JOLLY MEC
LEADER NEL RISCALDAMENTO

I-DEA IDRO

INSTALLATION, USE AND MAINTENANCE MANUAL

To be kept by the purchaser

QUADRA | FRONTALE | ANGOLO

Pellet fired stove with boiler

SM094 EN REV07 2018_05

Dear Customer,

thank you for having chosen to heat and save with a Jolly Mec product. Please carefully read and keep this sheet before using the equipment.

This sheet provides necessary information and suggestions on how to correctly install, use, clean and maintain the product. Knowing and observing these instructions will allow you to fully and safely enjoy the potential your equipment can offer you.

TABLE OF CONTENTS

CHAP.01 PREMISES

01.1 WARNINGS

- *Familiarity and compliance with the instructions given in this manual will ensure quick installation and correct use of the appliance.*
- *Read the manual attentively before commencing installation, and be certain to follow the directions it contains, otherwise the warranty could be invalidated and the performance and safety of the appliance jeopardized.*
- *The installation manual is an integral part of the product and must be given to the user.*
- *It must be kept in a safe place and consulted carefully, as all of the warnings provide important information on safety during installation, use and maintenance.*
- *Incorrect installation of the appliance could cause damage and injury to people or animals, for which the manufacture cannot not be held liable.*
- *Installation shall be performed by qualified operators in accordance with the regulations in force in the Country of installation.*
- *The manufacturer declines any contractual or non-contractual liability for damages caused by errors in installation or use of the appliance or failure to follow the instructions contained in this manual.*
- *All rights on the reproduction of this technical manual are owned by Jolly Mec Caminetti S.p.A.*
- *The descriptions and illustrations provided in the following publication are not binding.*
- *Jolly Mec Caminetti S.p.A reserves the right to make any modifications that may be deemed appropriate.*
- *This manual cannot be given to third parties for perusal without the written permission of Jolly Mec Caminetti S.p.A*
- *The technical directions for installation contained in this manual should be considered as basic requirements. Regulations in some countries may be more restrictive; in this instance, comply fully with the regulations prevailing in the country of installation (**all laws and local bylaws must be observed when installing and using the appliance, including those referring to national and European standards**).*
- *Never use the appliance as an incinerator, or in way other than that for which it was designed. Any other use is deemed improper and therefore dangerous.*
- *Do not use fuels that are not recommended under penalty of cancellation of the warranty.*
- *When the appliance is running, the glass and other visible parts reach extremely hot temperatures to the touch; handle with extreme care to avoid burns.*
- *Do not place the appliance in direct contact with combustible materials.*
- *Do not make any unauthorised modification to the appliance. Any unauthorised modification will automatically invalidate the warranty and release the manufacture from all liability.*
- *Use only original spare parts recommended by the manufacturer. Original spare parts are available through retailers, specialised Tecnical Service Centers, or directly at the head office of Jolly Mec Caminetti S.p.A.*
- *Acceptance of the machine by the user must be “total”, including the sound level of operation, comparable to an electrical appliance. Complaints for characteristics not indicated in this manual shall not be accepted.*

01.2 SYMBOLOGY

In this manual, points of considerable importance are marked with the following symbology:

INSTRUCTION: Instructions regarding the correct use of the appliance.

WARNING: This point is particularly important.

DANGER: An important point regarding behaviour for preventing injury and damage to materials is expressed.

01.3 APPLIED STANDARDS

All JOLLY MEC products are constructed according to the following directives:

- **EU 305/2011** European construction products regulation.
- **2006/42/CE** Machines.
- **2014/30/UE** Electromagnetic compatibility (EMC).
- **2014/35/UE** Low voltage (LVD) - electrical safety.
- **2011/65/EU (RoHs2)** Restriction of the use of certain hazardous substances in electrical and electronic equipment
- **2014/53/UE** Radio Equipment
- **2014/68/UE** Pressure Equipment (PED)

And in compliance with the standards:

- **CEI EN 61000-3-2** Electromagnetic compatibility (EMC) - Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase).
- **CEI EN 61000-3-3** Electromagnetic compatibility (EMC) - Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection.
- **EN 55014-1** Electromagnetic compatibility. - Requirements for household appliances, electric tools and similar apparatus - Emission
- **EN 55014-2** Electromagnetic compatibility – Requirements for household appliances, electric tools and similar apparatus - Immunity. Product family standard.
- **EN 60335-1** Safety of household electrical appliances and similar products. - General safety regulations
- **EN 60335-2-102** Safety of household electrical appliances and similar products. - Special regulations for appliances fitted with gas, diesel or solid fuel burners and electrical connections.
- **EN 62233** Measurement methods for electromagnetic fields of electrical appliances for home use and similar goods regarding human exposure.
- **EN50581** Technical Documentation For The Assessment Of Electrical Products With Respect To The Restriction Of Hazardous Substance.
- **EN 7129** Domestic and similar gas systems powered by the distribution mains.

- **UNI 10412-2** Hot water heating system - Safety requirements - Specific requirements for systems with domestic type heating devices powered by solid fuel with built-in stove, with total fire power not over 35 kW.
- **UNI 10683** Heat generators operating with wood or other solid bio fuels - Installation requirements
- **UNI EN 303-5** Heating boilers. - Heating boilers for solid fuels, manually and automatically stoked, nominal heat output of up to 500 kW - Terminology, requirements, testing and marking.
- **UNI EN 1443** Fireplaces - General requisites
- **UNI EN 1856-1** Chimneys - Requirements for metal chimneys - System chimney products.
- **UNI EN 1856-2** Chimneys. Requirements for metal chimneys - Metal flue liners and connecting flue pipes.
- **UNI EN 13229** Insert appliances including open fires fired by solid fuels - Requirements and test methods
- **UNI EN 13240** Roomheaters fired by solid fuel - Requirements and test methods
- **UNI EN 13384** Fireplaces - Thermal calculations and dynamic fluid.
- **UNI EN 14785** Residential space heating appliances fired by wood pellets - Requirements and test methods
- **UNI EN ISO 12100** Machine safety.

In the UK, the product must be installed, operated and maintained complying with the following regulations and legislations:

- **BS 7671** Requirements for electrical installations
- **EN 806** Specifications for installations inside buildings conveying water for human consumption
  - Part 1 General
  - Part 2 Design
  - Part 3 Pipe sizing. Simplified method
  - Part 4 Installation
  - Part 5 Operation and maintenance
- **BS 8558** Guide to the design, installation, testing and maintenance of services supplying water for domestic use within buildings and their curtilages. Complimentary guidance to BS EN 806
- BS EN 14961 Solid biofuels. Fuel specifications and classes
  - Part 1 General requirements
  - Part 2 Wood pellets for non-industrial use
  - Part 5 Firewood for non-industrial use

- **UK Planning Regulations** (for further details see https://www.planningportal.gov.uk)
- **UK Building Regulations Approved Documents** (for further details see https://www.planningportal.gov.uk)
- **CIBSE** (for further details see https://www.cibse.org)
- **Microgeneration Certification Scheme** (for further details see http://www.microgenerationcertification.org)
- **Microgeneration Installation Standards** (for further details see http://www.microgenerationcertification.org)
- **Pressure Systems Directive** (for further details see http://www.hse.gov.uk)
- **Health and Safety at Work Act** (for further details see http://www.hse.gov.uk)
- **Clean Air Act 1993** (for further details see http://smokecontrol.defra.gov.uk)

The installer must check and ensure, by contacting his local Council Planning Office, that the installation does or does not require Planning Permission and that the installation is not being installed in a Smoke Control Area (for further details see http://smokecontrol.defra.gov.uk).

The Building Regulation Notification has to be completed prior to handing over the installation. Self-certification, in lieu of building control approval, is only permitted where installation and commissioning is undertaken by a person deemed competent and registered with a Competent Persons Scheme (CPS) approved by the Department for Communities and Local Government (DCLG) for the scope of work being undertaken (for further details see http://www.competentperson.co.uk).

01.4 USE AND STORING OF THE INSTALLATION AND MAINTENANCE MANUAL

- **Recipients of the manual**

The use and installation manual is addressed to users responsible for the installation, operation and maintenance of the stove; particular attention must be given the parts of the manual concerning safety.
If the product is subsequently resold, the user is requested to hand over this sheet and to inform the manufacturer of the name of the new owner, so that the latter may receive any updates issued.

- **Scope of the manual**

The manual contains information on the correct use of the product in accordance with the purposes for which it was designed and built. It also provides information about loads, commissioning, repair and maintenance of the stove in conformance with the limits set down by the manufacturer.

- **Conservation of the manual**

The installation and maintenance manual is an integral part of the product and must be conserved up to the time when the stove is dismantled. It must be kept in a protected, dry place out of direct sunlight and near the product so that it is always readily available for consultation.
Should the manual get damaged, the user must request a copy from the retailer where he purchased the appliance. When requesting assistance, always make reference to the MODEL, LOT and SERIAL NUMBER indicated on the label shown in **CHAP.05.2 - PRODUCT IDENTIFICATION**.

- **Updating the manual**

The installation and maintenance manual reflects the status of the technology at the time the product was marketed. The manufacturer reserves the right to make modifications to the product, and consequently the relative manual, without any obligation to update previous editions.

01.5 MANUFACTURER LIABILITY AND WARRANTY CONDITIONS

Warranty terms are indicated in the enclosed card **SM081**.
Upon the delivery of this manual, Jolly Mec S.p.A. cannot be held liable, whether civil or criminal, for accidents due to partial or total non-compliance with the specifications herein contained.
The manufacturer is especially held harmless from any liability in the following cases:

- Improper use of the product
- Use not intended by specific national regulations
- Incorrect installation
- Faults in the electrical connections, the connections of the fume exhaust system and/or the comburent air ducting system e and in plumbing connections
- Failure to carry out maintenance as prescribed in this manual
- Unauthorised modifications or operations
- Use of replacement parts that are non-original or not specific to the model
- Total or partial failure to follow the instructions
- Exceptional events (e.g.: breakages due to natural or accidental events as lightening, short circuits etc.)
- Damage caused by electrical power cuts, sudden fluctuation of supply voltage, electromagnetic fields
- Use of fuel with characteristics other than those recommended in this manual

In the above cases the warranty is void.

NOTE

In the event of a malfunction or intervention request by a specialised Technical Service Center, the user must be able to demonstrate the use of fuel with the characteristics required by this manual.
The Manufacturer disclaims all liability concerning anomalies or malfunctions caused by use of FUEL which does not comply with the recommended requirements.

CHAP.02 ACCIDENT PREVENTION / SAFETY REGULATIONS

02.1 GENERAL CONSIDERATIONS

- The manual refers to essential aspects of the directives, regulations and dispositions on using the machine, summarising its most significant points.
- General legal regulations and mandatory rules regarding injury prevention and environmental protection must be observed. These obligations also include regulations regarding the use of personal protective equipment.
- For all work to be done on the system, the following dispositions and regulations in force must be observed regarding accident prevention, following the indications.

- Before using the system the first time, the user must have read and understood the instruction manual perfectly and this chapter in particular.
- The user must also make sure that the machine is always in good condition as regards its safety requirements.

- During maintenance and inspection activities, wear the protective garments specified in following **CHAP.02.4 - EQUIPMENT FOR OPERATORS AND MAINTENANCE PERSONNEL.** Cleaning and maintenance activities may only be performed with the equipment cold and preferably disconnected from the power mains or with the main switch in the “O” position.
- Danger warnings and signals in the form of plates, labels and markings must not be removed or made unidentifiable. If they are worn or broken, they must be replaced.

