4500 Kcal/Kg and a density of 620-630 Kg/m³.

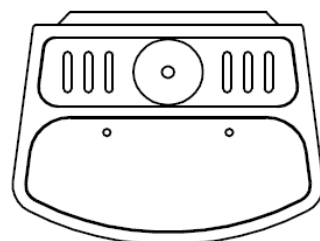


The use of fuel which does not comply with the description given above immediately voids the heater warranty. Do not use the appliance as an incinerator, at the risk of voiding the warranty.

3.3. THE FEEDBOX



- The feedbox is situated in the top part of the heater.
- The maximum load capacity of the tank is 23 Kg for the 6000, 53 Kg for the 8000, but varies according to the specific weight of the pellets. The manufacturer recommends emptying the tank and vacuuming the screw feeder zone once a month and during the summer period. Take special care when loading the hopper as the screw feeder at its base is in motion. Only pellets that comply with the specifications listed above must be fed into the hopper; never insert foreign objects into the hopper.



4. INSTALLATION

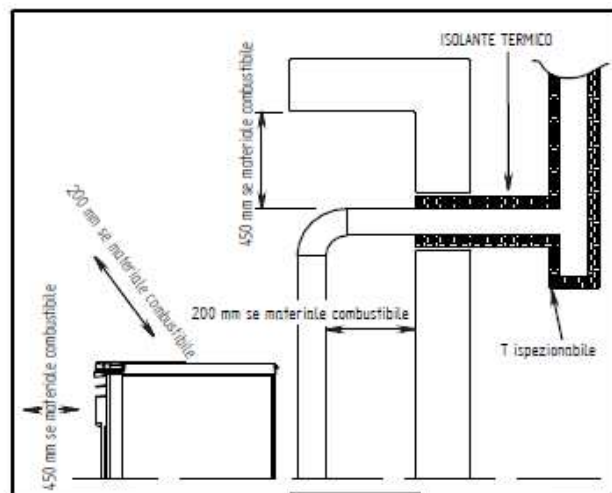
4.1. HEATER LOCATION



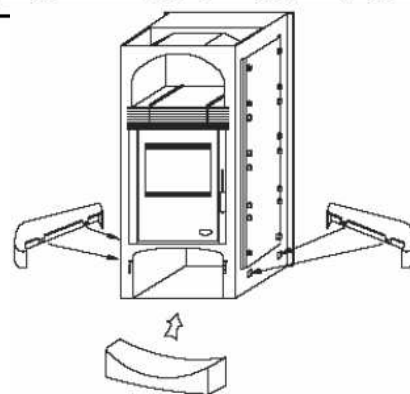
Follow the general guidelines set out in paragraph 1.1 to the letter. A vital aspect to consider is that the flooring of the room in which the heater is installed must be capable of bearing the weight of the heater. CAUTION: The heater must be installed in a room with adequate ventilation.



The appliance must be positioned at a minimum safe distance from walls and furnishings. This distance will have to be increased considerably if the objects surrounding the appliance are inflammable (matchboarding, furniture, curtains, picture frames, sofas, etc...). The recommended minimum distances are illustrated in the drawing below on the right. It is advisable to interpose a floor protector plate between the heater and the floor if the latter is made of wood or other combustible material. Installation in the vicinity of heat-sensitive materials is only permitted if suitable insulating protection is placed between the object and the appliance (ref. Uni 10683).



CAUTION: DO NOT LEAN ON THE TOP CONTROL PANEL WHEN MOVING THE HEATER AS IT IS A PARTICULARLY DELICATE DEVICE AND CAN EASILY BREAK (DAMAGE CAUSED IN THIS WAY IS NOT COVERED BY WARRANTY).



4.1.1. ASSEMBLING THE KICKPLATES

After positioning the heater the next step is to mount the kickplates. Follow the mounting instructions illustrated in the diagram on the right:

LEGENDA

ISOLANTE TERMICO

T ispezionabile

200/450 mm se materiale combustibile

KEY

HEAT INSULATING MATERIAL

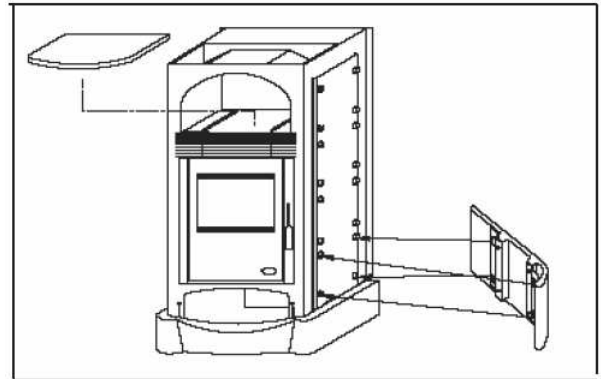
Inspectable Tee element

200/450 mm if the material is combustible

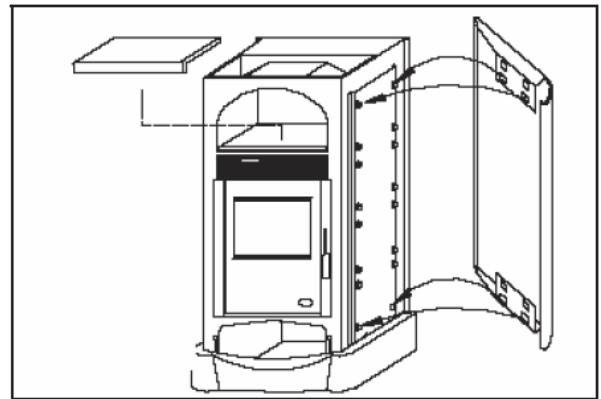
ASSEMBLING THE KICKPLATES

4.1.2. MOUNTING CERAMIC CASING

Once the kickplates have been mounted, the next step in the assembly procedure is to mount the 8 side ceramics (6 for 6000 model). These ceramics are a premium quality product, and even though they are produced industrially they still maintain the secrets of the handcraft tradition. Even if the moulds are developed using the most advanced CAD systems and the production and baking management systems are fully computerized, the artistic origins of our ceramics have in no way been affected negatively, on the contrary, they have been enhanced. In fact, it is the perfect balance between earth-water-fire (in proportions dosed out by the expert hand of those who have been passing on this art for centuries) that creates an object that is unique and different to every other piece produced. This, therefore, is why due to the high temperatures that at over 1000 degrees transform the finest powders into enamelled ceramics, it is possible to find slight differences in the shape and colours of the finished product . These differences, together with slight cracks in the moulds, do not affect the quality of the ceramics in any way whatsoever, but rather they exalt their uniqueness. The ceramic casing is packed separately to avoid accidental breakages. The heater must be assembled by qualified personnel. The ceramics are supplied with brackets for anchoring to the heater body. Remove elements A,B,C and D illustrated in chapter 4.1.4. Follow the instructions indicated in the diagram to mount the side ceramics and the food warmer (food warmer only in 8000 model). First of all, mount the food warmer ceramic (the one on the left), then mount the side ceramics beginning with the lowest one and proceeding upwards. Remount elements A, B, C, D.



ASSEMBLING THE CERAMICS



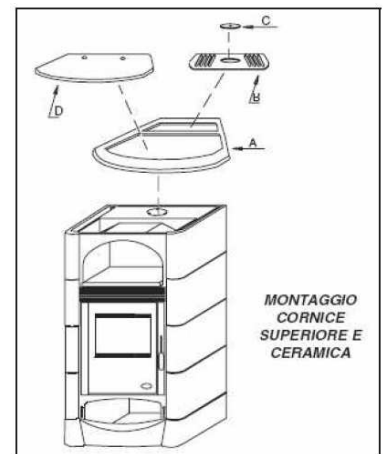
ASSEMBLING THE STEEL CASING

4.1.3. ASSEMBLING THE STEEL CASING

Remove elements A,B,C and D illustrated in chapter 4.1.4. Remove the protective film from the stainless steel casing. Make sure that the hooks are well-anchored to the heater body then attach the right and left panels to the hooks, followed by the food warmer. Replace elements A,B,C and D.

4.1.4. ASSEMBLING THE UPPER FRAME

The last step is to mount the top frame and top ceramic. As can be seen in the figure the mounting sequence is as follows:
-Mount the top frame to the heater body A (this element is not fitted with anchor brackets as it simply sits on and is supported by the stove body).
-Next mount element B (also without brackets).
-Then mount element C (cover)
-Lastly mount the top ceramic D and the 2 supplied knobs.



ASSEMBLING THE UPPER FRAME AND CERAMICS

5. DESCRIPTIONS OF CONTROLS

5.1. DESCRIPTION OF CONTROL PANEL AND HEATER REAR PANEL

5.1.1. DESCRIPTION OF THE CONTROL PANEL

There are two main control pushbuttons marked with the ventilation symbol (2) and the symbol of the flame (1). The flame pushbutton (1) sets the power of the heater with 5 levels available which are activated as the 5 bars light up in sequence (7). The off cycle is activated when all power bars are turned off. Key (2) controls the ventilation of the heater. It is activated when the smoke, detected by the smoke probe, reaches a temperature over 70°C. The ventilation can be set up to 6 speed levels (7): when the heater is on the ventilation cannot be switched off. All controls and indicators are presented here below:

(1) Appliance on/off and flame adjustment button When you press this button the appliance (7) switches to **START / WORK / OFF**.

Press repeatedly to activate up to 5 bars on the display (7)

(2) Ventilation setting button Press this button to set the desired level of ventilation: up to a maximum of 6 speeds are available, indicated by the lighting of the corresponding bars in the display (7). One bar is always lit on the display even in OFF status.

(3) (4) Auxiliary setting keys

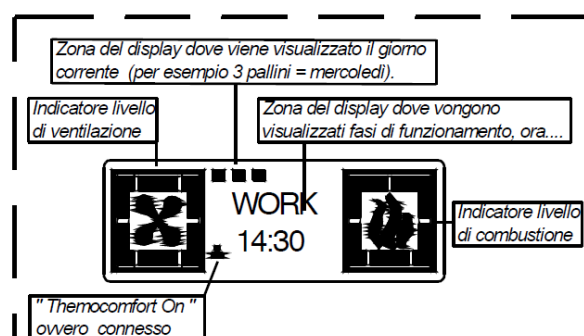
Keys (3) and (4) are operating keys necessary when on-off cycles are programmed, for operative levels, clock setting, etc..

(5) Programming Enable / Disable / Chrono Reset buttons

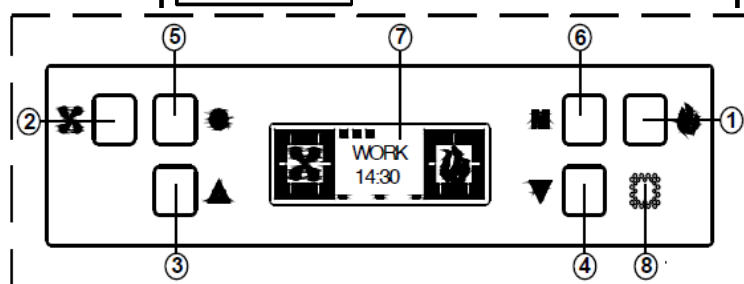
(6) "MENU" selection button To access the main menu press the button marked with 6. Press button 6 repeatedly to scroll the various windows: date, programming setting,...

(7) Display

(8) Infrared sensor for infrared control



LEGENDA	KEY
Zona del display dove viene visualizzato il giorno corrente (per esempio 3 pallini = mercoledì).	Display area in which the current day is displayed (for example, 3 dots = Wednesday)
Indicatore livello di ventilazione	Ventilation level indicator
Zona del display dove vengono visualizzati fasi di funzionamento, ora,...	Display area in which the operation steps are displayed, time,...
"Thermocomfort On" ovvero connesso	"Thermocomfort On" i.e. connected
Indicatore livello di combustione	Combustion level indicator



5.1.2. BACK PANEL OF HEATER

A description of the functions of the buttons and LEDs on the back panel of the heater:

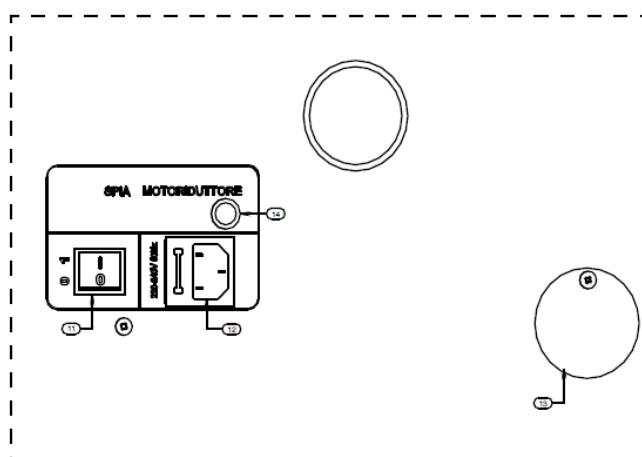
(11) Main switch 0-1

(12) Heater electrical power outlet 220-240V 50 Hz.