- Modifications, additions or transformations must not be made on the machine and its components without the manufacturer’s authorisation. This is valid first and foremost for installation and regulation of the installed safety devices. Failure to comply with this warning relieves the Manufacturer of all and any responsibility.
- Make sure, before starting up every time and after carrying out maintenance, that dismantled parts have been repositioned correctly and in particular all the protection devices that impede access to the machine.

02.2 SAFETY REGULATIONS FOR ROUTINE MAINTENANCE AND USE

- The user and/or owner of the product is required, in accordance with the laws in force, to assign the installation and maintenance to qualified and specialised operators, and acknowledge the risks and hazards should they fail to observe this requirement.
- Children of at least 8 years old, people with reduced physical, sensory or mental capabilities, or lacking the experience or the needed knowledge can use the device only under surveillance or having been instructed on the device safe use and on the understanding of the deriving dangers. Children are not allowed to play with the device. Cleaning and maintenance are meant to be performed by the user and not by unsupervised children.
- The settings and programming of the product must only be performed by adults who have received suitable and specific training. Errors or incorrect settings can create hazardous conditions and trigger malfunctions with relative consequences for persons and things.
- Before any cleaning and/or routine or extraordinary maintenance on the machine, disconnect it from all energy sources; in particular, turn the electrical power switch to “O”.
- Prior to installation, the user and installer are obliged to check that the mains electrical supply to which the machine will be connected, corresponds to the voltage on the identification plate (see **CHAP.05.2 - PRODUCT IDENTIFICATION**), and that it is equipped with all suitable safety devices to classify the electrical system as compliant with applicable safety standards. If this is not the case, contact a Qualified Technician to adapt the system to required standards.
- Upstream from the machine (at the user’s expense) on the electrical power supply line, a bipolar switch must be installed that is able to intercept all the current phases (see **CHAP.06 - TECHNICAL DATA**).
- The irradiation area includes the area between the opening of the hearth and up to 1 metre of space frontally as well as laterally. No inflammable object must be left in this area (such as: inflammable liquids, fire-starting products or firewood, drapes, wooden decorations, rugs, etc.).
- Do not use the stove to dry clothes, it could overheat and cause an outbreak of fire.

- **ATTENTION - BEWARE OF BURNS**, most of the outer surfaces of the stove are very hot, door handle, glass, metal sides, majolica or metal top, fume exhaust pipe etc. Never touch the stove with naked hands when it is running; always use heat protection gloves, such as those supplied with the stove, when handling all parts.
- Before doing any internal cleaning or maintenance, you must wait until the machine reaches the ambient temperature.
- If the stove is in alarm status due to a malfunction, do not attempt to restart it before finding out what has caused the heat generator to shut down.
- Never wash the internal parts of the combustion chamber with water.

- In alarm status for failed start up, do not try to restart the stove until the firebox has been thoroughly cleaned.
- The appliance must always be started up with the firebox empty, without pellets and without unburned fuel from previous use.
- Do not attempt to ignite the fuel with inflammable liquids or solids; the stove must ignite automatically via the electrical components installed onboard.
- Do not load pellets manually into the firebox before or whilst the appliance is running.
- Keep the ventilation grids in the area the appliance is installed in clean conditions.
- Never load any fuel other than pellets into the stove storage hopper. Corn, nuts or other combustible materials must not be used as fuel for the appliance.
- Check and periodically clean the fume exhaust pipe, from the appliance to the flue (Union).
- It is strictly prohibited to start up the product with the combustion chamber door open or allow it to run with the glass broken.
- In case of need and if any operating problems persist, the user should contact the specialised Technical Assistance Center.
- **Never try to start the device using ethyl alcohol or other flammable liquids.**

02.3 SAFETY REGULATIONS FOR EXTRAORDINARY MAINTENANCE AND INSTALLATION

- The user and/or owner of the product is required, in accordance with the laws in force, to assign the installation and maintenance to qualified and specialised operators, and acknowledge the risks and hazards should they fail to observe this requirement.
- The installation of the heat generator and the relative combustion product exhaustion system, the electrical connections, the commissioning and extraordinary maintenance services MUST always be performed by qualified and licensed professional staff.
- The product must be installed in accordance with the laws and standards in force in the State, Region or Area in which the machine is installed.
- Installation in bedrooms, rooms with a volume below 15 m^3 or with explosive atmospheres is strictly prohibited.
- The system installer MUST issue a Declaration of compliance for the work performed after commissioning the system, in accordance with the laws in force related to system safety standards.
- The installation technician must inform the user on safe equipment use.
- The installation operator is responsible for the installation and is therefore required to perform the work to top workmanship standards.
- **The appliance must be connected to a combustion product exhaustion flue built in accordance with applicable standards and certified with a declaration of compliance.**
- Should any installation defects arise during the optional Commisisoning service, the specialised Technical Service Center, can refuse to endorse use of the product for safety reasons and submit a written Servicing Report to the User informing him that he and the Installation operator shall be jointly liable for any damage to persons, animals or things if used.
- Before installing the machine, the customer and installation operator must ensure that the flooring on which it will be positioned is suitably levelled and can support the weight (see **CHAP.06 - TECHNICAL DATA**). IIf there is any doubt on the solidity of the flooring, it is essential to have a Structural Engineer verify relative installation feasibility.
- Only specialised and qualified personnel may work or carry out checks inside the machine, complying with safety regulations.
- Prior to installation, the user and installer are obliged to check that the mains electrical supply to which the machine will be connected, corresponds to the voltage on the identification plate (see **CHAP.05.2 - PRODUCT IDENTIFICATION**), check that the system is sized so as to bear the maximum load required of the product, and also that it is equipped with all suitable safety devices to classify the electrical system as COMPLIANT with applicable safety standards. If this is not the case, contact a Qualified Technician to adapt the system to required standards.

- The power cord plug must be connected only AFTER the conclusion of the installation and assembly of the device, and must remain accessible after installation if the device does not have a suitable and accessible double-pole switch.
- Personnel assigned to handling the machines and equipment must always wear industrial gloves and boots.
- The Maintenance Operator must recommend the Customer to sign an annual maintenance contract for the product, so as to maintain the levels of safety and efficient performance of the product.
- The Maintenance Operator must check the working hours of the product between one maintenance intervention and another, to verify the actual work load of the stove. The actual hours of operation shall be reset at the end of the Technical intervention and indicated on the Servicing Report.

02.4 EQUIPMENT FOR OPERATORS AND MAINTENANCE PERSONNEL

Every operator performing maintenance on the machine, must wear safety garments and personal protective equipment:

1 Protection headphones

2 Gloves hand protections

3 Respiratory mask

4 Face mask or goggles

5 Accident prevention boots

6 Overalls or smock

02.5 RESIDUAL RISKS

Though JOLLY MEC CAMINETTI S.p.A. does everything within its power to produce its systems with the greatest competence regarding safety and consulting all the directives, laws, and regulations available, there are still, if minor, some residual risks during the phases of:

- TRANSPORT AND INSTALLATION
- ELECTRICAL CONNECTIONS (Which must be done by a qualified electrician)
- MAINTENANCE

Therefore, the technicians who perform these tasks must take these residual risks into account.

WARNING

Removal or tampering with the protection and safety devices can be only be done voluntarily and may cause serious injury to people.
Replace the safety signals when they become illegible or come off.

CHAP.03 HANDLING AND TRANSPORT

03.1 RECEIVING GOODS

The machine is delivered on a pallet, packed in a wooden cage with a cellophane hood.
when receiving merchandise, check that:

- all packaging is intact
- all of the merchandise indicated on the delivery bill has actually been delivered
- the supply corresponds to the order specifications
- if the packaging is damaged, check the condition of the contents, because any breakages must immediately be reported to the carrier and to the retailer
- check there is no damage to any supplied elements; if there is any breakage detected, report it as soon as possible to the carrier and to the retailer

If any material listed on the delivery note is missing, report it to the retailer as soon as possible.

WARNING **Danger of suffocation**

Make sure that children do not come into contact with packaging materials, plastic film or polystyrene as this could cause suffocation.

03.2 LIFTING AND TRANSPORT

Personnel in charge of handling the product must have read and thoroughly understood the safety prescriptions in **CHAP.02 - ACCIDENT PREVENTION / SAFETY REGULATIONS** of this manual and must wear work gloves and safety footwear.
For safety reasons, unauthorised persons must not be in the area while the product is being moved.

The product must be moved only with a trolley or pallet fork, and never with belts, chains, overhead cranes (see **CHAP.06 - TECHNICAL DATA** for the weight). All parts of the packaging coming into contact with the crane, belts or straps must be protected.
Unless there are obstacles, lift the product to a maximum of 30 cm from the ground and move it slowly, avoiding jerky or brusque movements.

WARNING **Danger of crushing, collision and abrasions.**

CHAP.04 ECOLOGICAL REGULATIONS

04.1 DISPOSAL OF THE MACHINE

Directive 2012/19/UE (waste electrical and electronic equipment - WEEE): information for users.
The crossed-out wastebasket symbol on the appliance means that at the end of its useful lifespan, the product must be disposed of separately from ordinary household wastes.
The user is responsible for delivering the appliance to an appropriate collection facility at the end of its useful lifespan.
Appropriate separate collection to permit recycling, treatment and environmentally compatible disposal helps prevent negative impact on the environment and human health and promotes recycling of the materials making up the product.
For more information on available collection facilities, contact your local waste collection service or the shop where you bought this appliance.

NOTE

The machine must be disposed of in a manner that complies with the laws in force and the environment.
When taking it to the firms that dispose of ferrous materials, handle the stove as described in **CHAP.03 - HANDLING AND TRANSPORT.**

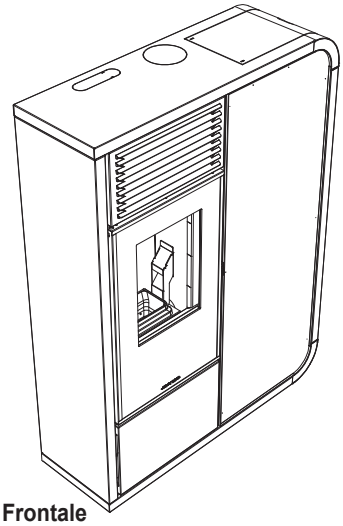
WARNING

Danger of environmental pollution

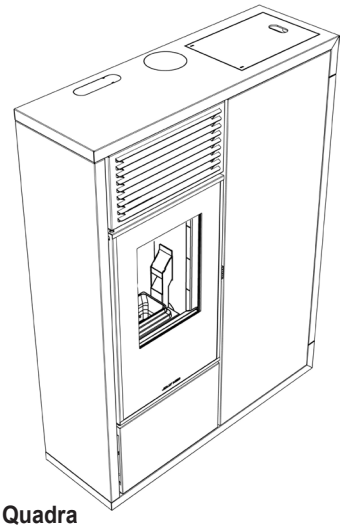
Adopt positive civic behaviour and DO NOT disperse the packaging into the environment, but take it to waste disposal centres for recycling. All packaging can be recycled, as it consists of wood, polyethylene film, polystyrene and cardboard

CHAP.05 DESCRIPTION

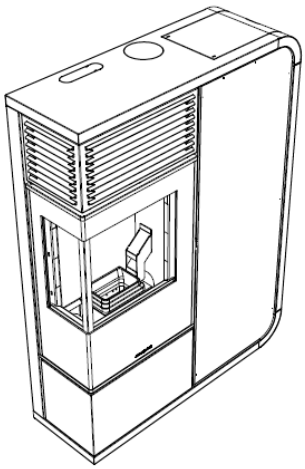
05.1 PRODUCT PRESENTATION



Frontale



Quadra



Angolo

Jolly-Mec products are the result of over forty years experience in the wooden biomass combustion sector; they are designed and engineered to meet the increasing demands of today's markets with high performance levels and savings enveloped in a modern design.