(13) Overtemperature thermostat button cap

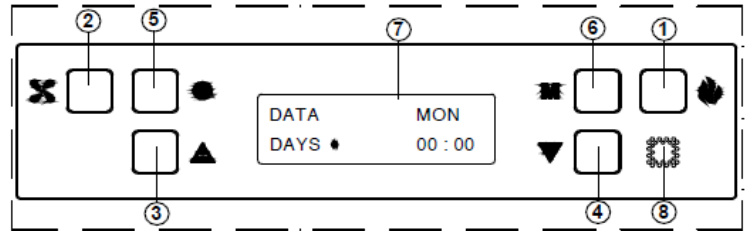
In the event of overtemperature this safety thermostat stops the loading of pellets. The button is located on the back of the heater. The heater must be allowed to cool down, inspected, the causes for the overheating eliminated then the button on the precut sheet pressed before it can be restarted.

(14) Feed motor test indicator light When the pellet screw feeder is set in motion the light must come on.



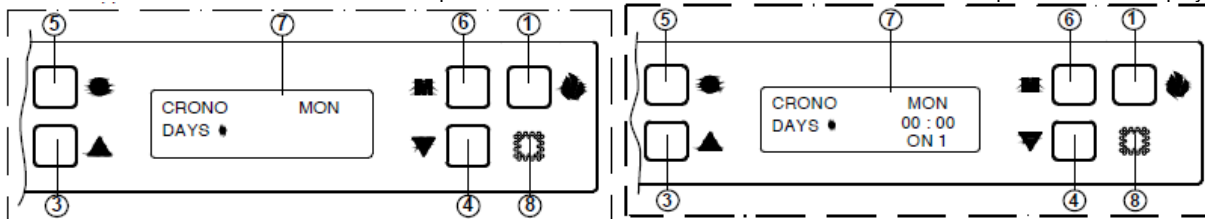
5.2. DAY AND TIME SETTING

The heater must be energised and the rear switch in position "1". The words **START** or **WORK** or **OFF** could be present on the display (7). To set the time and the day of the week carry out the procedures described below. Press button (6) once; the word **DATA** will appear on the display followed by the words illustrated in the figure on the right. To set the day press arrow button (4) and/or (3) repeatedly until the desired day appears: (MON and one dot for Monday -- TUE and two dots for Tuesday -- WED and 3 dots for Wednesday -- THU and 4 dots for Thursday -- FRI and 5 dots for Friday -- SAT and 6 dots for Saturday -- SUN and 7 dots for Sunday). Then confirm the day by pressing the key (1). The 2 digits representing the hours will start flashing: it is possible to select the present hour using the arrow keys (4) and/or (3), the selection must be confirmed by pressing key (1). The 2 digits indicating the minutes will start flashing: it is possible to select the present minutes using the arrow keys (4) and/or (3), the selection must be confirmed by pressing key (1). The setting of the day and of the hour is now completed. For the entire procedure to be confirmed and to move back to the heater status display, key (6) must be repeatedly pressed until the operating status is displayed: **START**, **WORK** or **OFF**.



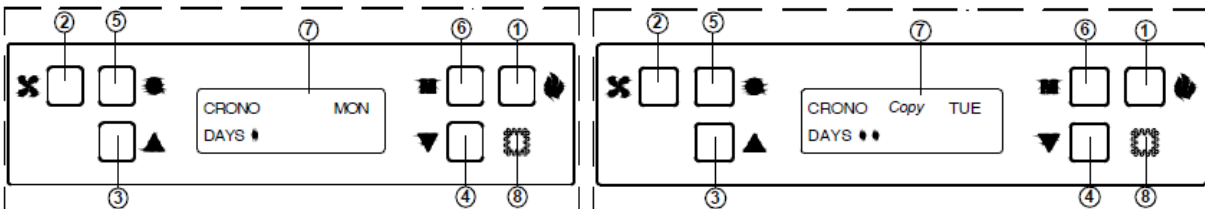
5.3. ON/OFF PROGRAMMING

The heater must be fed with the rear switch in position "1". The words **START** or **WORK** or **OFF** could be present on the display (7).



It is possible to carry out the weekly programming by setting up to 3 on/off cycles for each day from Monday to Sunday. To program the appliance press button (6) twice until the word **CRONO** appears followed by the words illustrated in the figure above on the left. Now you can begin programming the first day of the week - Monday - by pressing button (1). Press the arrow button (3) and/or (4) to choose another day to be programmed, to confirm the selection press button (1) again. The words **ON1** will appear on the display followed by 2 blinking digits indicating the hours (figure above right). Press button (3) and/or (4) to enter the hour of the first cycle start time. To confirm the selection press the button (1). The 2 digits indicating the minutes will start flashing. Press button (3) and/or (4) to enter the minutes of the first cycle start time. To confirm the selection press button (1). The first start up time for the selected day has now been set. Then the inscription **OFF1** will appear in the display and the 2 digits representing the hours will turn on. When the (3) and/or (4) button is pressed the hour of the first off-cycle is entered. To confirm the selection press the button (1). The 2 digits indicating the minutes will start flashing. By pressing the button (3) and/or (4) the minutes for the first off-cycle will be entered. To confirm the selection press the button (1). This concludes the setting of the first on-off cycle for the selected day. Later, it is possible to set the Monday's second on-off cycle (shown with the display of **ON2** and **OFF2**) and the third Monday's on-off cycle (shown with the display **ON3** and **OFF3**). Next the display appears as illustrated in the figure above on the left. Press the arrow button (3) and/or (4) to choose another day to be programmed, to confirm the selection press button (1) again.

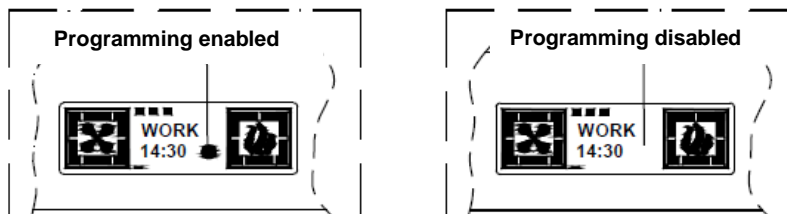
If you wish to copy all the on-off programs, for example the Monday settings, to the other days of the week, proceed as follows: press button (6) until the word "CRONO" appears followed by the screen illustrated in the figure below on the left. Next press button (2) and the display appears as illustrated in the figure below on the right: the program for Monday has been copied to Tuesday. Press button (2) again to copy the program to Wednesday, Thursday For the entire procedure to be confirmed and to move back to the heater status display, key (6) must be repeatedly pressed until the operating status is displayed: **START**, **WORK** or **OFF**. In the programming menu if you wish, for example, to edit the programming for Sunday press button (3) and/or (4) to go to Sunday and then press button (1). If the second on-off cycle is not required simply set the **ON2** time as 00:00 and the **OFF2** time as 00:00.



The programming procedure ends when you confirm the last data entered by pressing button (6) or when you exiting the programming menu. During the **START** or **WORK** or **OFF** phases press button (5) to enable / disable the programming (Enabled = **CR.ON** appears momentarily on the display together with the fixed presence of the chrono symbol on the bottom right of the display). Disabled: message **CR.OFF** temporarily displayed and, at the same time, the point on the right side at the bottom of the display is not present) : this function is useful if you wish to disable the established weekly program setting. Moreover, you can reset, or delete, all the programmings by holding down (in **OFF**, **START** or **WORK** phase) button (5) for approximately 8 seconds; the word "RESET CRONO" appears momentarily in order to indicate deletion of all the programmings previously set. When the programming is active the operating conditions at ignition (combustion level – ventilation speed) are the same as those set before the last shut down, but only if the shut down of the heater occurred through programming, that is, not manually. Manual shut down can only be carried out with the programming disabled. After shut down, by re-enabling the programming, at the next start up controlled by the programming the heater will be set at the 1st combustion power position and first fan speed.

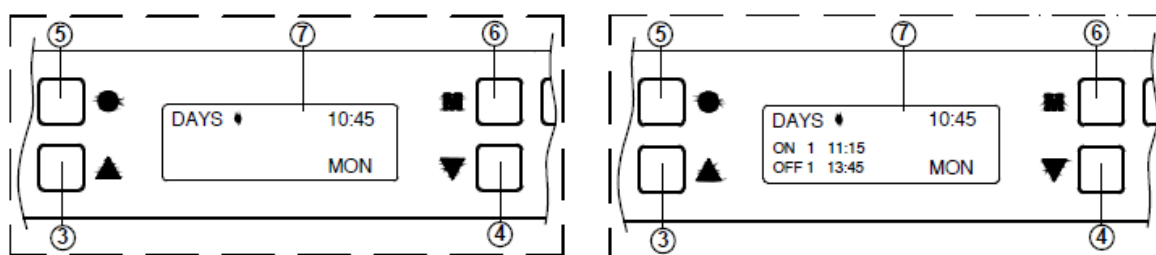


In the event of a programmed cycle on always ensure that the brazier is clean and seated correctly in its lodging: failure to clean the brazier can reduce and/or affect the life of the spark plug as it would be subjected to high temperatures due to poor cooling. When the programming is enabled (**CR.ON** appears momentarily with the together with the fixed presence of the chrono symbol on the bottom of the display) any additional chronothermostats (see para. 7.2) are disabled.



5.3.1. ON-OFF PROGRAMMING DISPLAY

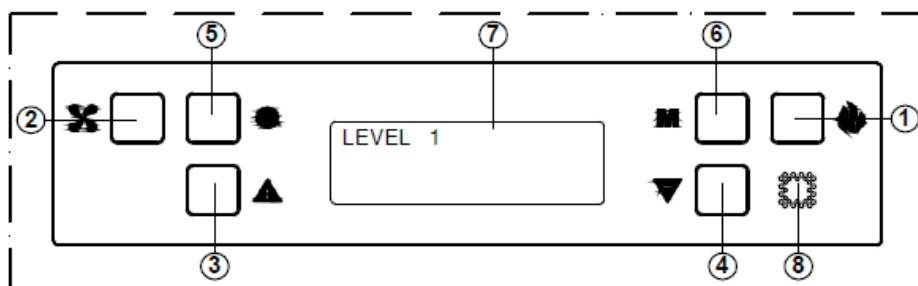
To view the programmings press button (6) 5 times until the words "Show Chrono" appear. After a few seconds the display appears as illustrated in the figure below on the left. Press button (3) repeatedly to scroll the programmings for all the days of the week (see figure below on the right) : press button (6) to exit.



Caution: the on-off programmings cannot be modified from the "SHOW CRONO" menu, this menu is used only for viewing the programs that have been entered and/or edited through the "CRONO" menu.

5.4. OPERATING LEVEL SETTING

The heater must be fed with the rear switch in position "1". The words START or WORK or OFF could be present on the display (7).



Your appliance is delivered with an excellent program installed that favours combustion efficiency; the program is called **LEVEL 1**. If you are using pellets with an out-of-standard incidence of residues after combustion in the brazier, alternative levels may be selected: **LEVEL 2** : this program increases the smoke suction unit speed acceleration. (program Level 2 increases air delivery to the burner which promotes the combustion of tightly compacted pellets: this program reduces combustion efficiency).

LEVEL 0 : when using too long pellets and/or flue outlets with very high vacuum, over 2 Pascal. When operating at LEVEL 0 the burner becomes dirty very easily.

The pellet consumption value is not affected by the operating level settings.

Select the required level by acting as follows:

Press button **(6)** three times until the word LEVEL appears on the display after which the level set on the heater will appear (**LEVEL 1** or **LEVEL 2** or **LEVEL 0**). In order to change the operating level as key **(3)** is kept pressed, press the key **(4)**. By holding down button (3) and pressing button (4) repeatedly the level changes in the following sequence: **LEVEL 2... ..LEVEL 0 ... LEVEL 1**.



If the change is made while the appliance is running the difference in the flame will be apparent. It is mandatory to pay particular care when selecting the most appropriate operating cycle for your installation. Once the operating cycle has been selected it is mandatory to thoroughly clean the brazier. To confirm and return to the heater status screen press button (6) repeatedly until the operating status appears.

6. USE OF THE HEATER



CAUTION: before each use make sure that the burner is clean and positioned correctly in its lodging, check that the ash pans are clean and shut tight and check that the firebox door handle is locked.

WARNING: the door must always remain shut tight when the heater is operating. It is strictly forbidden to open the door while the appliance is in operation. While the heater is in operation the smoke exhaust pipes and the heater can reach extremely high temperatures: do not touch them! It is strictly forbidden to use any type of fuel (liquid, solid...) to light the heater: the heater must light up automatically as designed and described in this installation, use and maintenance booklet. Do not place objects that are not heat resistant near the heater (see also para.4.1.)

6.1. SWITCHING ON THE HEATER

Before using the appliance check that all the movable parts are in place; also remove any labels and stickers from the glass to avoid that permanent traces remain on the surfaces.

Turn the switch installed on the back of the heater to position "1" (= ON). Press button **(1)** to start the start up phase. When key (1) is repeatedly pressed, the desired combustion level can be set and it will be active at the end of the ignition stage. The electrical heater will start to overheat and after a few minutes the first lot of pellets will start dropping into the brazier. This occurs because the screw feeder has to fill up because it is completely empty. The first time the heater is started up the start up phase will have to be carried out twice for this very reason.



CAUTION: The start up phase (the word **START** appearing on the display) continues until the word **START** remains lit; during this time the heater ignores all commands transmitted to it. Once this phase has ended the word **WORK** appears on the display. The fan will begin operating as soon as the combustion smoke reaches a suitable temperature. During the work stage it is then possible to adjust combustion and the ventilation: The combustion can be adjusted by 5 bars through button (1)), the ventilation setting can be set on 6 levels indicated by the sequential lighting up of the corresponding bars on the display (through button (2)).

To turn the heater on it is necessary for the inscription **OFF** to be present on the display: if it is not present, the key (6) must be repeatedly pressed until the inscription **OFF** appears.

6.2. HEATER COMBUSTION AND VENTILATION ADJUSTMENTS

The heating capacity is adjusted by pressing key (1) or on the remote control provided. Act on this command to adjust the quantity of pellets fed to the firebox. Maximum combustion power is achieved when all 5 leds are lit.



Caution: the room fan starts up as soon as the temperature of the combustion smoke reaches a suitable threshold. The fan setting is expressed visually by means of 6 different positions represented by 6 bars: press button (2) repeatedly to regulate it. A slight vibration of the heater is quite normal when it is running. One bar is always present on the display even in OFF status.

6.3. INFRARED REMOTE CONTROL

A practical infrared remote control is supplied with the heater: press the left button to adjust the ventilation level, press the right button to adjust the combustion level. If the heater is supplied with a white radio control (optional) the infrared control only works when the **MANUAL** setting is set on the white handheld radio control.

6.4. OPERATION OF THE WHITE HANDHELD RADIO CONTROL (OPTIONAL)

INTRODUCTION

The handheld remote control is the instrument that allows you to optimise both consumption and functions. Keep in mind that radio wave transmissions can be affected by the surrounding environment: the presence of thick walls can reduce the transmission that normally extends to 6-7 metres.



CAUTION: to guarantee optimal data transmission it is advisable to always place the radio control in its support in a vertical position. The following operations must be carried out the first time the appliance is started up:

- Turn the switch (11R) to ON (see drawing below)

- Connect the radio control by means of the battery charger supplied to the power line, (it must be recharged for at least 5 days); as the rechargeable batteries could be partially or completely flat. Leave the radio control connected at all times, by means of the battery charger, to the power supply line. The heater must be energised and the switch turned to position "1". CAUTION: the Thermocomfort function is disabled, that is, OFF. To enable it, in the START, WORK, OFF phases, repeatedly press button (6) on the local control panel until the word "THERMOCOMFORT" appears on the display (7) followed by the words "Thermocomfort Off". To activate the Thermocomfort function simply press the button (3): " Thermocomfort On". To return to the original operating function simply press the button (6) again.

At the end of the winter season it is mandatory to switch off the radio control completely, by means of the switch situated inside the battery compartment, in order to preserve the life of the batteries. The batteries are guaranteed for 6 months.

When the batteries are exhausted dispose of them safely. It is normal for the temperature sensor to detect temperatures which are slightly different to the real ones: variations caused by the environment in which the radio control is positioned.



6.4.1. Indicators of the handheld radio control

(1R) Flame adjustment button

(2R) Ventilation adjustment button

(3R) (4R) Auxiliary buttons

(5R) "Room temperature detected by the radio control's sensor" indicator

(6R) "Ventilation" indicator (7R) "Combustion" indicator

(8R) "Room temperature setting" indicator: this is the room temperature that you wish to reach by means of buttons 3R and 4R.

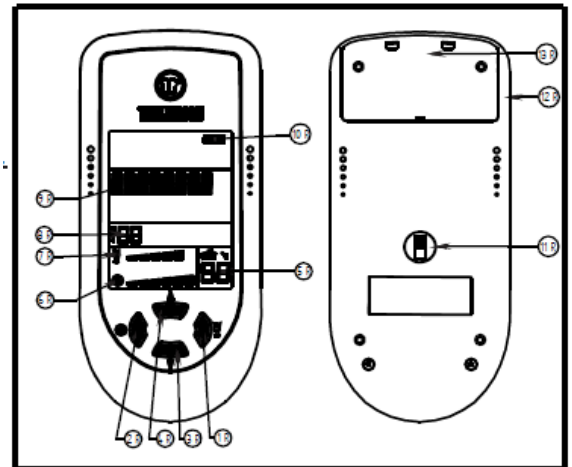
(9R) Area of the display where the operating program is displayed

(10R) Battery charge level

(11R) Switch 0-1 radio control power

(12R) Battery charger connection

(13R) Code selector and batteries compartment cover



The Thermocomfort radio control can be used with 4 different operating programs:

- **Manual (MANUAL** appears in area (9) of the display).

- **Automatic 5 (AUTO 5** appears in area (9) of the display).

- **Automatic 3 (AUTO 3** appears in area (9) of the display) .

- **Economy (ECONOMY** appears in area (9) of the display).

To change the operating program turn the switch (11R) to "1". Press and hold down button (3R) until the set program begins to blink on the display (9R). Now release button (3R) and press button (3R) and/or (4R) repeatedly until you select the desired operating program.

MANUAL program (the "Thermocomfort On" symbol is blinking on the display on the heater)

In the MANUAL program the room temperature thermostat is disabled. Press button (1R) and the flame symbol blinks. Press button (3R) to reduce the combustion level as signalled by the power bars lighting up in sequence, vice versa press button (4R) to increase the combustion level. The combustion level changes every time buttons (3R) and (4R) are pressed. Press button (2R) and the ventilation symbol blinks. Press button (3R) to decrease the combustion level, vice versa press button (4R) to increase the combustion level. The ventilation level changes every time buttons (3R) and (4R) are pressed. Caution: it is possible that, due to radio interference or sending commands too close together, the changes will not be implemented. With this program you can also use the infrared control supplied. It is normal that in the manual cycle the ventilation is often set at the maximum speed in order to cool the heater body more effectively.

AUTO 5 program (the "Thermocomfort On" symbol is steady on the display on the heater)

In program AUTO 5 the room temperature thermostat is enabled. The radio control adjusts the ventilation and the combustion automatically in relation to the target room temperature set in display area (8R). The desired room temperature appears in area (8R) . You can vary the desired room temperature by simply pressing button (3R) and/or (4R) (variation indicated in area (8R)). The remote control will set the maximum combustion and ventilation levels and modulate them both as the room temperature (5R) approaches the target temperature (8R). When the target temperature (8R) in the room (5R) is reached, the combustion level will stabilise on a bar as will the ventilation level. Caution: it is possible that, due to radio interference, the commands sent to the heater will not be implemented. When using this program the infrared remote control cannot be used. Caution: the power and the ventilation depend on the preset value, if the required temperature is too high or not reachable the heater could operate at maximum power for long periods of time.

AUTO 3 program (the "Thermocomfort On" symbol is steady on the display on the heater)

In program AUTO 3 the room temperature thermostat is enabled. The remote control adjusts the ventilation and combustion automatically in relation to the target room temperature set in display area (8R). The desired room temperature is displayed in area (8R). You can vary the desired room temperature by simply pressing button (3R) and/or (4R) (variation indicated in area (8R)). The remote control will set the combustion power at level 3 and the ventilation at level 4 and modulate them both as the room temperature (5R) approaches the target temperature (8R). When the target temperature (8R) in the room (5R) is reached, the combustion level will stabilise on a bar as will the ventilation level. Caution: it is possible that, due to radio interference, the commands sent to the heater will not be implemented. When using this program the infrared remote control cannot be used. Caution: the power and the ventilation depend on the preset value, if the required temperature is too high or not reachable the heater could operate at maximum power for long periods of time.

ECONOMY program (the "Thermocomfort On" symbol is steady on the display on the heater)

In the ECONOMY program the heater always operates at the minimum combustion level and the minimum ventilation level. When using this program the infrared remote control cannot be used.

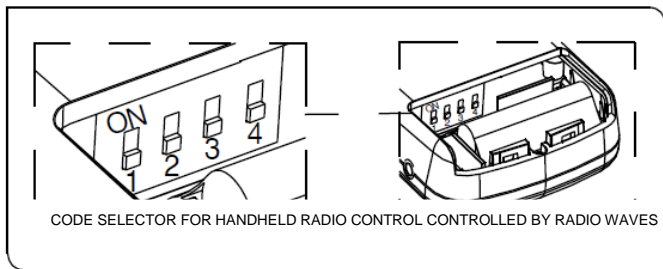
CAUTION : THE HEATER MUST ALWAYS BE STARTED UP AND SHUT DOWN FROM THE LOCAL CONTROL PANEL OR THROUGH PROGRAMMING.

6.4.2. TRANSMISSION CODES SETTINGS

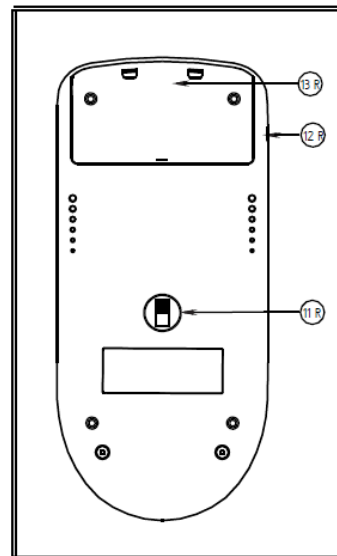
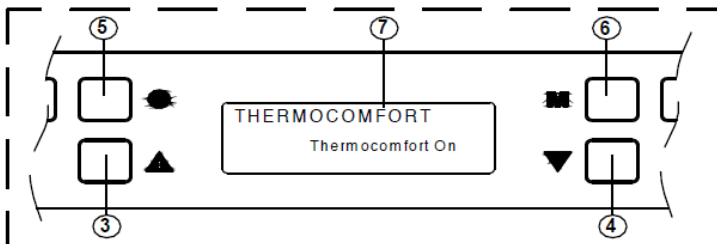
The heater must be fed with the rear switch in position "1". The words **START** or **WORK** or **OFF** could be present on the display (7).

If there are several heaters installed in rooms closeby to each other it may be necessary to set different transmission codes as this type of interference deactivates operation of the optional Thermocomfort radio control. To change the transmission codes proceed as follows:

- Disable the Thermocomfort function. To disable it, in the START, WORK, OFF phases, repeatedly press button (6) on the local control panel until the word "THERMOCOMFORT" appears on the display (7) followed by the words Thermocomfort On". To deactivate the Thermocomfort function simply press the button (3): "Thermocomfort Off". To return to the original operating function simply press the button (6) again.
 - Switch off the Thermocomfort radio control by pressing the button (11R) on the device.
 - To change the transmission codes, open the cover (13R) and act as indicated in the figure below.
 - Next switch on the radio control by pressing the button (11R).
 - Activate the Thermocomfort function. To enable it, in the START, WORK, OFF phases, repeatedly press button (6) on the local control panel until the word "THERMOCOMFORT" appears on the display (7) followed by the words Thermocomfort Off". To activate the Thermocomfort function simply press the button (3): "Thermocomfort On". To return to the original operating function simply press the button (6) again.
- The radio control may still not function even after having changed the transmission codes. If this occurs change the codes once again using the procedure described above.