The I-DEA IDRO Heating stove, available in the 9 or 17 kW versions and approved according to European EN 14785:2006 standards at a third party authority accredited by the European Commission as a machine inspection and certification institute, is a high performance electronic controlled closed circuit water heating machine without hot water production, powered with an ECOLOGIC AND ECONOMIC energy source: wooden pellets.

The I-DEA IDRO Heating stove is a single-body heater with a heat exchanger in special steel, with a particular flue gas pass and whose special structure allows it to make maximum use of the heat produced by combustion to achieve high performance that places it at the top of its category for efficiency and emissions. High yield, over 90%, and reduced polluting emissions are the characteristics that allow this device to be included in the most advanced product range on the market, permitting high energy savings and fast returns on initial investments thanks to the excellent ratio between heating power and costs provided by an innovative fuel such as pellets.

It works with forced draught, with a combustion fan for pellets and an 80 mm diameter exhaust pipe located on the rear of the stove. The pellets are fed by an auger driven by a gear motor that picks the pellets from the hopper and channels them to the firebox via a chute.

The I-DEA IDRO heating stove can be connected to a radiator or floor heating system. The heating stove comes with a previously tested standard closed tank hydraulic kit.

Combustion is controlled by means of a radio-frequency electronic control unit with the following main functions and features:

- **Display** LCD screen that provides an interface with the product to set function values and read data on work status.
- **Chronothermostat** On and off time setting function programmed with settable temperature regulation program.
- **Room temperature** Actual room temperature settings and display function
- **Power levels** Control possibilities on 5 heat power levels.
- **Operating status** Function that displays product and connected heat system operating status in real time.
- **Multilingual** Possibility to select one of five different European languages (ITA - ENG - DEU - FRA - ESP).

They are also fitted with:

- Pellet container with about 30 kg capacity and minimum level sensor*
- A practical drawer to collect the ashes.
- Heat safety device against any structural or water overheating
- Safety device against possible clogging of the flue pipe
- Fume exhaust fan
- Electrical resistance to ignite combustion and pellets
- Water circulator for the heating system

WARNING

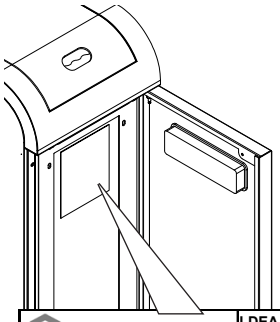
! * Fully empty net container capacity is about 30 kg. The pellet level probe will signal when fuel supplies go into reserve. When minimum pellet level is signalled operators have about 30 minutes to refuel (the level must be covered by pellets) before the minimum level alarm is triggered.

Standard I-DEA IDRO Heat stove cladding includes the following components with the relevant variations for the three available models:

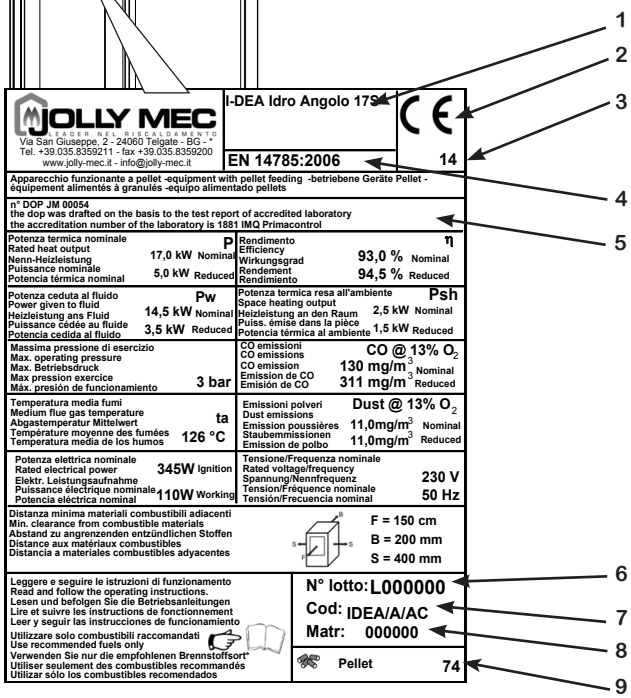
- Painted steel top
- Painted front grid
- Painted steel sides
- Right side opening to access the main switch, the current socket and reset the safety thermostats (pellet hopper safety and water safety)
- Painted steel pellet container cover
- Vertical exhaustion of fumes by removing the screw cap to make room for the fumes tube
- Combustion chamber door with silkscreen printed ceramic glass, resistant to a temperature of 700 °C
- Steel door open/close handle

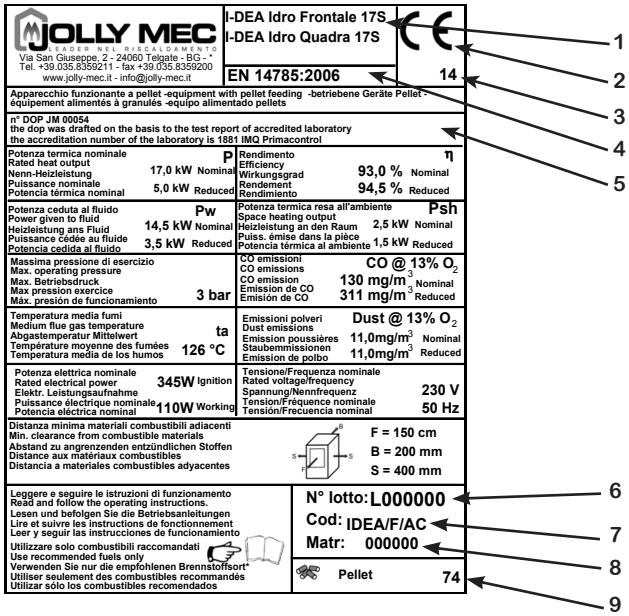
The various elements of the cladding must be handled carefully, as being satin-finished, polished or painted, they could be scratched or dented during the handling or assembly phases.

05.2 PRODUCT IDENTIFICATION



It is COMPULSORY to indicate the product MODEL, the LOT number and SERIAL NUMBER in all communications with the Manufacturer. Identification numbers are printed on the adhesive plate located on the back of the device as illustrated on the right.
Stove performance values measured during inspection tests according to the indicated reference and EC markings are also included on the plate.





1	Product model
2	CE marking
3	Year of commissioning and certification
4	Reference standard
5	Performance declaration No.*
6	Product LOT N°
7	Product sales code
8	Product label code
9	Product serial number

WARNING

*Pursuant to European Regulation No. 305/2011, manufacturers are now required to have the DoP - Declaration of Performance for each product of own design concerned; Jolly-Mec did namely provide all of these documents in downloadable electronic form that you can easily see on the website of the Company at the following address: http://www.jolly-mec.it.

NOTE

The illustrated example plate may differ in graphics from the original affixed to the product.

CHAP.06 TECHNICAL DATA

06.1 HOMOLOGATION

Technical specifications resulting from laboratory tests conducted according to EN 14785:2006 test methods at the CERTIFICATION institute.

Description	I-Dea Idro Angolo 9S I-Dea Idro Frontale 9S I-Dea Idro Quadra 9S	I-Dea Idro Angolo 17S I-Dea Idro Frontale 17S I-Dea Idro Quadra 17S	UM
Burnt heat output	9,1	18,3	kW
Nominal heat power	8,5	17,0	kW
Reduced heat output	5,0	5,0	kW
Fluid power efficiency	7,5	14,5	kW
Space heating output	1,0	2,5	kW
Consumption at nominal heat output	2,0	3,8	kg/h
Consumption at reduced heat output	1,0	1,0	kg/h
Efficiency at nominal output	93,5	93,0	%
Rated voltage	230	230	V
Rated frequency	50	50	Hz
Electrical absorption (at full capacity - during start-up)	110 - 345	110 - 345	W
Device weight	165	165	kg
Standard hopper capacity	27,0	27,0	kg
Minimum flue draught at nominal heat output	10,0 [0,10]	11,0 [0,11]	Pa [mbar]
Fume exhaust diameter	80	80	mm
Average fume T at nominal heat output	88,0	126,0	°C
CO (13% O_2) at nominal heat output	168	130	mg/Nm^3
Dusts (13% O_2)	15,0	11	mg/Nm^3
OGC (13% O_2)	11,0	8	mg/Nm^3
NO_X (13% O_2)	178,0	125	mg/Nm^3
Mass fume flow at nominal output	8,2	10,7	g/s
Minimum air distance from inflammable side wall	400	400	mm
Minimum air distance from inflammable rear wall	200	200	mm
Frontal air distance from inflammable material	150	150	cm
Testing pressure	6	6	bar
Maximum water working pressure	2,5	2,5	bar
Water content	17	17	l
Heat pump head (@ 1m3/h)	6	6	m
Heating pump maximum capacity (@ 0,5 m.c.l.)	5	5	m^3/h
Comburent air pipe diameter	60	60	mm
Energy efficiency class	A+	A+	-

The declared output may vary according to fuel type

The above technical specifications were measured with certified quality PELLETS. ONLY use this type of fuel as recommended later in **CHAP.06.2 - RECOMMENDED FUELS.**

WARNING

All appliance tests, final inspection and fine-tuning was performed using the recommended certified pellets.. Jolly Mec Caminetti S.p.A. is not responsible for malfunctions, breakdowns or problems due to the use of pellets that are not recommended, as combustion parameters vary according to the quality of the pellets.
To achieve best operational results, it may be necessary to change the default factory settings on the control unit during the optional Commissioning service. These operations must only be performed by a specialised Technical Service Center.

06.2 RECOMMENDED FUELS

WARNING PELLET QUALITY IS VERY IMPORTANT; PLEASE READ THIS SECTION CAREFULLY

A pellet product's performance is significantly linked and highly influenced by the type and quality of wooden pellets that is burned. It is important to choose pellets that have no debris or impurities. The Association of Pellet Manufacturers with the Italian Thermotechnical Committee have established standards for identifying pellets in terms of energy*.
As the efficiencies of different wooden PELLETS qualities differ, likewise the efficiency and heat capacity emitted by the product running on pellets will vary. Similarly, unburned residue left in the combustion chamber is inversely proportionate to pellet quality: the lower the pellet purity, the faster dirt accumulates in the machine.
Jolly Mec Caminetti S.p.A recommends the use of the same type of pellets used during the optional Commissioning service, i.e. when the settings and calibrations were made to suit the loaded combustible materials. Continuous switching of types and qualities of combustible materials will require continuous adjustments to settings by the specialised Technical Service Center, which can not be endorsed by the Manufacturer.

The main quality certifications for PELLETS on the European market are DIN Plus, Ö-Norm M7135 and UNI EN ISO 17225-2 (class A1 or A2), which guarantee the following quality standards:

*CERTIFIED PELLET CHARACTERISTICS	
Powder	1% maximum through a 3.2 mm screen
Apparent density	680 Kg/m^3 minimum
Dimensions	6 mm diameter from 25 to 30 mm of maximum length
Ash content	1% maximum
Humidity	8% maximum
Heating power	4,9 kWh/Kg
Packaging	in eco-compatible or biodegradable material sacks

Store pellets at least 1 m from the appliance, in a dry place and not outdoors, not even under porches or roofings.
Do not use pellets that are very hard and with different dimensions; the mechanical parts are sized and tested for use with pellets with the above-mentioned characteristics.

No breakdown or malfunction depending on the quality of the pellets used and/or by the dosage of the quantity will be covered by the warranty.