CODE SELECTOR FOR HANDHELD RADIO CONTROL CONTROLLED BY RADIO WAVES





6.4.3. CARE AND MAINTENANCE OF THE RADIO CONTROL

The radio control has been designed and produced to the strictest standards and must be handled with great care. If you observe the guidelines set out below, the radio control will provide a long trouble-free performance:

- Protect the radio control against humidity! Precipitation, humidity and liquids corrode the electronic circuits. If the radio control is wet, disconnect it immediately from a power source, remove the battery, open it and allow it to dry at room temperature.
- Do not use or store the radio control in dusty or dirty environments. The dust/dirt could damage the movable parts of the radio control.
- Do not store the radio control in very hot environments. High temperatures could shorten the life of the electronic devices, damage the batteries and deform or even melt plastic parts. Do not store the radio control in cold environments. When it heats up (when it returns to normal operating temperature), humidity could form inside it and damage the electronic circuits.
- Do not drop the radio control, do not hit or bump it and do not shake it. Actions such as these could damage the internal circuits of the device.
- Do not use corrosive chemical substances, caustic solutions or detergents to clean the radio control. All the above guidelines apply equally to the radio control, the battery, the battery charger, and all the accessories.

The parts subject to wear (such as batteries, keypads, lodging compartments, small compartment parts) are guaranteed for 6 months from the purchase date. The guarantee does not apply if the defect is caused by non-conforming use and/or if the instructions and guidelines described above are not observed to the letter. Non-conformities must be reported within two months of having identified them. Devices or parts returned for replacement become the property of Thermorossi. The presence of irregular black-blue lines on the display (also present when de-energised and battery flat or missing) indicate that the glass screen of the display is damaged following a fall or impact: in this case the breakage is not covered by the guarantee.

7. ADDITIONAL ROOM TEMPERATURE THERMOSTAT (not supplied) ADDITIONAL CHRONOTHERMOSTAT (not supplied)

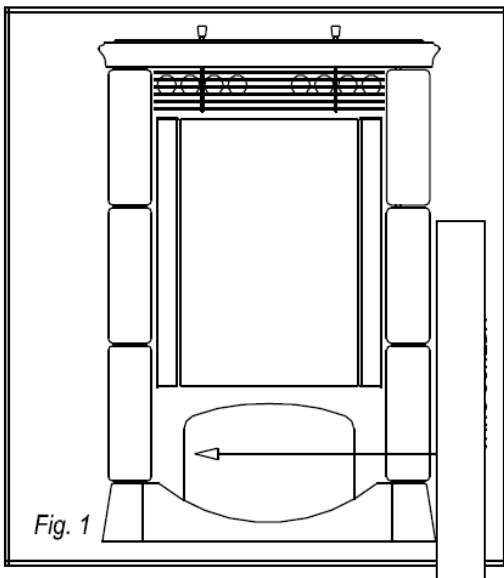


Fig. 1

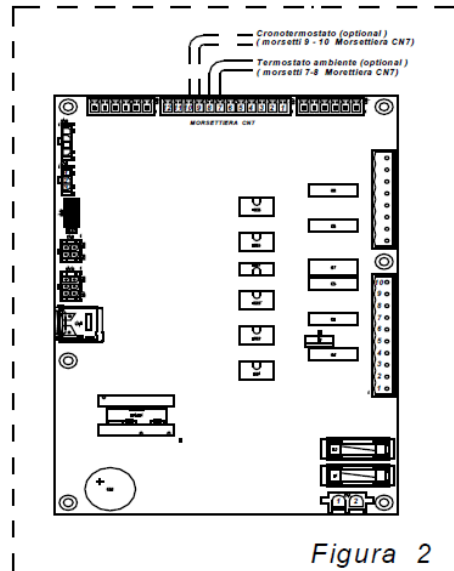


Figura 2

LEGENDA FIGURA 2	KEY FIGURE 2
Cronotermostato (optional) (Morsetti 9 - 10 Morsettiera CN7)	Chronothermostat (optional) (Terminals 9 / 10 Terminal block CN7)
Termostato ambiente optional (Morsetti 7 - 8 Morsettiera CN7)	Room thermostat optional (Terminals 7 / 8 Terminal block CN7)

The control panel ensures that your heater is provided with all the required programming and temperature adjustment functions: There are 4 contacts in the electronic board (see Figures 1 and 2) : 2 dedicated to the additional room temperature thermostat and two dedicated to the additional chronothermostat They refer to two operating modes:

- With the room temperature thermostat.
- With the chronothermostat or modem.

Simply connect the additional room temperature thermostat to the contacts on board 7-8 of the terminal block CN7 "Room temperature thermostat ", or connect the additional chronothermostat to contacts 9,10 of the terminal block CN7 " Chronothermostat ".



Contacts are defined as "CLEAN" contacts and they must never be fed with 220 V. If the board is energised with 220V or voltages exceeding 6 V the control board will be permanently damaged and will not be covered by the GUARANTEE.

7.1. OPERATING WITH THE ADDITIONAL ROOM TEMPERATURE THERMOSTAT (NOT SUPPLIED)

An additional room temperature thermostat can be installed by connecting it to the cable gland marked "THERMOSTAT" at the back of the heater. The operating principle is as follows:

-When the room temperature reaches the set temperature (only during the RUNNING phase) the thermostat closes the contact and the heater shifts to the minimum room fan speed and minimum combustion power. This condition is indicated on the display by the blinking ventilation bar and combustion bar: the heater ignores all commands transmitted to it. By using the room temperature thermostat the heater does not shut down, therefore electrical energy consumption is kept to the minimum and the heater has a longer life. When the room temperature drops the thermostat opens the contact and the heater returns to its original position in terms of thermal power and ventilation. In this position the heater can be started up automatically both via the programming and via the chronothermostat-modem rear contact.



CAUTION: N.C. (normally closed) contacts must be used for the connection to the additional room temperature thermostat. The thermostat must have a thermal hysteresis that is not less than 2°C.

7.2. OPERATING WITH THE ADDITIONAL CHRONOTHERMOSTAT (NOT SUPPLIED)

As an alternative to the room temperature thermostat, a chonothermostat can be installed by connecting it to the cable gland marked "CHRONOTHERMOSTAT" fitted to the back of the heater. Using this output when the chronothermostat contact closes the START cycle begins, whereas when the contact opens the OFF cycle begins. The operating level at start up (combustion power - fan speed) is the same as the level used before the last time the heater shut down. **CAUTION: when using the chronothermostat program up to a maximum of 3 on-off cycles without setting the desired target temperature or set it at the highest possible value for the chronothermostat.** At the end of the preset time the contact will open and perform the shut down process. Similarly at the preset startup time the contact will close and initiate the START cycle. The chronothermostat can be used to program start up and shut down times and dates for the heater. It is therefore possible to program a momentary shut down of the heater according to the preset time. **Do not shut down the heater according to the room temperature.** It is mandatory to deactivate the Chrono symbol on the display (see para. 5.3) if an external chronothermostat is used.

CAUTION: The manufacturer denies all responsibility for the life of the electrical heater if subjected to excessive start ups. It is recommended not to set the desired room temperature or to set it at the highest possible value for the chronothermostat in order to avert this danger.



CAUTION: Use N.O. (normally open) contacts for the connection to the chronothermostat.

CAUTION: In the event of connections to the chronothermostat Thermorossi shall not be held responsible for the appliance not starting up, smoke leaks, breakage of the lighting component. In the event of a programmed cycle on always ensure that the brazier is clean and seated correctly in its lodging. A maximum of 3 on-off cycles per day are permitted. The chronothermostat must have a thermal hysteresis that is not less than 2°C.

8. CLEANING AND MAINTENANCE

8.1. FOREWORD

Before commencing any operation disconnect the appliance from the electric power outlet.

Your pellet heater does not require any special maintenance; simply adhere to the simple and basic but regular controls and general cleaning. This will guarantee consistently smooth operation and optimal efficiency of the appliance. In the event of prolonged non-use of the product it is mandatory to check for obstructions in the smoke channel and flue outlet before putting it back into use. It is necessary to accurately follow the directions given below: otherwise severe damages may occur for the product, the installation, objects and the people who use the generator. Caution: the heater must not come into contact with water and do not touch the electrical parts with wet hands. Never vacuum hot ash: this could damage the vacuum device. All the cleaning operations described in this manual must be carried out when the heater is cold.

8.2. CLEANING AND MAINTAINING THE HEATER

EVERY DAY clean out all the combustion residues from the brazier **A** and correctly remount the brazier **A** and catalyst **A1** (figure 1).

Caution: make sure, before every start up, that the brazier is clean and if necessary also thoroughly clean the burner with a suction unit. To guarantee correct operation of the appliance, carefully clean the area around the spark plug: this will guarantee the correct operation of the appliance.

EVERY 3 DAYS lift and drop the tube scraper rods several times (figure 2).

EVERY 3 DAYS clean the ash pan **B** and the area under the brazier (lift the brazier to access this area) then make sure the brazier **A** and catalyst **A1** are remounted correctly.

EVERY 5 DAYS clean the room air grill **G** (see fig.1).

EVERY 2 WEEKS clean the smoke exhaust "T" at the heater inlet.

EVERY MONTH inspect and clean the opening identified as **C** by undoing the 3 fixing screws. (figure 1).

EVERY MONTH check that the smoke exhaust is free from fly ash deposits, particularly in the initial sections.

EVERY MONTH vacuum the ash deposited on the bottom of the tank (when the tank is empty).

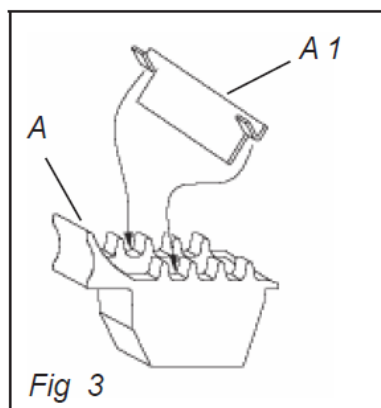
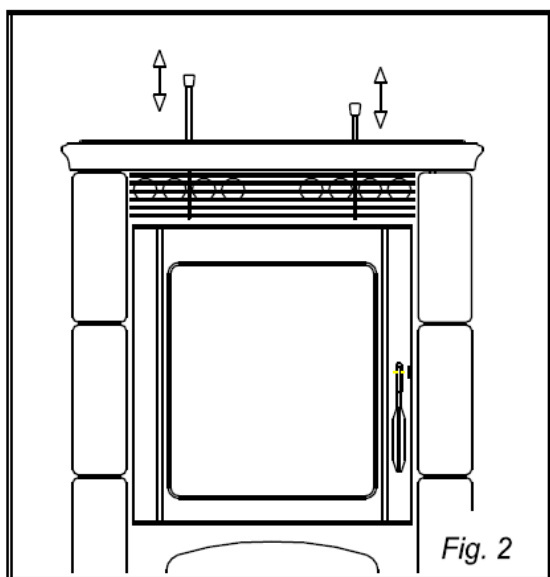
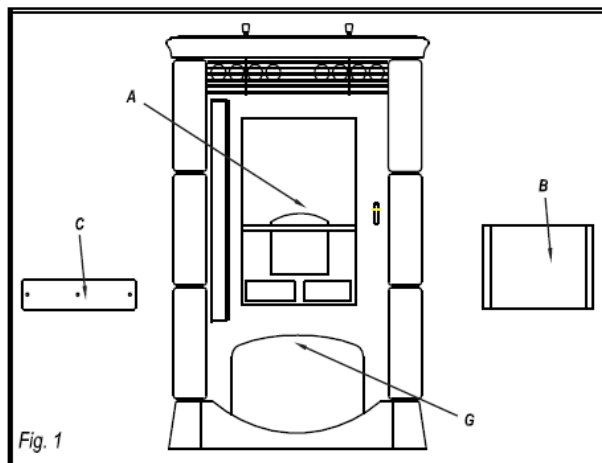
TWICE A YEAR clean the flue outlet.

AT THE END OF THE WINTER SEASON OR WHENEVER NECESSARY we recommend thoroughly cleaning the heater firebox, using brushes and vacuum cleaner.



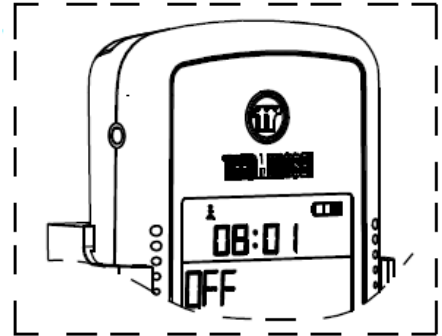
A vacuum device simplifies the cleaning procedure. Use a damp cloth or a scrunched up piece of newspaper, dampened and rolled in the ash, to wipe the glass until it is perfectly clean. Do not clean the glass while the heater is operating. The glass retains an acceptable degree of cleanliness if the catalyst is mounted correctly in the brazier as illustrated in figure 3. Remember that the heater must be completely cooled down before the side panel can be cleaned with a soft cloth and water. Caution: a daily deposit of soot and combustion residues on the glass is quite normal. It is normal for the ash to fall to the floor when the door is opened.

CAUTION: after cleaning it is mandatory to carefully check that the combustion chamber door and the ash pan " V1" are shut tight.
CAUTION: the smoke channel and flue outlet generator must be cleaned in accordance with the specifications described above and use of inflammable products is strictly forbidden. Total or partial lack of maintenance will affect the heater's performance. Any problems resulting from total or partial lack of maintenance will immediately void the warranty.



8.3. CHARGING THE BATTERY OF THE HANDHELD RADIO CONTROL (optional)

As soon as the battery symbol on the display begins to blink, as shown in the drawing, the battery needs to be charged. While it is being charged and consequently while it is connected to the electrical power mains the battery symbol blinks continuously even when the batteries of the radio control are completely charged. This operation is necessary as otherwise the communication between the heater and the radio control could be cut off. The batteries of the handheld radio control require regular recharging in relation to the amount of use made of it. The duration of the battery charge is variable and depends on how often the remote control is used. The batteries must be recharged using the supplied battery charger : INPUT 100V-240V 50/60 Hz 0,3/A OUTPUT 5,5V 750 ma



The battery charger must be connected to a 220-240V 50Hz power mains. To obtain a total recharge of the batteries they must be charged for at least 5 days: lower charge times could reduce the duration and life of the batteries. Leave the radio control connected at all times, by means of the battery charger, to the power supply line. It is completely normal during the battery recharge process for symbols and/or lines to appear haphazardly on the display. The optimal battery autonomy is achieved after several battery charge / discharge cycles. If the radio control is not used for more than one week it is mandatory to switch it off completely in order to preserve the life of the batteries. Turn the switch located in the battery compartment to 1, that is, OFF. The batteries are guaranteed for 6 months.



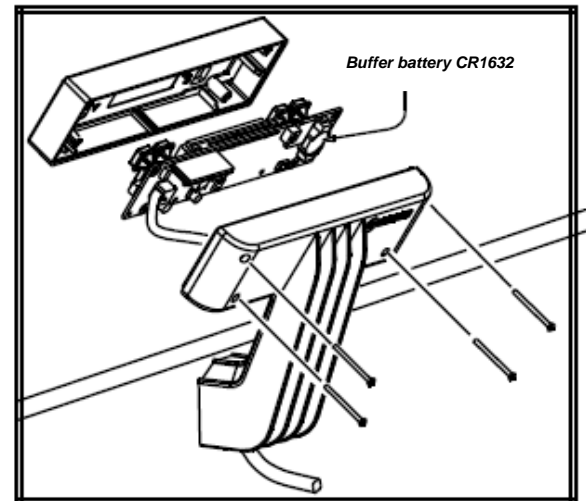
Caution: Use only the battery charger provided by Thermorossi. The use of any other type of battery charger will invalidate the product warranty. Flat batteries must be removed and safely disposed of. Use rechargeable AAA 1.2 V min. 750 mAh batteries. Use only rechargeable batteries but do not mix different brands and types.

8.4. BATTERY REPLACEMENT FOR INFRARED REMOTE CONTROL

When the infrared remote control does not send out the transmission signal (led on), the battery must be replaced. Use a Phillips screwdriver of proper size, to separate the half shells and replace the battery. The dead battery must be disposed of safely.

8.5. REPLACING THE BUFFER BATTERY OF THE CONTROL PANEL

Inside the control panel there is a buffer battery type CR 16 32. When the time and programming are not being memorised (this malfunction is not considered a defect as it is the result of normal wear/consumption) replace the battery by removing the 4 screws at the back of the control panel. The dead battery must be disposed of safely.



9. SMOKE DISCHARGE TUBE

• Due to the frequent accidents caused by poor functioning of flue outlets installed in private dwellings, we have prepared the following paragraph to assist the installer in his inspection of the parts concerned with eliminating the gases produced by combustion. The smoke exhaust must be installed in compliance with UNI7129/92, UNI 10683 and EN14785 and must respect the following reference values: it must be able to withstand the action of a fire (in case of fire call the fire brigade immediately). It is necessary to accurately follow the directions given below: otherwise severe damages may occur for the product, the installation, objects and the people who use the generator.

9.1. VENTILATION OF THE ROOMS

- The room where the appliance is installed must have a good air flow to guarantee air for the heater for the combustion process and for ventilation of the room. The natural air flow occurs directly through permanent apertures to the outside made in the walls of the room, or by means of single or multiple ventilation ducting. The ventilating air must come from outside and if possible, away from sources of pollution. Indirect ventilation is also allowed by taking in air from rooms adjacent the one where the heater is installed taking into account all the warnings and limitations specified below.
- The apertures in the walls must comply with the following requirements:
 - have an unobstructed section of at least 6cm² for each Kw of installed thermal power, with a minimum limit of 100cm²;
 - be made in such a way that the vent openings, both on the inside and outside of the wall, cannot be obstructed;
 - be protected with grills or similar systems in order not to reduce the section described above;
 - be situated at floor-level.
- The air flow can also be obtained from an adjacent room as long as:
 - the adjacent room is equipped with direct ventilation in compliance with the points described above;
 - in the room to be ventilated the installed appliances are only connected to one flue outlet;
 - the adjacent room is not used as a bedroom or a common area of the building;
 - the adjacent room is not a room with a fire hazard, such as storage sheds, garages, combustible material store rooms, etc...;
 - the adjacent room does not become a vacuum compared to the room to be ventilated due to an opposite draught effect;
 - the air flow from the adjacent room to the room to be ventilated is unobstructed through the permanent apertures having an overall net section of no less than that indicated above. These apertures can be obtained by enlarging the space between the door and the floor.



This chapter is not intended to replace UNI 7129/92, UNI 10683 and EN 14785. The qualified installer must in any case be fully aware of this standard and its amending versions.

9.1.1. COMBUSTION AIR INTAKE

The air required for combustion can be taken directly from the room in which the heater is installed. The room where it is installed must however be suitably ventilated.

CAUTION: The presence of extraction fans or similar appliances, if operating in the same room or space in which the product is installed, could cause problems for the correct operation of the heater.

CAUTION: do not obstruct the vents or the air inlets on the heater.

9.2. SMOKE OUTLET

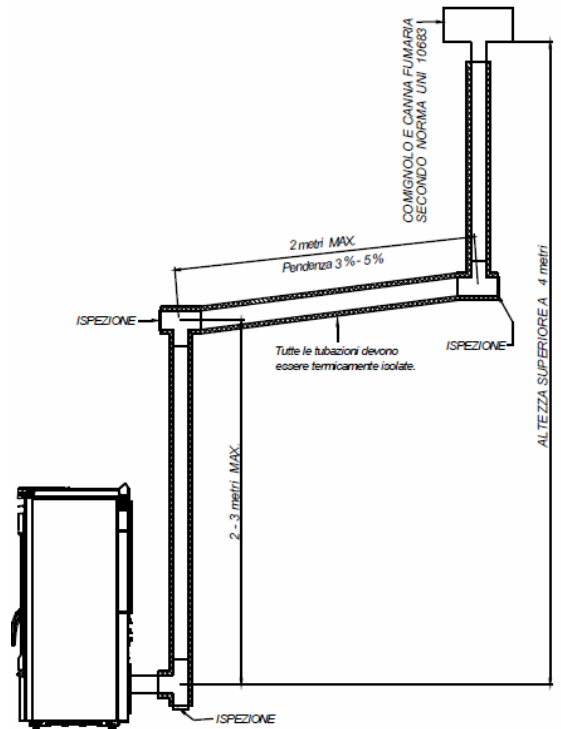
The user must possess a certificate of conformance for the flue outlet (Ministerial Decree 22 January 2008, no. 37).

The flue outlet must be built in compliance with UNI 10683.

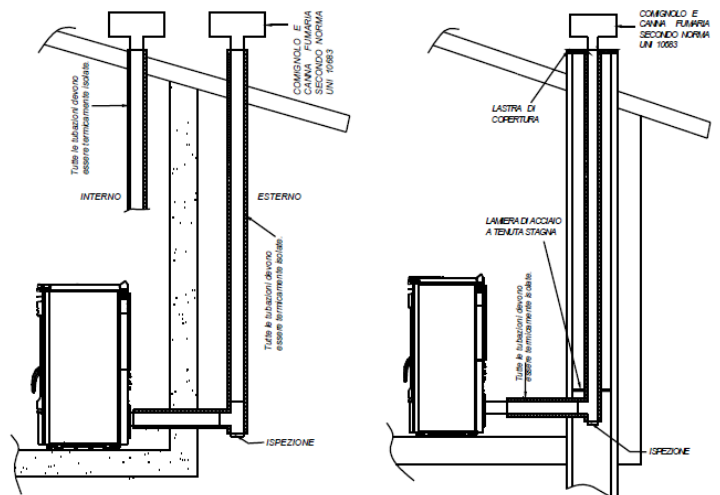
• The smoke exhaust shown in the following figures is the best solution to ensure the discharge of smoke even when the fan is not operational, such as for example if there is an electrical power failure. A minimum drop of 1.5 metres is required between the T terminal on the outside of the building and the outlet at the back of the appliance, to ensure that residual combustion smoke is discharged in the case described above (Otherwise the residues would stagnate inside the firebox and be discharged out to the free atmosphere).

The figures below illustrate the best solution for discharging the smoke out through the roof or into the flue outlet. If you opt to discharge the smoke out through the roof it is important to operate as shown in the figure below on the left. Insert a union tee with inspection cap, connecting brackets suitable for the height of the flue outlet, flashing that crosses the roof and chimney cap to protect against bad weather conditions. If you decide to use a classic masonry outlet see the diagram below on the right. A union tee with inspection cap and suitable supporting brackets are required. If the flue outlet is too big we recommend inserting a stainless steel or porcelain-coated steel tube with a diameter not exceeding 150mm. Seal area where the inlet and outlet part of the smoke exhaust meets the wall. **It is strictly forbidden to apply mesh to the end of the outlet tube, as it could cause the heater to malfunction.** If the smoke tube is installed in a fixed position it is advisable to provide inspection openings for clean-out purposes especially in the horizontal sections. See the diagram. These openings are essential to allow for the removal of ash and unburned products which tend to accumulate along the discharge path. **The heater operates with the pressure in the combustion chamber lower than atmospheric pressure, whereas the discharge of smoke to the chimney is slightly pressured, consequently the discharge system must be hermetically sealed.** The smoke discharge tube must be made from suitable materials such as

for example: porcelain-coated steel tubes, and the various fittings sealed with red silicone (resistant to 350°C). The outer casing of the tube must be made with insulating material (mineral wool, ceramic fiber) or use pre-insulated tubing.



LEGENDA	KEY
COMIGNOLO E CANNA FUMARIA SECONDO NORMA UNI 10683	CHIMNEY CAP AND FLUE OUTLET ACCORDING TO UNI 10683 STANDARD
2 metri MAX.	2 metres MAX.
Pendenza 3% - 5%	Slope 3-5%
ISPEZIONE	INSPECTION
Tutte le tubazioni devono essere termicamente isolate	All the pipes must be thermally insulated
ALTEZZA SUPERIORE A 4metri	HEIGHT MORE THAN 4m
2-3 metri MAX	2-3 metres MAX.
INTERNO - ESTERNO	INTERNAL / EXTERNAL
LAMIERA DI ACCIAIO A TENUTA STAGNA	WATERTIGHT STEEL SHEET
LASTRA DI COPERTURA	COVER SLAB





It must be possible to inspect and remove all the smoke tube sections for clean-out purposes.