NOTE WHAT YOU SHOULD KNOW ABOUT PELLETS:

pellets are obtained by a drawing process using sawdust discarded by virgin wood processing systems and therefore have no chemical additives. The consistency, compactness and strength with which the pieces remain intact is due to a substance contained in wood called lignin; this acts as a binder during the compression phase.

The various qualities of combustible materials can also depend on the sawdust mix used to produce the pellets, which generally have a standard length of between 5 and 30 mm, a diameter of between 5 and 6 mm, a weight of from 600 to 700 Kg/m^3 and a humidity of no more than 8% of its weight.

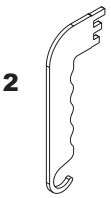
One advantage over wood is its greater heating power; in fact, when using good quality wood, it is possible to achieve about 4.3kWh/Kg with a humidity rate of up to 15%, whilst with pellets this can climb to 4.9kWh/Kg and a water content of a maximum of 8%.

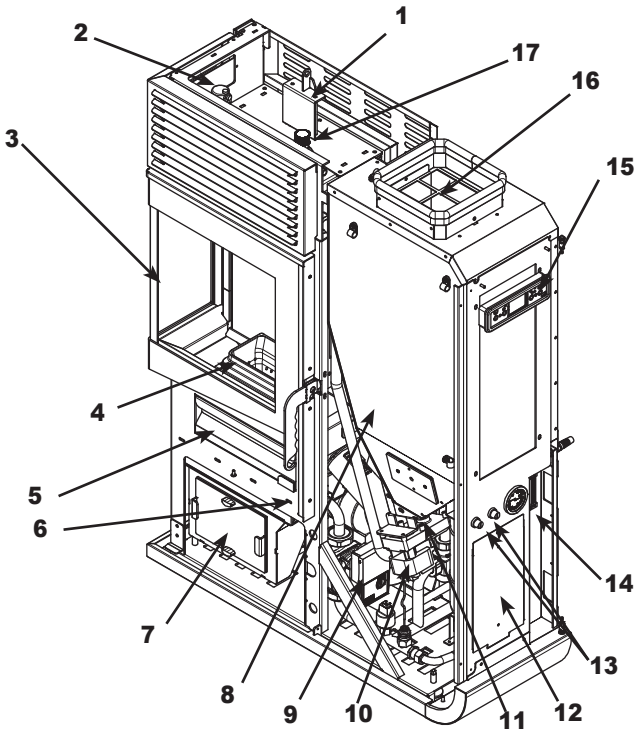
The sacks of pellets must be stored in a clean, dry place.

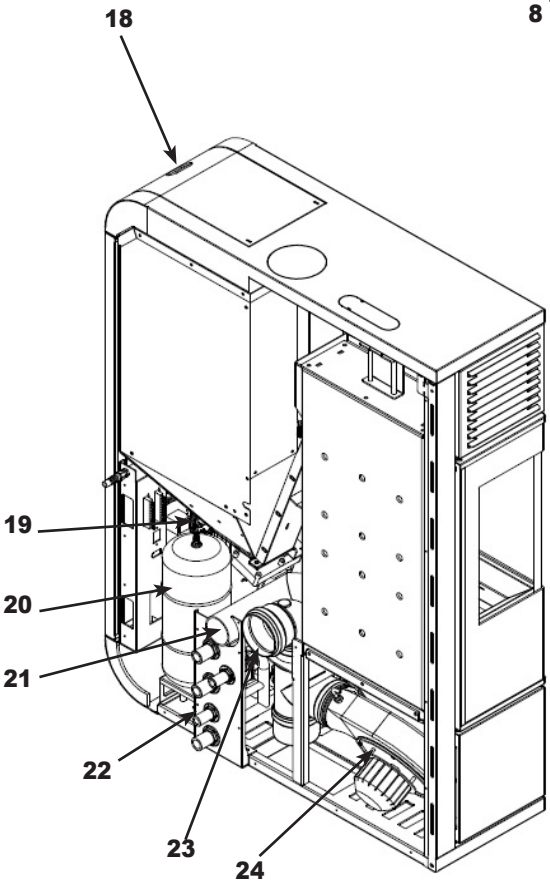
06.3 COMPONENTS

The device is supplied with the following components:

- Installation, use and maintenance manual
- Use and maintenance accessories (see **CHAP.08.6 - ORDINARY MAINTENANCE**).
- Power cord to connect the stove to the mains.
- Cladding.
- IR Remote control (1)
- Handle for opening the door and using the scraper (2)







Part List:

1. Tube bundle scraper
2. Automatic air breather float valve
3. Combustion chamber door
4. Firebox
5. Ash pan
6. Combustion chamber door safety microswitch
7. Fume inspection flap
8. Pellet hopper
9. Heat circulation pump
10. Pellet loading auger gear motor
11. Pellet loading auger
12. Electronic control unit (accessible on removing the relative support)
13. Safety thermostat with manual reset
14. Socket group panel
15. LCD display
16. Pellet loading chute
17. 3 bar safety valve
18. Pellet loading lid
19. Pressure switch
20. Expansion tank
21. Comburent air intake tube Ø 60 mm
22. Hydraulic connections
23. Fume exhaust pipe Ø80 mm
24. Combustion and fume exhaust fan

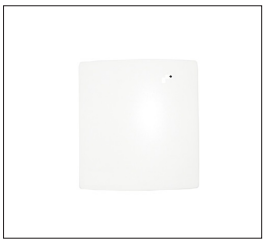
06.4 OPTIONALS

Automatic closing box for external air passageway:
Installed on the external air passageway, it only allows for air intake when actually necessary, closing the cold air passage when the generator is not running to thus avoid cooling the installation room

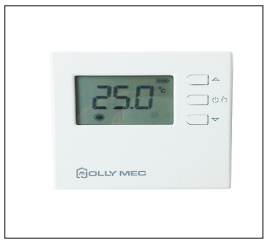
Insect- proof grate 230 x 230 mm:
Installed on the exterior of the comburent air intake, it prevents insect entrance within the home. The mesh must be periodically cleaned since dust, pollen or humidity can obstruct air passage through the grate over time.

Zone module:
Essential device for correct zone control with the pellet stove. The module can separately manage systems with zone valves or systems with zone circulators and a secondary Puffer intake circulator.

Remote thermostat module:
Installed in the home, it is used to easily control stove operations and adjust necessary temperatures from within the home. Temperature time settings or personalised heating profiles can be set.

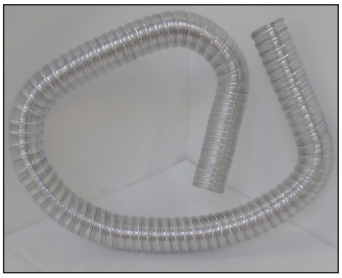


Receiver:
This device receives the signal via radio from the ambient thermostat.



Radio digital thermostat:
This device is a radio thermostat display to control the room temperature and use in conjunction with the receiver

Room temperature probe:
This device reads the room temperature.



Aluminium foil pipe Ø60mm:
Pipe for external connection of the comburent air pipe.

Fume exhaust kit rear outlet

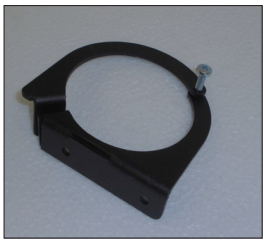
Fume connection pipe L300/L250mm Ø80mm:
Metallic pipe used to connect the generator to the flue.

T union for fume exhaust with condensate drain cap:
To be installed at generator output. Ø80mm for union connection and Ø100mm for flue connection.

Fume exhaust pipe Ø100mm:
Metallic pipe used to connect the generator to the flue.

Fume exhaust kit vertical outlet

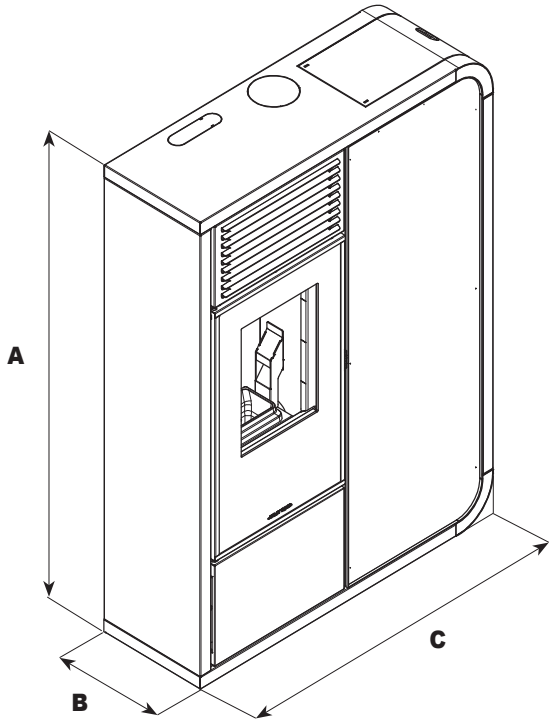
Fume exhaust pipe Ø80mm:
Metallic pipe used to connect the generator to the flue (the pipe serves the first outlet section of the device, to be used as a flue union)



Connection band:
Band to fasten the fume exhaust pipe to the stove.

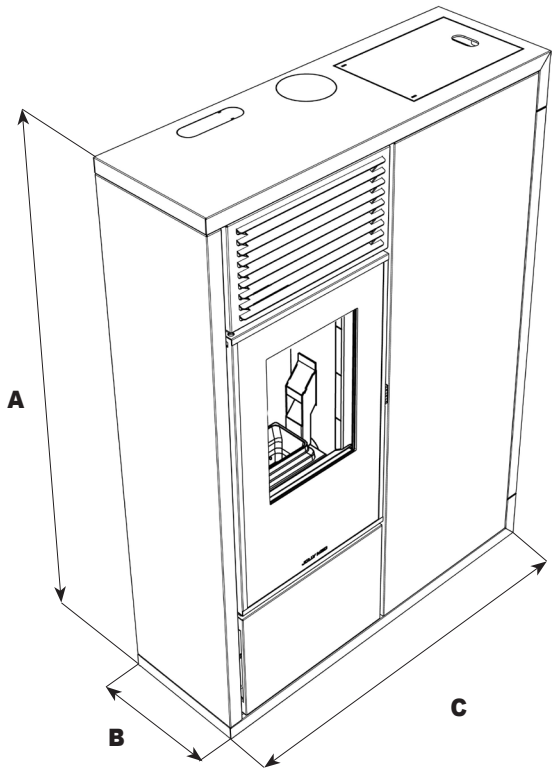
06.5 DIMENSIONS

All measurements are in mm.