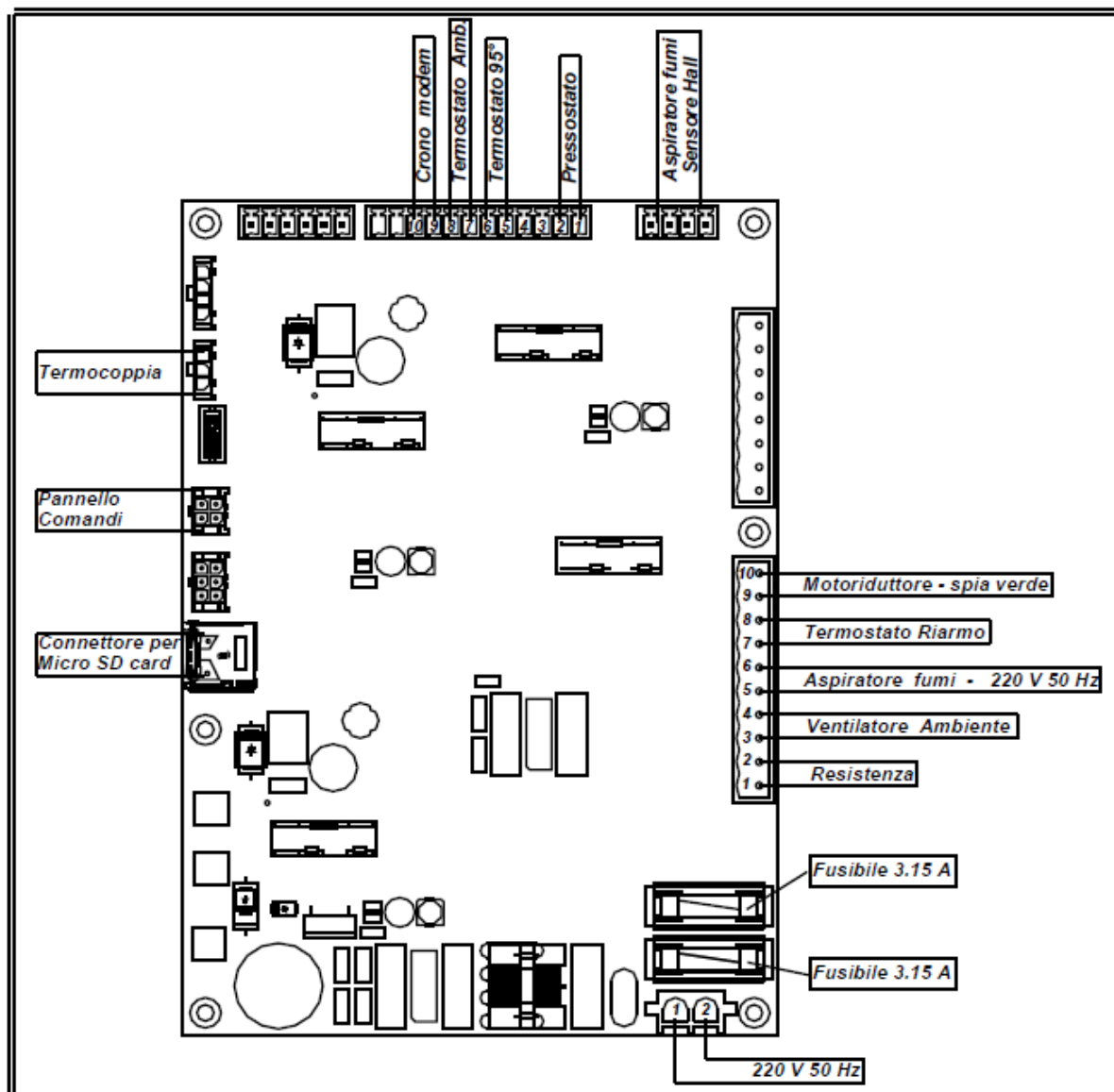
CAUTION: if the flue outlet is not sufficiently insulated and /or if it is too long it could generate condensation. It is advisable to provide a condensation drain near the smoke outlet of the appliance. The appliance must always and only be installed in a single flue outlet system dedicated exclusively to the appliance. If the generator is connected to a non-compliant flue system the appliance could rapidly deteriorate due to an abnormal, continuous overheating: in this case the damaged parts will not be covered by warranty. **IF THE CHIMNEY CATCHES FIRE DO NOT HESITATE TO CALL THE FIRE BRIGADE IMMEDIATELY.**

10. ALARMS

The heater is programmed to communicate 7 fundamental alarms. The alarms are listed below:

- AL PE** : is communicated when the temperature during the **WORK** mode drops below the fixed threshold: this indicates that the heater is switching off due to lack of pellets. To reset the alarm simply press the flame button (1): The heater will begin a new start up phase. Before repeating the START phase the pellet hopper must be filled up.
- AL AC** : appears once the **START** phase has finished if the smoke does not reach a certain temperature. To reset the alarm simply press the flame button (1): the heater will begin a new start up phase. It is mandatory to empty and clean the brazier before repeating the START phase: pellets emptied from the brazier must not be fed into the tank.
- AL OP** : this occurs when the smoke outlet is partially blocked. To reset the alarm the power to the heater must be switched off then on by turning the switch at the back of the heater to 0-1.
- AL T max** : appears when the temperature of the heater body exceeds 125°C. Once the causes for the overtemperature have been identified and remedied unscrew the plastic cover of the thermostat located at the back of the heater and press the button (the heater temperature must be below 117 °C). To reset the alarm the power to the heater must be switched off then on by turning the switch at the back of the heater to 0-1.
- AL SMOKE TEMP SENSOR** : appears when the smoke thermocouple is damaged.
- AL SMOKE FAN** : activates when the smoke suction unit revolution sensor detects a very slow rotation speed: clean out the Tee connecting the flue outlet to the smoke exhaust pipe.
- AL SMOKE RPM SENSOR** : trips when the smoke suction unit revolution sensor fails to detect any rotation. The smoke suction unit is not working.

11.ELECTRICAL WIRING



LEGENDA

Termocoppia
 Pannello Comandi
 Connettore per Micro SD card
 Crono modem
 Termostato Amb.
 Termostato 95°
 Pressostato
 Aspiratore fumi sensore Hall
 Motoriduttore - spia verde
 Termostato riarmo
 Aspiratore fumi 220V 50 Hz
 Ventilatore Ambiente
 Resistenza
 Fusibile 3.15 A

KEY

Thermocouple
 Control panel
 Connector for Micro SD card
 Chrono modem
 Room thermostat
 Thermostat 95°C
 Pressure switch
 Hall sensor for smoke suction unit
 Ratio motor - green LED
 Reset thermostat
 Smoke suction unit 220V 50 Hz
 Room fan
 Heater
 Fuse 3.15 A

12. INFORMATION FOR THE SKILLED TECHNICIAN

12.1. MAIN COMPONENTS AND THEIR OPERATION

SMOKE PRESSURE SWITCH

This is a safety switch that stops the screw feeder motor whenever necessary. The main cause for the pressure switch tripping is a blocked flue outlet or smoke exhaust pipe. Note that it is strictly forbidden to apply any kind of mesh screen to the end of the pipe. When the holes of the mesh clog up they create a plug that trips the pressure switch which stops the pellet feeder.

SCREW FEEDER MOTOR

This motor is powered at regular on/off intervals controlled by a microprocessor. The operation of this motor is affected when:

- The motor's thermal cutout trips.
- Pellets finished.
- The manual reset thermostat trips at 125°C
- The pressure switch trips due to blocked smoke exhaust.
- The heater is switched off intentionally.

ROOM FAN

Starts automatically as soon as the smoke thermocouple detects a suitable smoke temperature. Similarly it stops when the fuel is finished or during a voluntary shut down when the smoke thermocouple detects a suitable temperature for activating.

SMOKE SUCTION UNIT

This is activated when the start up signal is given. In the first two minutes it «washes» the smoke discharge tube, that is, it functions at maximum working rate. Once this time has elapsed it self-adjusts to the optimal speed. The exhaust continues to operate for approximately one hour from the time the heater is switched off to allow for the evacuation of all the smoke and for safety purposes. It comes to a stop 30' after the smoke thermocouple detects a suitable drop in the temperature of the smoke.

THERMOCOUPLE

Its function is to verify the temperature of the combustion smoke: when the smoke temperature exceeds a certain value it indicates that the heater is on. Similarly, when the temperature drops below a certain limit it causes the smoke exhaust to stop.

TANK SAFETY THERMOSTAT

This thermostat starts operating as soon as the temperature in or near the pellet tank approaches 85°C and sends an immediate signal to the room fan to operate at maximum power.

125°C MANUAL RESET THERMOSTAT

When the temperature exceeds 125°C the pellet feed screw shuts down. A red light at the back of the appliance remains lit. Once the causes for the overtemperature have been identified and remedied the heater can be reactivated by unscrewing the plastic cover of the thermostat located at the back of the heater and pressing the button (the heater temperature must be below 117 °C).

GLOW PLUG

It is activated in the START phase. Heats the air to 800°C, which assist the first combustion of the pellets present in the brazier.

12.2. USEFUL ADVICE FOR INSTALLATION AND OPERATION

- 1 The appliance must never be deliberately disconnected from the electric power supply. Whenever the appliance is deliberately disconnected from the electric power supply smoke could be emitted into the room and be a hazard. Similarly never switch off the heater by suddenly cutting off the electric power supply.
- 2 Do not install the appliance with horizontal wall outlets only: evacuation of the combustion products must be guaranteed in a natural manner.
- 3 Do not install the appliance with horizontal sections only: the wall could be exposed to high wind conditions and the heater could shut down due to back draft.
- 4 Operate the appliance at maximum for 10 hours for a complete drying and baking of the silicates contained in the enamel which covers the body of the appliance.
- 5 Do not install a grill or outlet terminal which could restrain the flow of the combustion gases: this could affect the dynamic gas to the point where it would not allow the pellets to burn correctly.
- 6 Read this instruction booklet.
- 7 Keep the appliance clean and check the burner as described in this manual.
- 8 Clean the smoke outlet regularly.
- 9 Use top quality pellets: by saving 20 cents a bag you heat up to 50% less.
- 10 Maximum useable lengths of smoke exhaust tubes: Painted aluminized steel tubes (1.5 mm minimum thickness), Aisi 316 stainless steel tubes or 0.5 mm enamelled tubes may be used.

Minimum vertical length	4 m
Maximum vertical length	8 m
Length with min. slope 5%	0.5 m
Maximum number of elbows at least 0.5 m apart	2

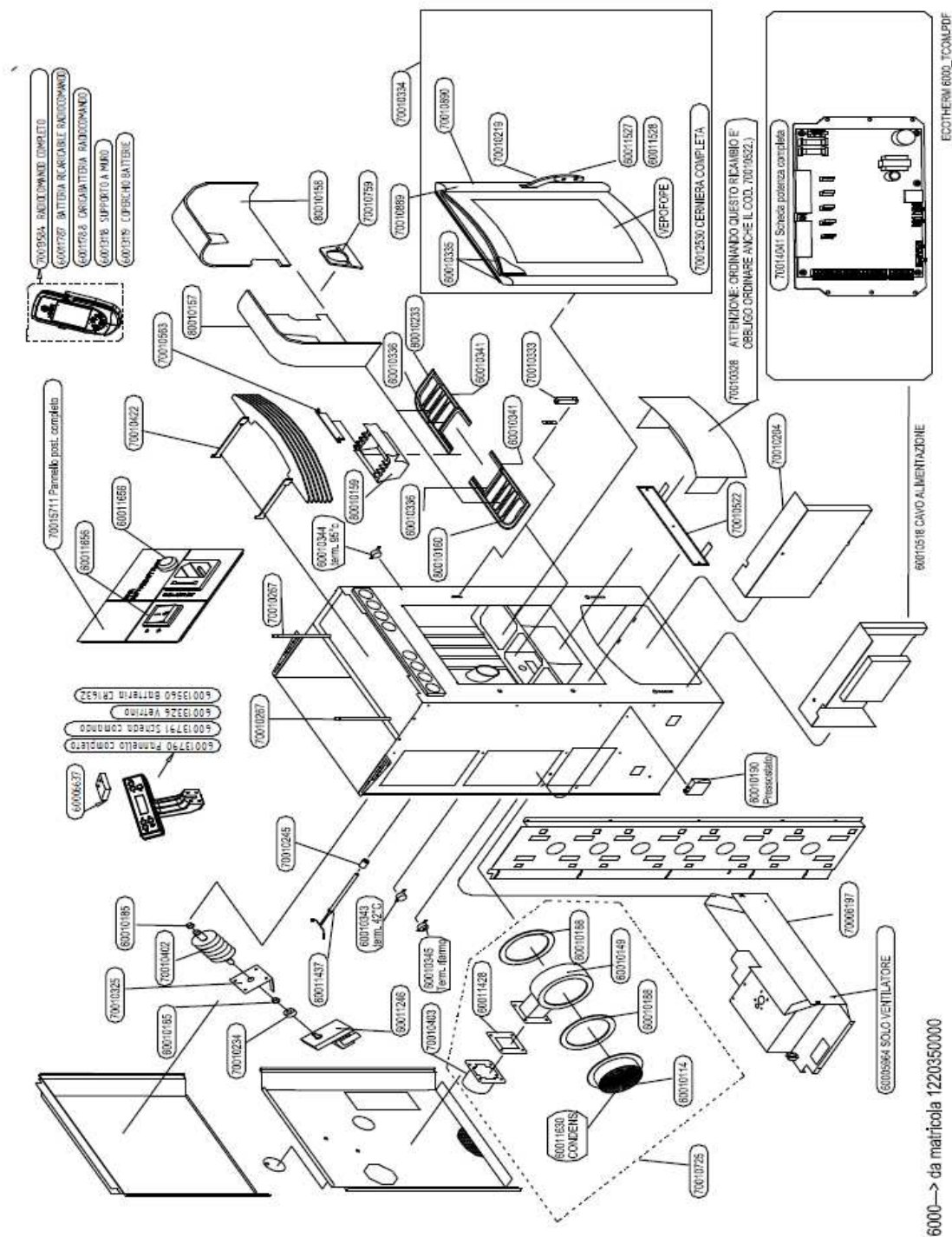
12.3. TROUBLESHOOTING CAUSE-SOLUTION

PROBLEM	CAUSE	SOLUTION
PELLETS DO NOT DROP INTO THE BURNER	PELLET TANK IS EMPTY (DISPLAY SHOWS THE INSCRIPTION AL PE)	FILL UP THE TANK
	FOREIGN BODY SUCH AS NAIL, NYLON, PIECE OF WOOD ON THE FEEDER SCREW ON THE BOTTOM OF THE TANK (DISPLAY SHOWS THE INSCRIPTION "AL PE")	REMOVE THE FOREIGN BODY
	SMOKE EXHAUST NOT FREE, OR WITH TERMINAL THAT OBSTRUCTS THE PASSAGE OF SMOKE (DISPLAY SHOWS THE INSCRIPTION AL OP)	CHECK THE SMOKE EXHAUST AS IT COULD BE DIRTY OR CLOGGED
	OUTLET TERMINAL CLOGGED BECAUSE A GRILL OR TERMINAL HAS BEEN INSERTED WHICH PREVENTS THE FREE PASSAGE OF SMOKE (DISPLAY SHOWS THE INSCRIPTION AL OP)	REMOVE THE TERMINAL AND REPLACE IT WITH A MORE SUITABLE ONE.
	CONTINUOUS GUST OF WIND WHICH HAS MADE THE HEATER GO INTO SAFETY MODE (DISPLAY SHOWS THE INSCRIPTION AL OP)	SWITCH THE POWER SUPPLY TO THE HEATER OFF THEN BACK ON AGAIN
	THE PELLET SCREW MOTOR DOES NOT WORK	REPLACE THE PELLETS SCREW MOTOR
	THE RESET THERMOSTAT TRIPS AND LOCKS THE GEARMOTOR (DISPLAY SHOWS THE INSCRIPTION AL T max)	THE ROOM FAN IS BROKEN AND MUST BE REPLACED; THEN PUT BACK INTO SERVICE THE RESET THERMOSTAT; WAIT UNTIL THE HEATER COOLS DOWN AND RESET THE THERMOSTAT. THE VENTILATION GRATE IS VERY DIRTY AND MUST BE CLEANED; THEN, PUT BACK INTO SERVICE THE RESET THERMOSTAT; WAIT UNTIL THE HEATER COOLS DOWN AND RESET THE THERMOSTAT.
THE APPLIANCE ACCUMULATES PELLETS IN THE BRAZIER WHILE OPERATING	SMOKE EXHAUST NOT FREE, OR WITH TERMINAL THAT OBSTRUCTS THE PASSAGE OF SMOKE	REMOVE THE TERMINAL AND REPLACE IT WITH A MORE SUITABLE ONE. CHECK THE SMOKE EXHAUST AS IT COULD BE DIRTY OR CLOGGED
	BURNER IS DIRTY	CLEAN IT ON A MORE FREQUENT BASIS CARRY OUT ALL CLEANING OPERATIONS INDICATED IN PARAGRAPH 8.2
	PELLETS WITH DEPOSIT ABOVE PERMISSIBLE LIMITS	CLEAN THE BURNER MORE OFTEN. SET THE OPERATING PROGRAM "Level 2"
	THE BURNER IS NOT PROPERLY PLACED ON ITS SEAT	SET THE BURNER ON ITS SEAT PROPERLY
	THE BURNER STAYS LIFTED FROM ITS SEAT	SET THE BURNER ON ITS SEAT PROPERLY
THE HEATER SMOKES	OCCURS THE FIRST TIME THE HEATER IS SWITCHED ON AS THE SILICONE PAINT IS BEING BAKED	RUN THE HEATER AT FULL POWER FOR 10 HOURS TO COMPLETE THE BAKING
	THE SMOKE EXHAUST IS NOT SEALED CORRECTLY	MAKE SURE THAT THE GASKETS HAVE BEEN FITTED TO THE SMOKE EXHAUST PIPES
	IF THE HEATER STARTS TO SMOKE AFTER 25 MINUTES: DIRTY BURNER, VERY DELAYED START	CLEAN THE BURNER
	IF THE HEATER STARTS TO SMOKE AFTER 25 MINUTES: DELAYED START BECAUSE THE SCREW FEEDER IS EMPTY	FILL UP THE TANK
THE APPLIANCE SHUTS OFF 5 MINUTES AFTER THE END OF THE START UP CYCLE	DELAYED START BECAUSE THE SCREW FEEDER IS EMPTY (DISPLAY SHOWS THE INSCRIPTION AL AC)	FILL UP THE TANK
	DIRTY BURNER, VERY DELAYED START (DISPLAY SHOWS THE INSCRIPTION AL AC)	CLEAN THE BURNER

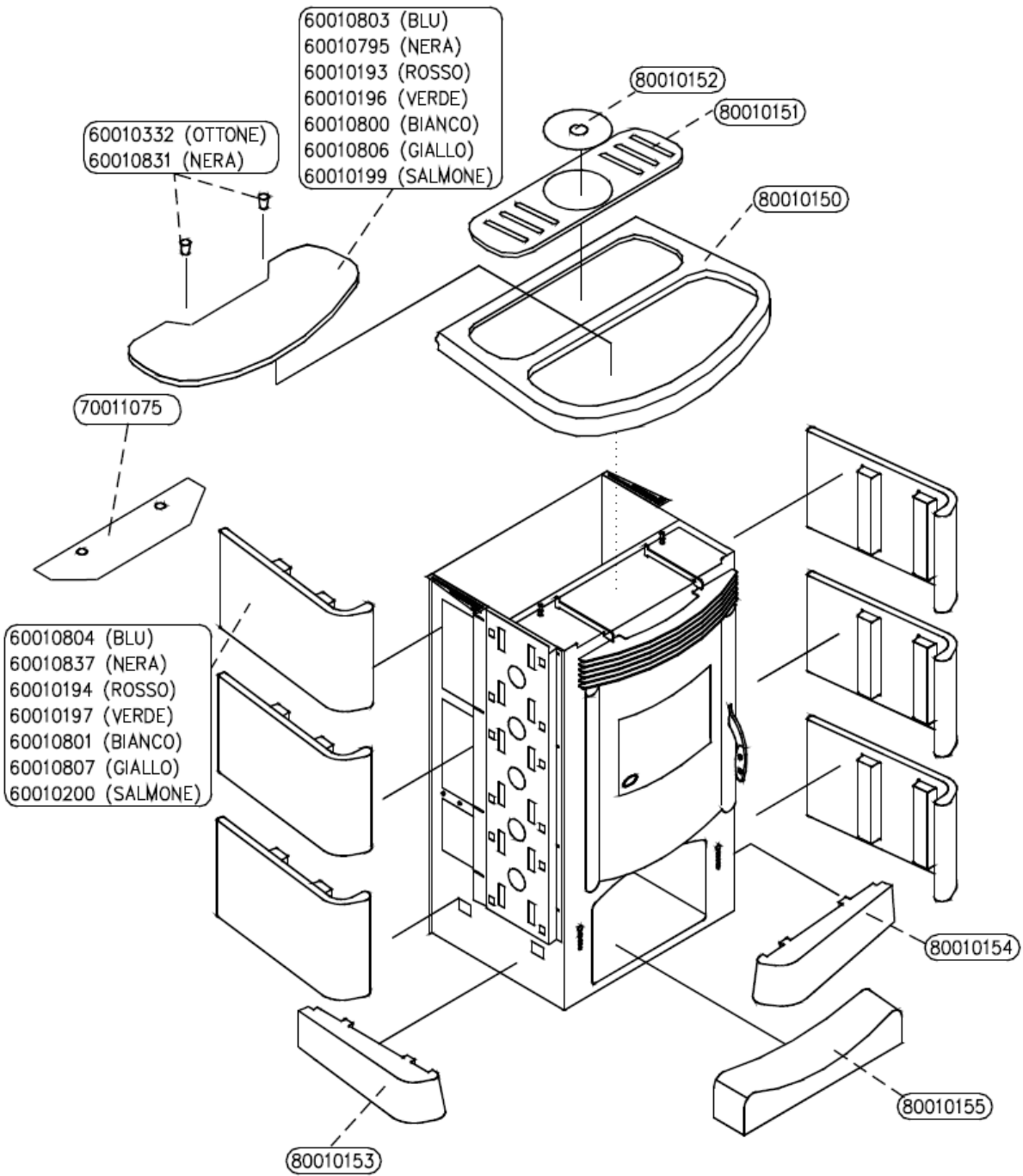
THE HEATER DOES NOT START UP	THE SPARK PLUG IS BLOWN (DISPLAY SHOWS THE INSCRIPTION AL AC)	REPLACE THE SPARK PLUG
THE GLASS IS COVERED IN BLACK SOOT	THE HEATER ACCUMULATES PELLETS IN THE BRAZIER	SEE POINT "PROBLEM-CAUSE-SOLUTION" "THE APPLIANCE ACCUMULATES PELLETS IN THE BRAZIER WHILE OPERATING"
	NO CAUSE	CLEAN THE GLASS MORE OFTEN
	THE CAST BLADE POSITION IS NOT CORRECT/ NO BLADE	POSITION THE BLADE CORRECTLY/MOUNT THE BLADE
ABSENCE OF FLOW OF VENTILATION AIR	VENTILATION GRATE DIRTY	CLEAN THE VENTILATION GRATE LOCATED AT THE BACK OF THE HEATER
IT DOES NOT WARM UP	THE HEATER OPERATES AT INTERVALS.	THE HEATER MUST OPERATE FOR MORE HOURS WITH MORE POWER
	THE ROOM IS TOO LARGE, THE WALLS ARE COLD	SEPARATE THE SPACES THE HEATER SHOULD OPERATE FOR MORE HOURS AND WITH MORE POWER
	CEILINGS TOO HIGH OR PRESENCE OF STAIRS THAT DISPERSE THE HEAT ELSEWHERE.	SEPARATE THE SPACES THE HEATER SHOULD OPERATE FOR MORE HOURS AND WITH MORE POWER
THE HEATER IS OFF BUT THERE ARE UNBURNT PELLETS IN THE BRAZIER	THE TANK IS EMPTY	EMPTY THE BURNER AND FILL UP THE TANK
THE PROGRAMMING AND/OR TIME DO/DOES NOT REMAIN IN THE MEMORY	THE BUFFER BATTERY TYPE CR1632 INSTALLED IN THE CONTROL PANEL IS EXHAUSTED.	REPLACE THE BATTERY (SEE PARA. 8.5)
THE HEATER CARRIES OUT RANDOM COMMANDS THAT HAVE NOT BEEN SET ON IT OR RANDOMLY VARIES THE VENTILATION AND COMBUSTION LEVEL	THE "OPTIONAL WHITE HANDHELD RADIO CONTROL" IS INSTALLED AND THERE IS ANOTHER THERMOROSI HEATER NEARBY	CHANGE THE CODE SELECTOR (SEE PARA. 6.4.2)
THE HEATER DOES NOT CARRY OUT THE COMMANDS SET BY THE OPTIONAL WHITE RADIO CONTROL	THERE IS ANOTHER THERMOROSI HEATER NEARBY	CHANGE THE CODE SELECTOR (SEE PARA. 6.4.2)