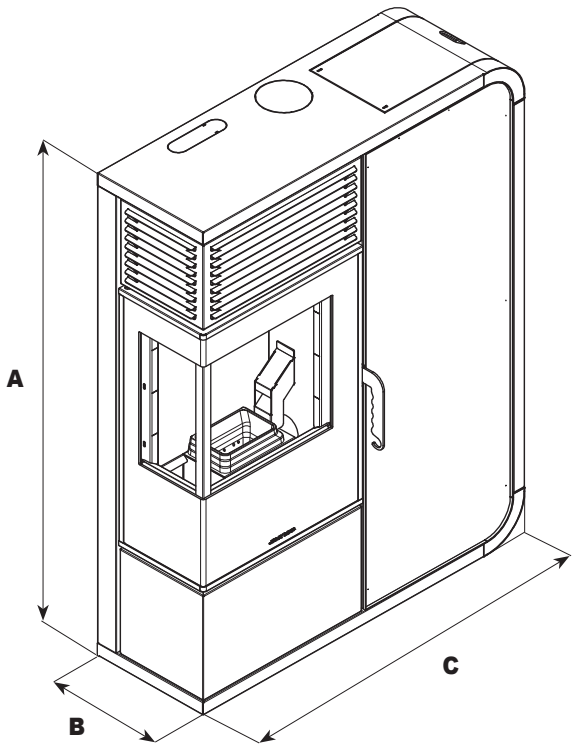


	Frontale	Quadra	Angolo
A	1134	1134	1134
B	346	346	346
C	852	852	862

Frontale



Quadra

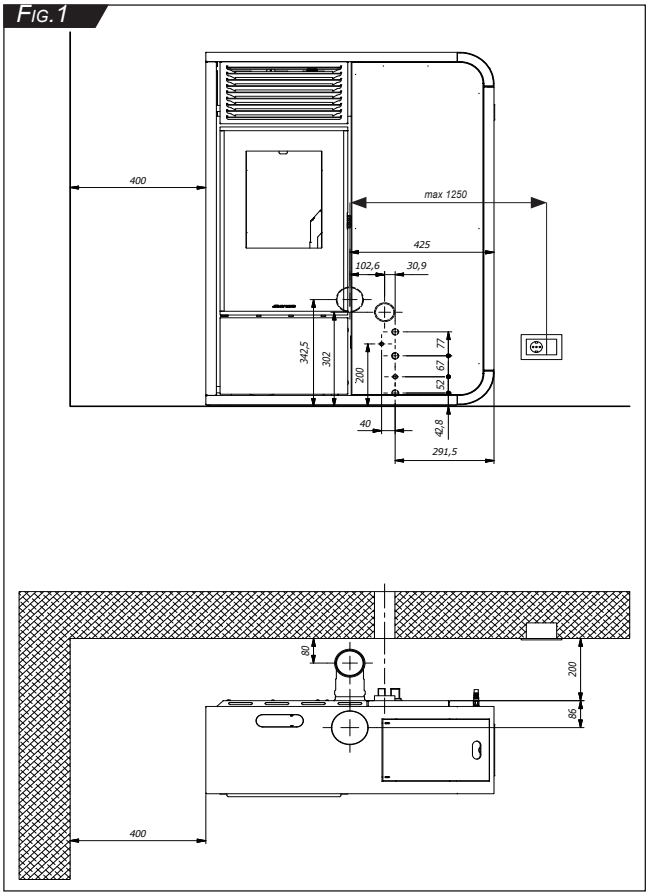


Angolo

CHAP.07 POSITIONING AND CONNECTIONS FOR THE INSTALLER

07.1 HYDRAULIC CONNECTION AND EXTERNAL AIR INTAKE SETTINGS

FIG. 1

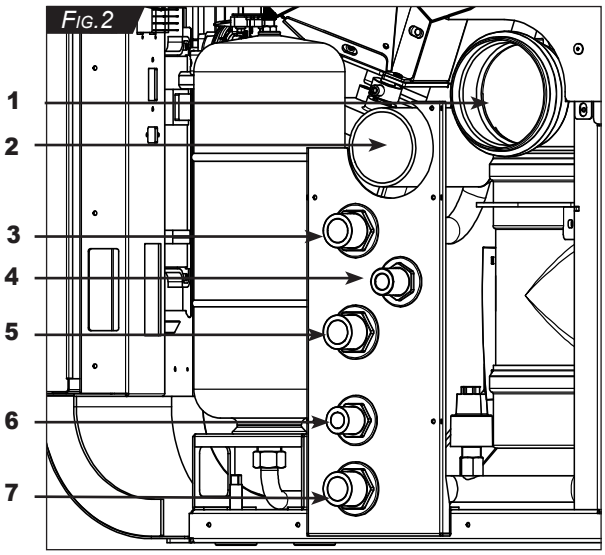


The device must only be installed indoors and on surfaces that can support the load. If the existing construction does not meet this requirement, it will be necessary to take appropriate measures (e.g. installing a load distribution plate). The appliance must be installed in an area where the appliance itself, gas exhaust pipes and flue can be easily accessed for maintenance. *FIG. 1* and *2* illustrate pipe functions and minimum distances that must be observed. All measurements are in mm.

The lateral distance from the adjacent wall, according to installation, is to be maintained on both sides.

1. Fume exhaust Ø80 F
2. Air intake Ø60
3. System flow ¾"M
4. Safety valve discharge ½"M
5. System return ¾"M
6. System feed* ½" M
7. System discharge ¾"M

FIG. 2



NOTE

As indicated in the national reference standard UNI 10683:2012, the product cannot be installed in rooms with a volume of under 15 m^3.

NOTE

Bear in mind that the minimum distances from inflammable materials are:

Minimum air distance from inflammable side wall: 400 mm
Minimum air distance from inflammable rear wall: 200 mm
Frontal air distance from inflammable material: 150 cm

As indicated in **CHAP.06.1 - OMOLOGAZIONE**

NOTE

The external air intakes must be made so that they cannot get accidentally covered and if they have an insect protection mesh they must be cleaned periodically to prevent clogging with dust and dirt, especially in periods with intense pollen concentrations.

NOTE

The hydraulic kit does not include cut-off valves. Therefore, we recommend these valves are installed on each stove hydraulic connection during installation.
Use outlet type valves leaving the pulley towards the stove (see **CHAP.07.6 - HYDRAULIC KIT**).

*FOR THE SYSTEM FEED THE COLD WATER MUST BE CONNECTED TO THE APPLIANCE.

WARNING

At the end of installation, accurately clean the heating system to eliminate all work residue. Dirt deposits can cause hydraulic components installed on the device such as the water circulator, anti-condensation valve, automatic air breather valve and safety valve to malfunction.
Maintenance for problems due to these faults is not covered by the Jolly Mec warranty.

07.2 FLUE OR FUME EXHAUST SYSTEM

The flue or fume exhaust system is a fundamental element for the proper functioning of the stove and must comply with the requirements of The Building Regulations Part J and with the following general standards:

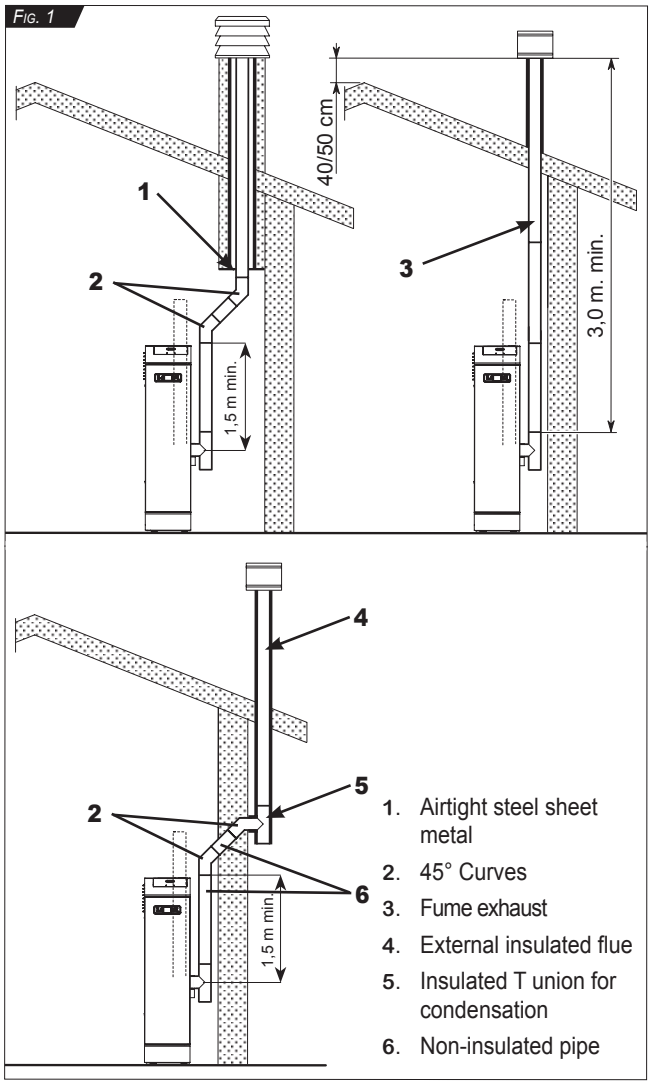
EN1856-1 Chimneys. Requirements for metal chimneys - Part 1: System chimney products
EN1856-2 Chimneys. Requirements for metal chimneys - Part 2: Metal flue liners and connecting flue pipes
UNI 10683 Heat generators operating with wood or other solid bio fuels - Installation requirements

The diameter of the flue must be sized according to the technical specifications of the appliance and type and place of installation. Each appliance must have its own chimney flue without any inlets from other appliances.
The exhaust duct of the combustion products generated by the forced draught equipment must respond to the following requirements:

- it is necessary to use union joints and pipes with pressure resistant seals, as the union of the flue could be slightly pressurised while the appliance running
- all changes in direction must be open to inspection to facilitate maintenance
- correct draught to maintain depression in the combustion chamber, as per the technical specifications, must be guaranteed
- it must be watertight, waterproof and suitably isolated and insulated
- must be made of suitable materials that resist normal mechanical stress, heat, the action of the combustion products and acid condensations
- must be prevailingly vertical structures with deviations from the axis not greater that 45°
- must be adequately distanced from combustible or inflammable materials via an air space or suitable insulation (as indicated in The Building Regulations Part J - Diagram 13).
- must have an internal section which is preferably circular: square or rectangular sections must have rounded corners with a radius of no less than 20 mm
- must have an internal section that is constant, free and independent

If the flue is installed externally it must be insulated to prevent the cooling of fumes and formation of condensation. The same is valid for the tract from the roof to the chimney cap (Torrino). For the union between the stove and the flue, or if there are deviations or curves, for easier, quicker and safer installation, we recommend using double-walled stainless steel pipes.
The use of pipes in fibre cement for connecting the equipment to the flue is forbidden.
Exhaust pipes must not run through rooms where the installation of combustion equipment is forbidden.
The union must be connected to the flue in such a way as to ensure they remain airtight when the appliance is operating in pressurised conditions and to avoid the formation of condensation and its conveyance to the appliance.

Fig. 1



It has to be avoid, as much as possible, the assembly of horizontal sections. In any case, the horizontal segment (or its horizontal projection) do not have to be longer than two meters with minimum slope not less than 5%. The horizontal section does not have to be connected directly to the smoke fan output but after the first vertical segment (6) *Fig.1*.

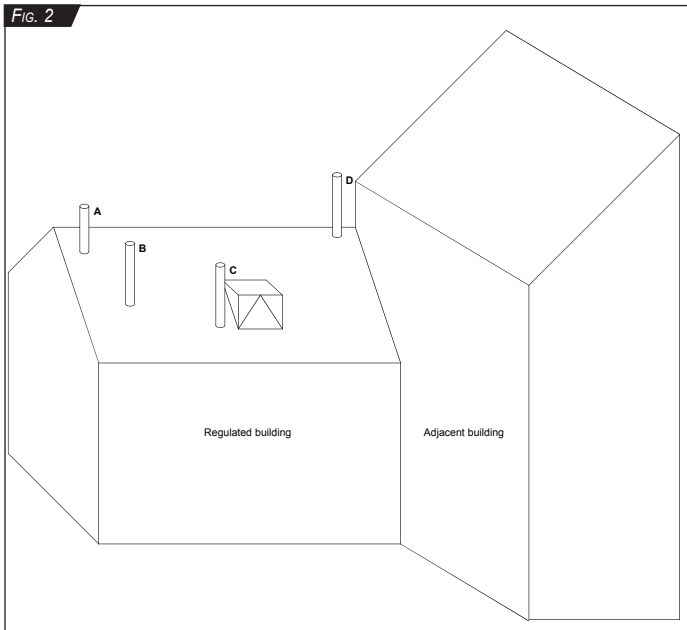
The chimney system for the smoke exhaust MUST be dimensioned and projected by a Qualified Engineer. He will determine the proper smoke exhaust system taking into consideration the product technical data, kind of installation, installation location and mostly the installation technical regulation in force. The Engineer will give indications to the installer about the materials to use, smoke path section, insulation thickness, corrosion resistance and all requirements needed for the correct working of the system product-chimney.

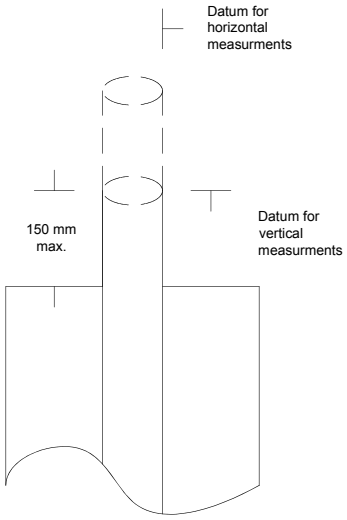
The correct dimension of the air intake for ventilation and aeration of the installation location MUST be verified in conformity with the technical regulation in force.

Malfunctioning of the product caused by a smoke exhaust not properly projected and dimensioned WILL NOT be object of objections to Jolly Mec and interventions at Jolly Mec charge.

For appliance that must reach ceiling or wall exhaust outlets that are not coaxial with regard to the issue of the fumes from the machine, changes in direction must be made using an open elbow of 45° (see *Fig.1*).
The outlet from a flue should be above the roof of the building in a position where the products of combustion can discharges freely and will not present a fire hazard, whatever the wind conditions. Flue outlet positions which can meet the requirements in common circumstances are shown in *Fig. 2 (*The Building Regulations Part J - Diagram 17) while *Fig. 3 (*The Building Regulations Part J - Diagram 18) shows flue outlet positions

FIG. 2





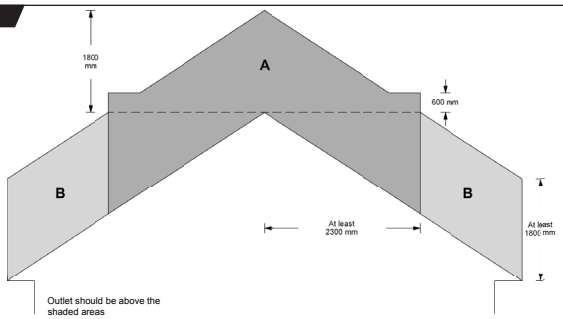
The datum for vertical measurments is the point of discharge of the flue, or 150 mm above the insulation, whichever is the lower

Point Where flue passes through weather surface (Notes 1, 2)		Clearances to flue outlet
A	At or within 600 mm of the ridge	At least 600 mm above the ridge
B	Elsewhere on a roof (whether pitched or flat)	At least 2300 mm horizontally from the nearest point on the weather surface and: a) at least 1000 mm above the highest point of intersection of the chimney and the weather surface; or b) at least as high as the ridge
C	Below (on a pitched roof) or within 2300 mm horizontally to an openable rooflight, dormer window or other opening (Note 3)	At least 1000 mm above the top of the opening
D	Within 2300 mm of an adjoining or adjacent building wether or not beyond the boundary (Note 4)	At least 600 mm above any part of the adjacent building within 2300 mm.

Notes

1. The weather surface is the building external surface, such as its roof, tiles or external walls.
2. A flat roofs has a pitch less than 10°
3. The clearances given for A or B, as appropriate, will also apply.
4. A vertical flue fixed to an outside wall should be treated as equivalent to an inside flue emerging at the nearest edge of the roof.

FIG. 3



Area	Location of flue outlet
A	At least 1800 mm vertically above the weather surface and at least 600 mm above the ridge.
B	At least 1800 mm vertically above the weather surface and at least 2300 mm horizontally from the weather surface.

where flue discharges in proximity to roofs with surfaces readily ignitable, such as where roofs are covered in thatch or shingles.

The use of counter slope elements is forbidden. The flue union must have a constant section and allow soot to be collected and swept away. Changes in cross-section are only allowed at the outlet of the heat generator: the use of adaptors on the coupling with the chimney flue is prohibited.

Running other air ducts and installation pipes inside the exhaust pipes, even if oversized, is forbidden.

In the event of a black-out, suitable sizing of the fume exhaust system guarantees sufficient draught to exhaust the fumes generated by combustion without the use of the electric exhaust fan.

If the performance of the fume exhaust system is not excellent, it is possible to adjust the operating settings of the stove to overcome draught defects by a maximum of 15% of the fume exhaust device; this adjustment is however the exclusive competence of the specialised Technical Service Center.

One airtight reading point is recommended on the flue to check emissions after installation and measure draught.

Supporting the weight of the flue with the appliance union is strictly forbidden. Use specific stands or independent supports for this purpose.

To install other combustion devices in the same room where the pellet appliance is installed, refer to UNI 10683 and UNI 7129 installation regulations.

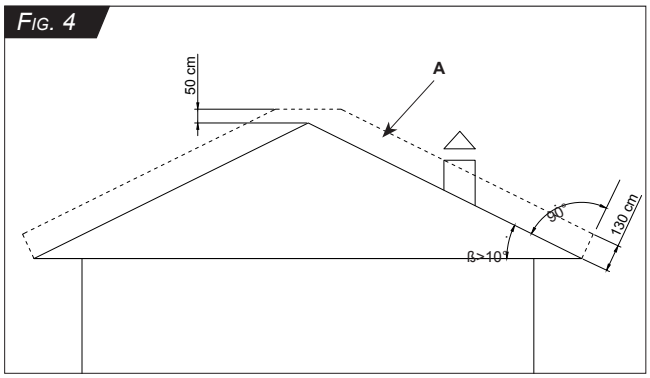
The minimum flue height must be over 3,0 m.

Blocking of wall exhaust terminals at any height and any distance from openings, doors and/or windows is not permitted and a very important rule to follow.

Installation of external fireplaces must be performed using insulated double-walled pipes, to prevent the formation of condensate; it must also be possible to inspect the base of the fireplace for routine maintenance which must be done at least once a year.

A windproof chimney cap must be installed; in the presence of adverse weather conditions, especially high winds, this accessory allows the stove flue draught system to operate much easier.
A minimum flue draught between 10 and 14 Pa must be guaranteed. This value must be measured using specific and controlled instruments each time the appliance and flue undergo maintenance. With strong winds and the chimney cap installed in the reflux area (see *Fig.4*, zone bordered by the dotted line A for roofs with ß>10° slant) of the roof or without complying with the distances foreseen by UNI 10683 situations may arise where the stove does not work which will trigger the no depression alarm. It is not possible to make corrections or reset the stove operating values to override the alarm.

Fig. 4



07.3 INSTALLATION ROOM VENTILATION

According to reference regulation UNI10683, 4 Pa depression must be verified between the installation room interior and exterior. Prepare adequate ventilation openings in the room where the product is installed to permit at least 50 m³/h clean comburent air flow not taken from polluted rooms. The ventilation openings, if fitted with insect-proof mesh, must be easily removable and undergo periodic cleaning to ensure clear air flow passage.
If the comburent air inlet is directly connected to the stove, it may be necessary to make adjustments to the control unit, especially during the start-up phase, as the temperature and humidity of outdoor air not only varies during the period of use of the product, but also come into direct contact with the pellets and the ignition element, generating different fuel burning times.
Jolly Mec allows the ducting system at the input of the combustion air within and not over the following limits: the length can't be longer that 1000 mm, the diameter has to have at least the same section of the stove/boiler connection, it is possible only one 90° change of direction, the center-to-center distance of the combustion air input pipe can be ± 300 mm.

WARNING

As for the fuel product exhaust system, air vents are also extremely important and must be given the appropriate consideration and respect.
The installer is directly liable for all electrical system parts, generation hook-up to the system, ventilation and the fume exhaust system and MUST, at the end of installation work, issue a declaration of conformity as per Ministerial Decree 37/08. On the other hand, the purchaser MUST assign all work to a qualified professional technician.

The device must be installed and used in accordance with all local and national laws and EC Regulations

NOTE

It is only recommended to connect the comburent air ducting system to the stove if absolutely necessary. Very cold air and humidity may cause difficulties during the stove ignition phase.

WARNING

It is not allowed to install coaxial systems for the smoke output.

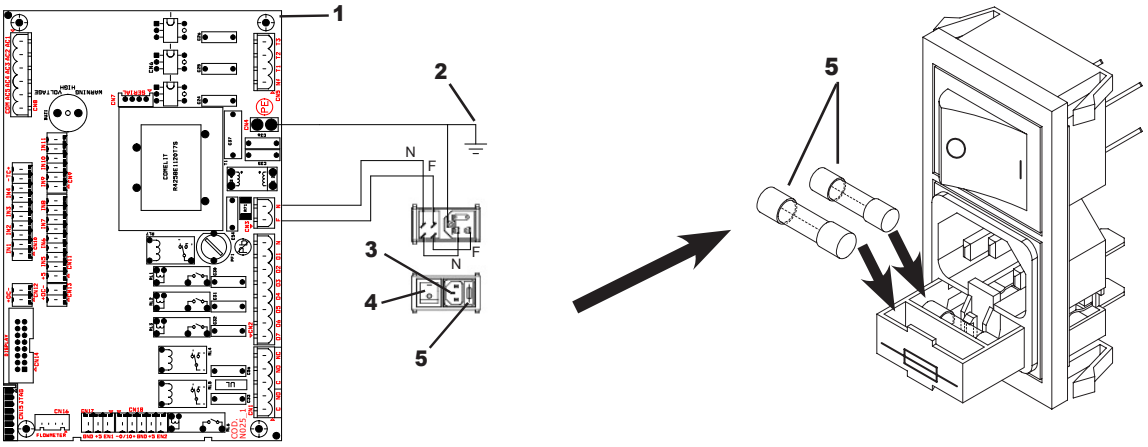
07.4 ELECTRIC CONNECTIONS

Connect the 230Vac 50Hz line with the proper cable with plug, supplied with the appliance, which powers up the control unit and all the appliance's electrical components.

The device is equipped with a power socket with fuses and a bipolar switch.

In the event that the control unit does not switch on, even after turning the switch to I "ONE", check that the fuses are intact.

1. Control unit manual
2. Earth
3. Power socket with cord included
4. Switch
5. Fuse Ø5X20 F4A 250V IEC 127-II



WARNING

Electrical connections must be carried out by skilled personnel according to the regulations in force (2014/30/UE and 2014/35/UE).