13. SPARE PARTS

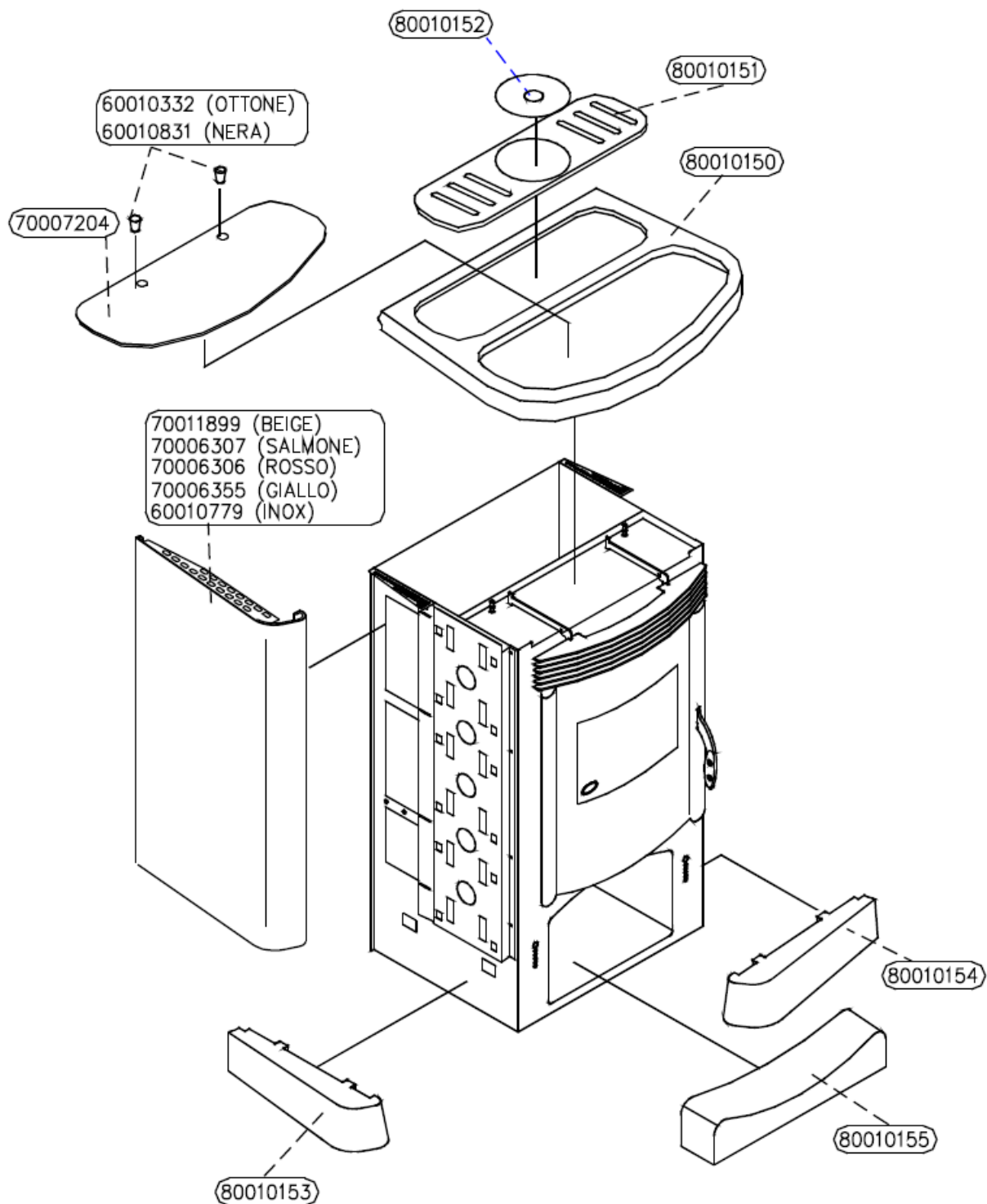
13.1. SPARE PARTS 6000 (PAGE 1/3)



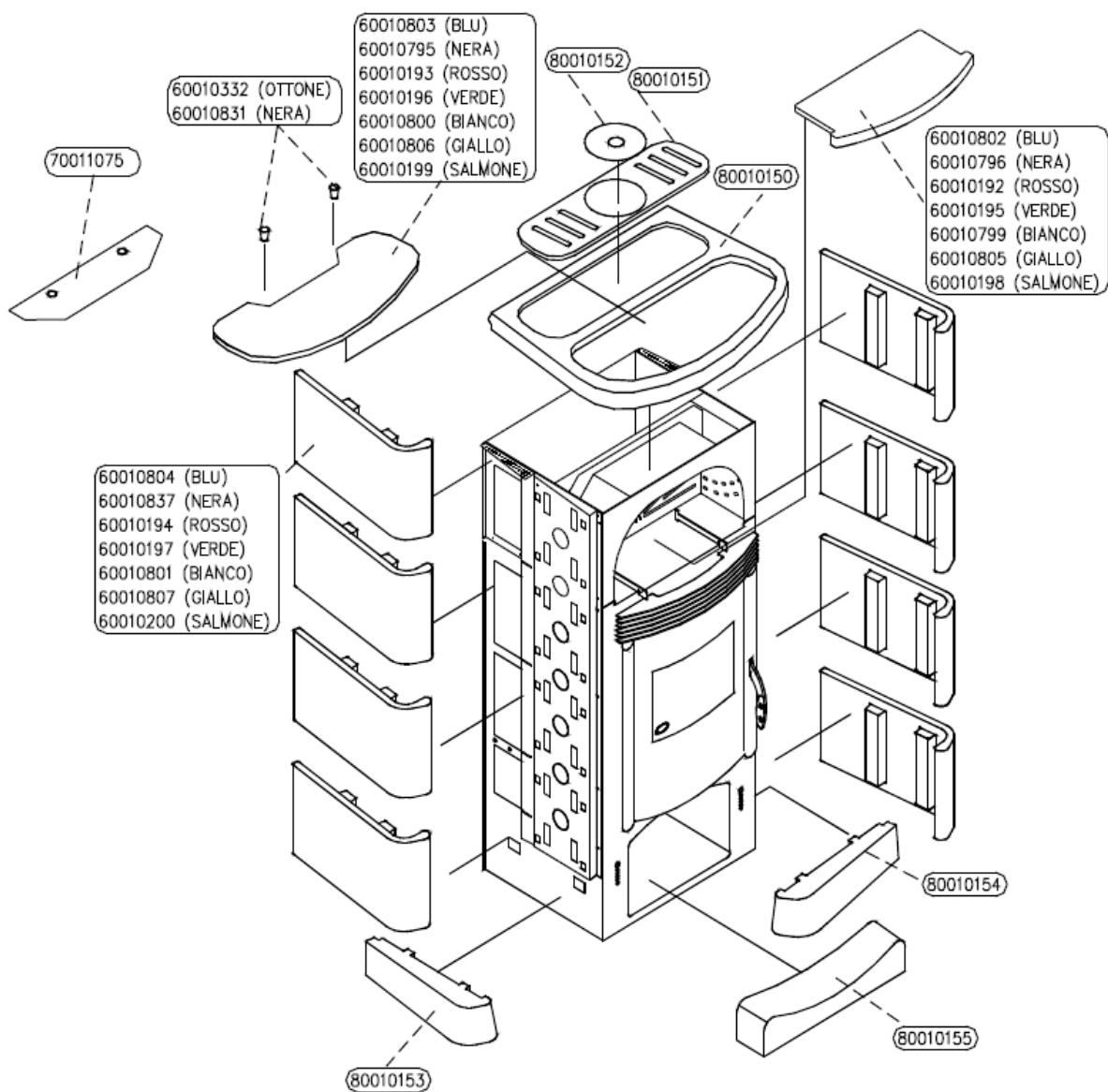
13.2. SPARE PARTS 6000 (PAGE 2/3)



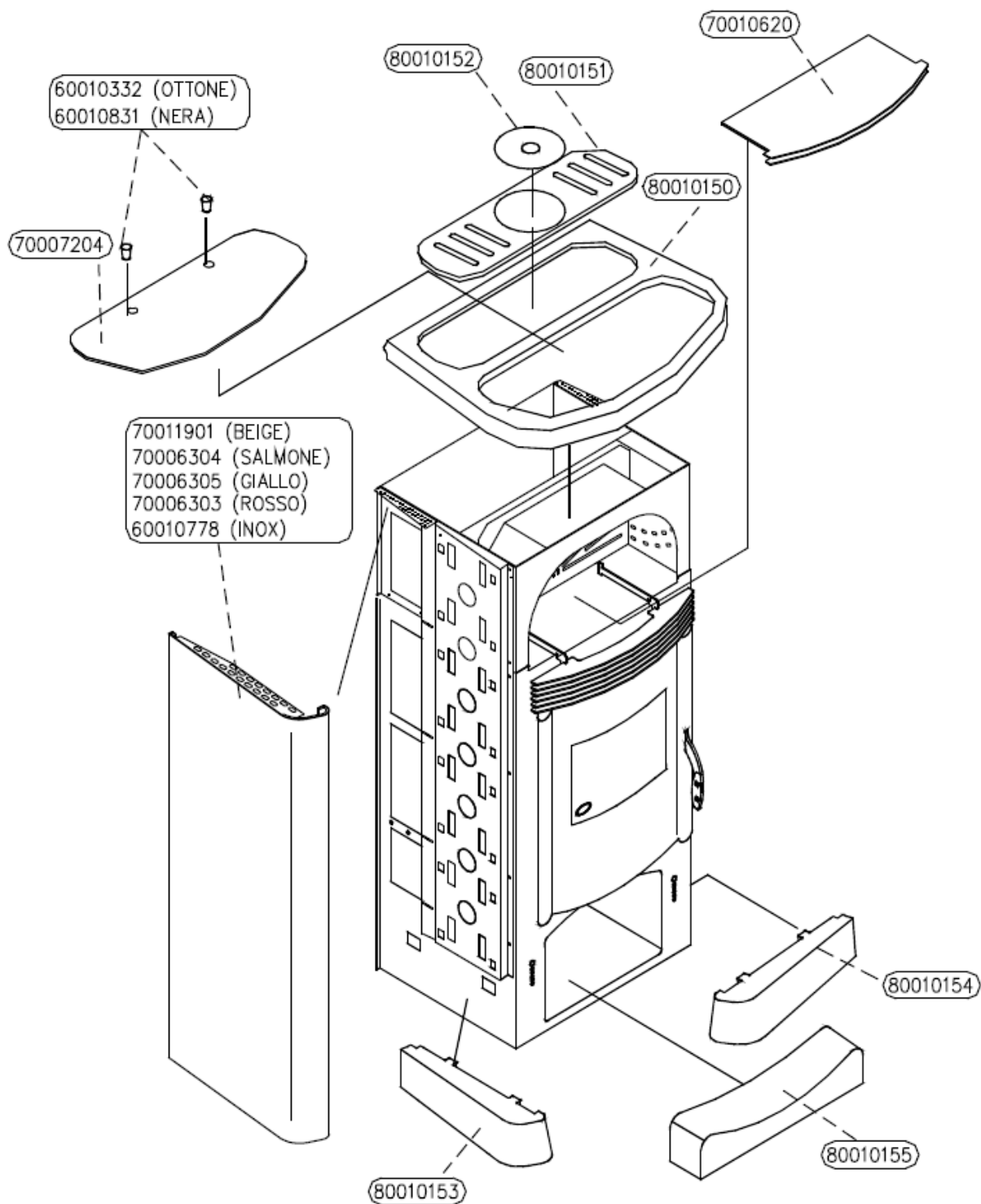
13.3. SPARE PARTS 6000 (PAGE 3/3)



13.5. SPARE PARTS 8000 (PAGE 2/3)



13.6. SPARE PARTS 8000 (PAGE 3/3)



LEGENDA pag.24-29

RADIOCOMANDO COMPLETO
BATTERIA RICARICABILE RADIOCOMANDO
CARICABATTERIA RADIOCOMANDO
SUPPORTO A MURO
COPERCHIO BATTERIE
Pannello post. completo
Pannello completo
Scheda comando
Vetrino
Batteria CR1632
Term. 42/ 95°C
Term. riarmo
Pressostato
CONDENS.
SOLO VENTILATORE
CAVO ALIMENTAZIONE
CERNIERA COMPLETA
ATTENZIONE: ORDINANDO QUESTO
RICAMBIO E' OBBLIGO ORDINARE ANCHE IL
COD. 70010522
Scheda potenza completa
OTTONE
NERA
BLU
ROSSO
VERDE
BIANCO
GIALLO
SALMONE
BEIGE
INOX
6000 --> da matricola 1220350000
8000 --> da matricola 1220360000

KEY page 24-29

COMPLETE RADIO CONTROL
RADIO CONTROL RECHARGEABLE BATTERY
RADIO CONTROL BATTERY CHARGER
WALL MOUNT
BATTERY COVER
Complete rear panel
Complete panel
Control board
Glass
Battery CR1632
Therm. 42/ 95°C
Reset thermostat
Pressure switch
CONDENS.
ONLY FAN
POWER CABLE
COMPLETE HINGE
CAUTION: WHEN ORDERING THIS SPARE PART IT IS
MANDATORY TO ALSO ORDER CODE NO. 70010522
Complete power board
BRASS
BLACK
BLUE
RED
GREEN
WHITE
YELLOW
SALMON PINK
BEIGE
INOX
6000 --> from serial number 1220350000
8000 --> from serial number 1220360000