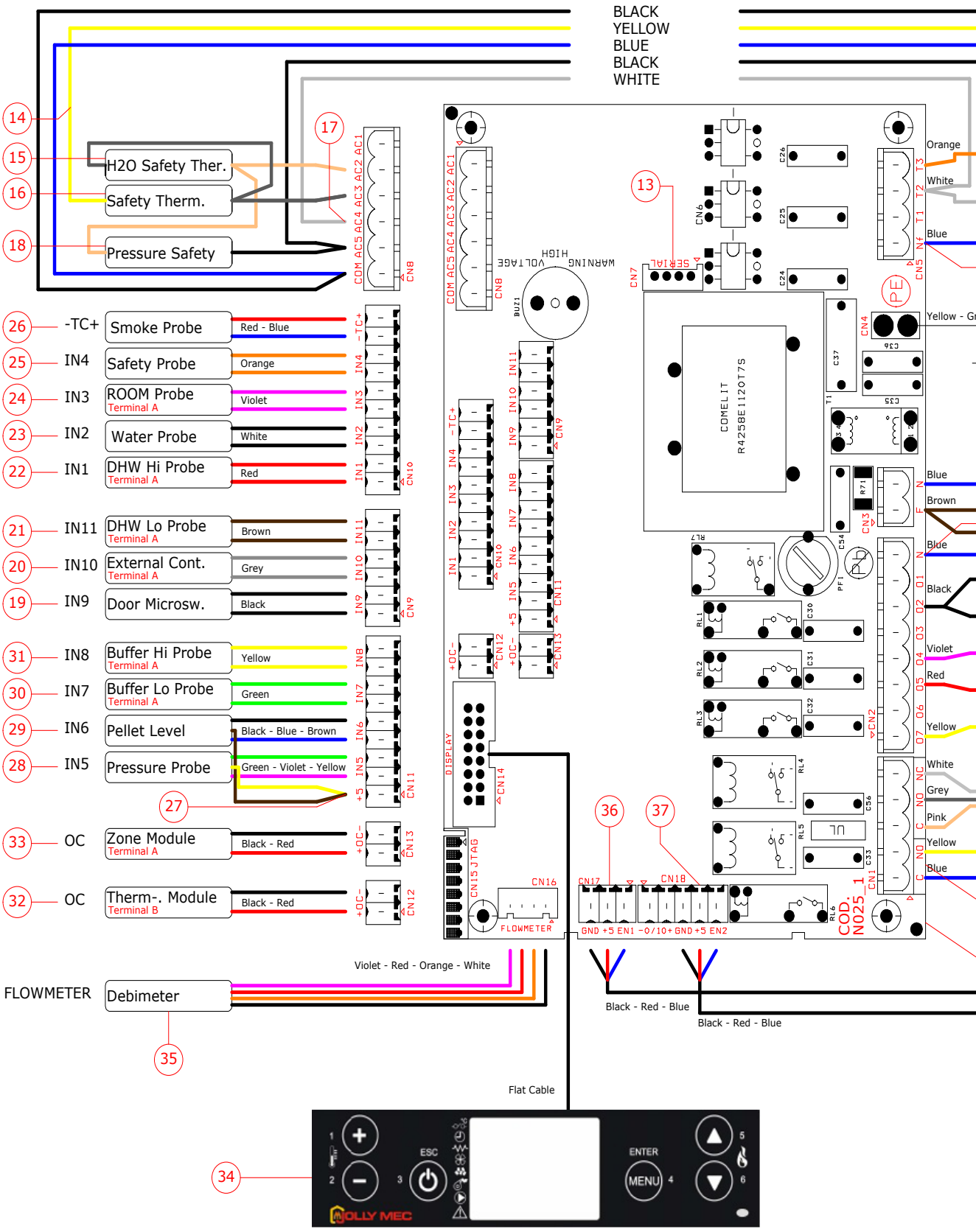
07.5 CONTROL UNIT ELECTRICAL WIRING DIAGRAM

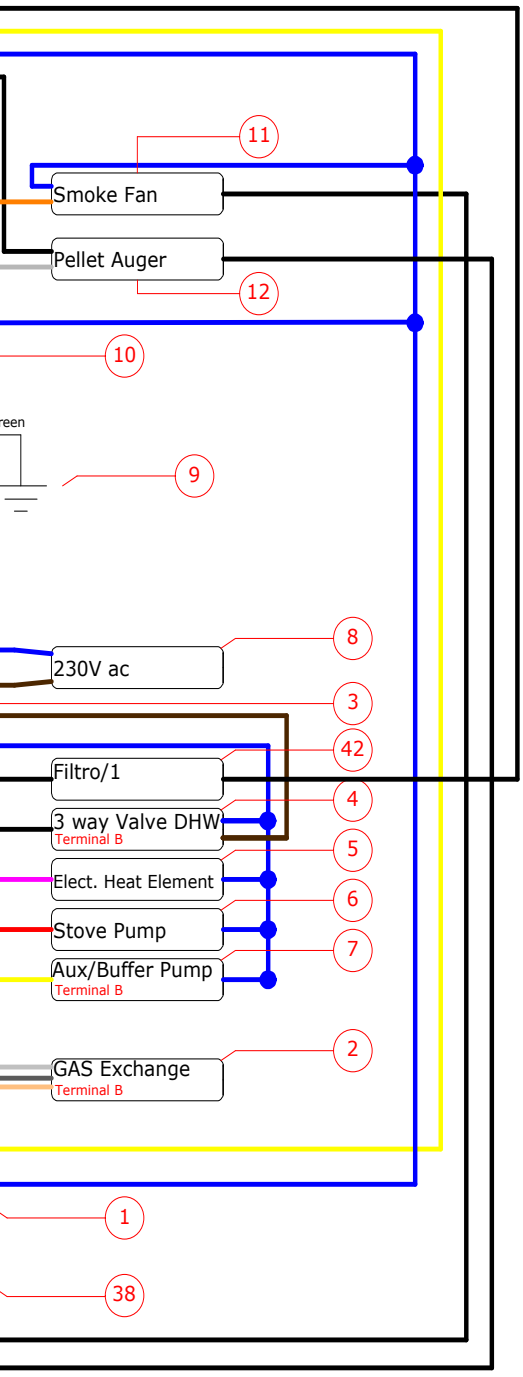
WARNING

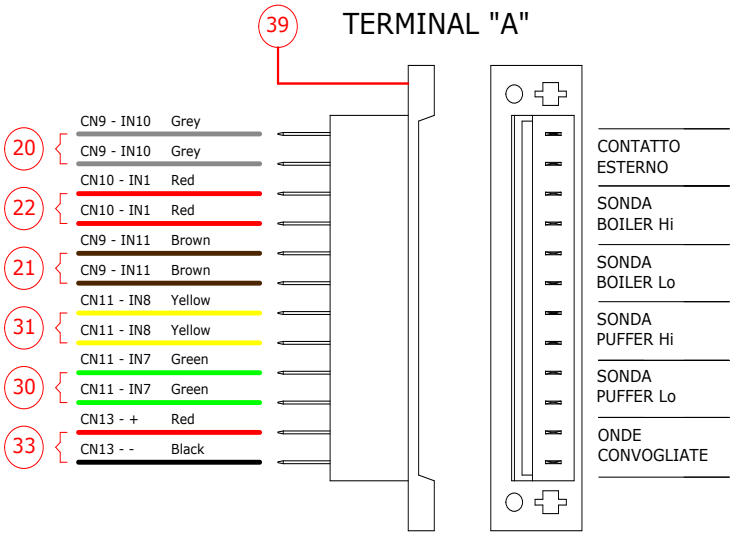
Electrical connections must be carried out by skilled personnel according to the regulations in force (2014/30/UE and 2014/35/UE).

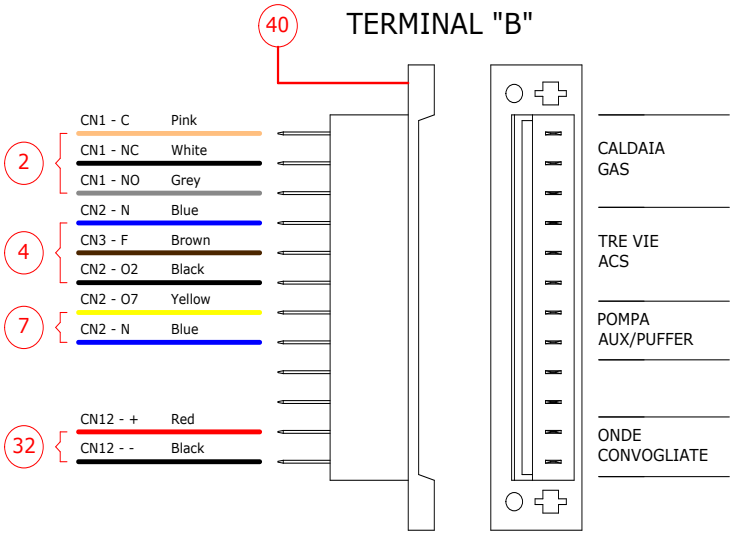
Following is a list of electrical components illustrated in the layout on the next page:

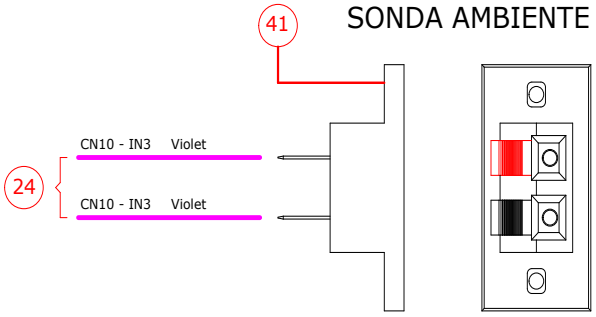
TABLE OF COMPONENTS		
POSITION	**CODE**	**DESCRIPTION**
4	DEVIATRICE/1	Deviator value for household boiler, installation with layout 6 and 7, terminal 02. Connection to terminal board B
5	RESISTENZA/6	Electrical resistance to start pellet burning, terminal 04
6	CIRCOLATORE/1	High-efficiency stove water circulator, terminal 05
11	VENT/1	Fume exhaust fan, terminal T3
12	MOTOR/17	Load pellet auger gearmotor, terminal T2
15	TERMOSTATO/13	Stove water safety thermostat with manual reset, terminal AC2
16	TERMOSTATO/4	Pellet hopper safety thermostat with manual reset, terminal AC3
18	PRESSOSTATO/2	Fume exhaust fan safety depressimeter, terminal AC5
19	MICRO/1	Door contact safety microswitch, terminal IN9
23	SONDA/3	Stove water temperature probe electrical connection, terminal IN2
24	SONDA/3	Room probe electrical connection, terminal IN3. Connection also to terminal A for external probe or thermostat connections.
25	SONDA/3	Safety probe electrical connection for internal temperature inside the stove cladding, terminal IN4
26	SONDA/1	Fume temperature probe electrical connection, terminal -TC+
28	TRASDUTTORE	Stove water pressure transducer, terminal IN5
29	SENS/1	Pellet level probe, terminal IN6
34	DISPLAY/11	Command display, DISPLAY terminal CN14
35	DEBIMETRO/1	Comburent air flow probe, FLOWMETER terminal CN16
38	QUA/PELLET/4	Motherboard
39	CONNETTORE/4	12-way union for probes and external devices
40	CONNETTORE/4	12-way union for probes and external devices
41	CONNETTORE/2	12-way union for ambient probes
42	FILTRO/1	RC filter for 3 way valve


BLACK
YELLOW
BLUE
BLACK
WHITE
14
15
16
18
H2O Safety Ther.
Safety Therm.
Pressure Safety
17
COM AC5 AC4 AC3 AC2 AC1
CN8
26
-TC+
Smoke Probe
Red - Blue
25
IN4
Safety Probe
Orange
24
IN3
ROOM Probe
Terminal A
Violet
23
IN2
Water Probe
White
22
IN1
DHW Hi Probe
Terminal A
Red
CN10
21
IN11
DHW Lo Probe
Terminal A
Brown
20
IN10
External Cont.
Terminal A
Grey
19
IN9
Door Microsw.
Black
CN9
31
IN8
Buffer Hi Probe
Terminal A
Yellow
30
IN7
Buffer Lo Probe
Terminal A
Green
29
IN6
Pellet Level
Black - Blue - Brown
28
IN5
Pressure Probe
Green - Violet - Yellow
27
CN11
33
OC
Zone Module
Terminal A
Black - Red
CN13
32
OC
Therm-. Module
Terminal B
Black - Red
CN12
WARNING HIGH VOLTAGE
SERIAL
CN7
BUZ1
CN8
CN6
C26
C25
C24
13
Orange
White
Blue
CN5
T3
T2
T1
N4
CN4
Yellow - Gr
C36
C35
C37
T1
COMELIT
R4258E1120T7S
Blue
Brown
CN3
R71
C54
RL7
PFI
Blue
Black
Violet
Red
Yellow
CN2
N
F
O1
O2
O3
O4
O5
O6
O7
RL1
RL2
RL3
C30
C31
C32
RL4
RL5
RL6
C56
C33
CN1
White
Grey
Pink
Yellow
Blue
NC
NO
C
DISPLAY
CN14
CN15 JTAG
CN16
FLOWMETER
CN17
CN18
GND +5 EN1 -O/10+ GND +5 EN2
36
37
COD. N025_1
Violet - Red - Orange - White
FLOWMETER
Debimeter
35
Black - Red - Blue
Black - Red - Blue
Flat Cable
34
ESC
ENTER
MENU
JOLLY MEC









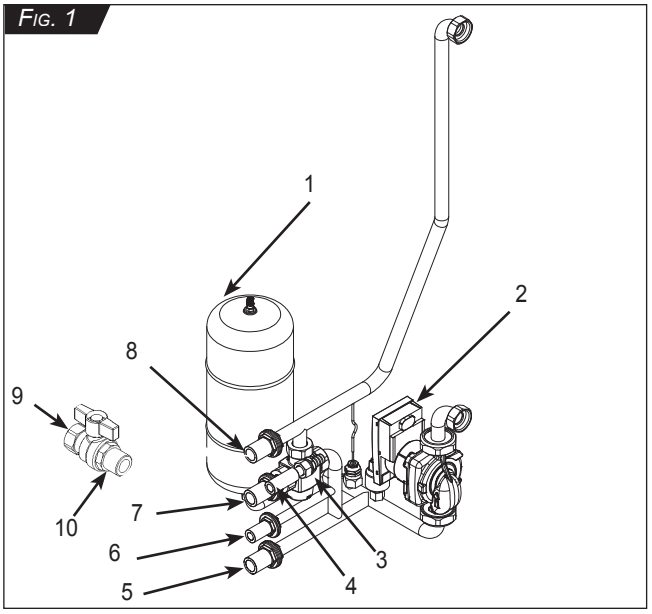
NOTE

The representation of the components is approximate, but they can change in terms of shape.

07.6 HYDRAULIC KIT

The water heating stove comes with a standard pre-installed hydraulic kit without domestic hot water production (DHW)
In *Fig. 1* e 3 illustrate hydraulic kit component. Following is an itemised list of these components:

Fig. 1



1. 3 litre expansion tank (pre-load 1,5 bar)
2. Heat circulation pump
3. Anti-condensation valve
4. Safety valve discharge ½"M
5. System discharge ¾"M
6. System feed* ½" M
7. System return ¾"M
8. System flow ¾"M
9. Outlet (pulley), to be installed facing the stove
10. Cut-off valve (not included, supplied by the customer)
11. Pressure transducer
12. Hydrometer

Fig. 2 illustrates the air breather unit:

- **A.** Air breather valve
- **B.** Stove water temperature probe and water safety thermostat probe well
- **C.** Safety valve 3 bar

Fig. 2

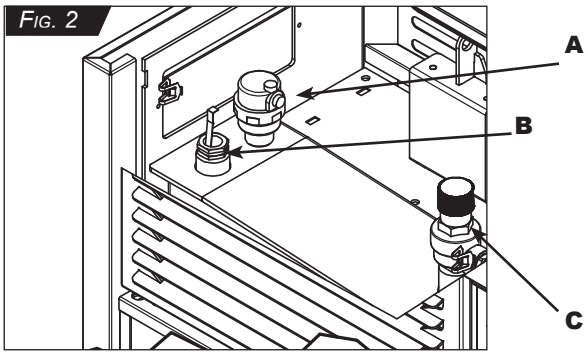
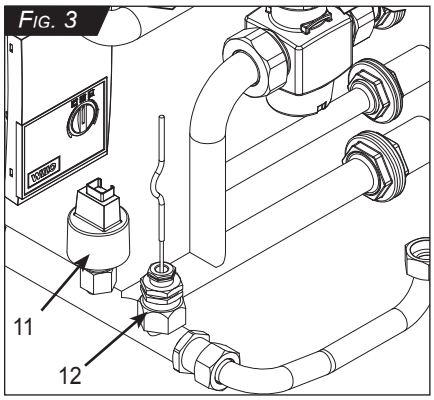


Fig. 3



WARNING

The installation operator is obliged to check that the closed expansion tank, supplied with the stove, has a capacity which is suitable for the system it will be connected to. For medium/large systems, a heat technician should inspect and calculate the needs of the rooms to be heated according to current regulations.

WARNING

1-1.2 bar cold pressurised water must always be in the stove. Topping up pressure is manual. After topping up, make sure the valve is closed.

• High Efficiency circulator

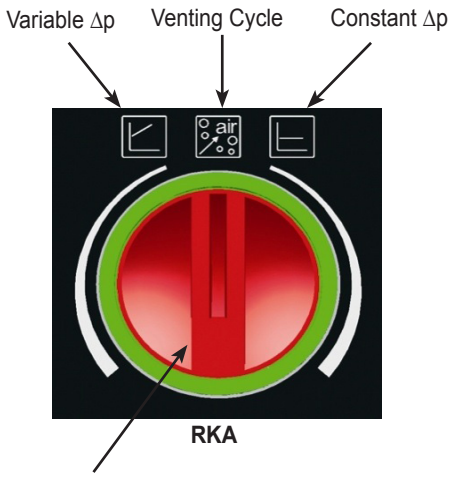
The heating stove is fitted with a high-efficiency circulator that generates low energy consumptions with an energy saving of about 60% compared to a traditional circulator.

The heater system engineer can choose from two operating modes:

- Constant pressure mode
- Variable pressure mode

Conforming to EU energy saving regulations ErP-2015.

The figure below represents a detail of the high efficiency circulator.



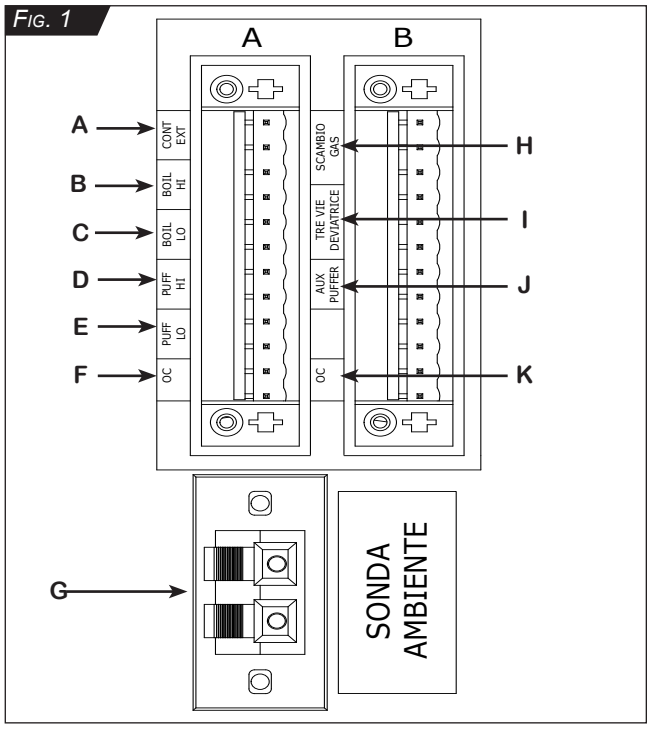
Red Knob to adjust the position of Variable Δp, Venting cycle and the Constant Δp

Pump led colour key:

LED	DESCRIPTION OF FUNCTIONS
Off	Circulator not connected to the mains.
Flashing green	With the vertical knob in air position, for ten minutes the pump performs high speed operating cycles alternating with stand-bys to bleed the air from the system.
Green - Red Flashing	Electrically powered pump at a standstill. It may be under powered T<160V or over powered T>253V. The engine thermal protection may have tripped due to overheating.
Flashing red	Blocked Pump. Switch off and then switch the pump back on, if the problem persists check the cause of the blocking or replace the pump.
Green	Standard operations.

07.7 EXTERNAL PROBE SOCKET UNIT

FIG. 1



External probe socket unit (*FIG. 1*):

A Connection for any external contact to turn the device on and off

B Terminal for high Boiler temperature probe connection

C Terminal for low Boiler temperature probe connection

D Terminal for high Puffer temperature probe connection

E Terminal for low Puffer temperature probe connection

F Terminal for conveyed wave connection between device electronic board and any zone module.

G Terminal for remote room probe connection. In this case the internal probe must be disconnected, or the probe on-board the device can remain connected if a room thermostat is connected.

H Terminal for gas stove connection and for electric by-pass

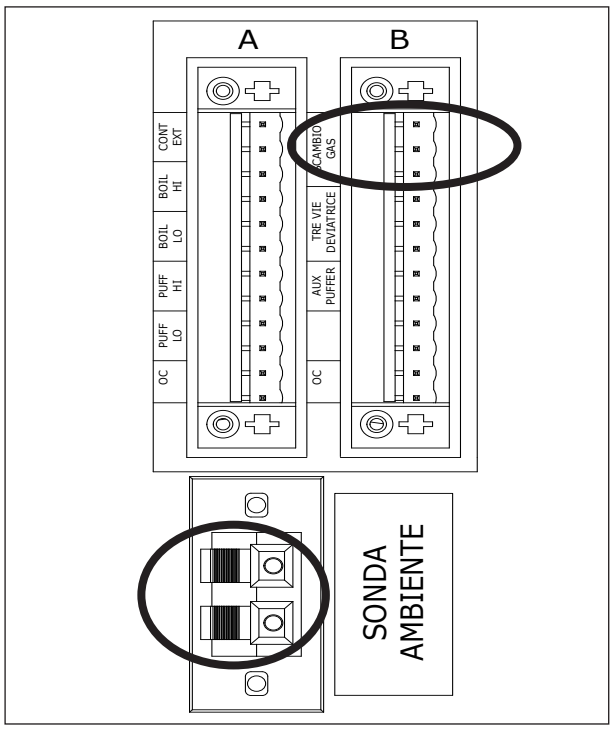
I Terminal for external three-way diverter valve connection for domestic hot water boiler

J Terminal for connection to the auxiliary pump in layouts 1 and 3 and connection to the pump puffer in layouts 5 and 7.

K Terminal for conveyed wave connection between device electronic board and any thermostat module.

07.8 SYSTEM CONFIGURATIONS

Different hydraulic system configurations are possible with the device to allow for better operations based on the system solution adopted in the installation phase.
This setting must be made by the installer or by the the specialised Technical Service Centre.
Factory settings are set in CONFIGURATION 1 in MENU 9 – TECHNIC SETTINGS, in the SETTINGS RUNNING page, accessible to the user in the stove status page in MENU 8.
Available system configurations are numbered up to 7 and itemised below:



NOTE

Use the C N_C N_O connector to enable or disable a parallel heat source based on pellet stove operations: with the pellet stove OFF, ALARM ON and ALARM MEMORY, a parallel source can be enabled. In all other conditions, stove operations takes precedence.

CONFIGURATION 1 – Heating -

Device configuration for heating only, without the possibility of managing a zone system, an external Boiler for Domestic Hot Water (hereinafter DHW) or Puffer for inert heat accumulation.

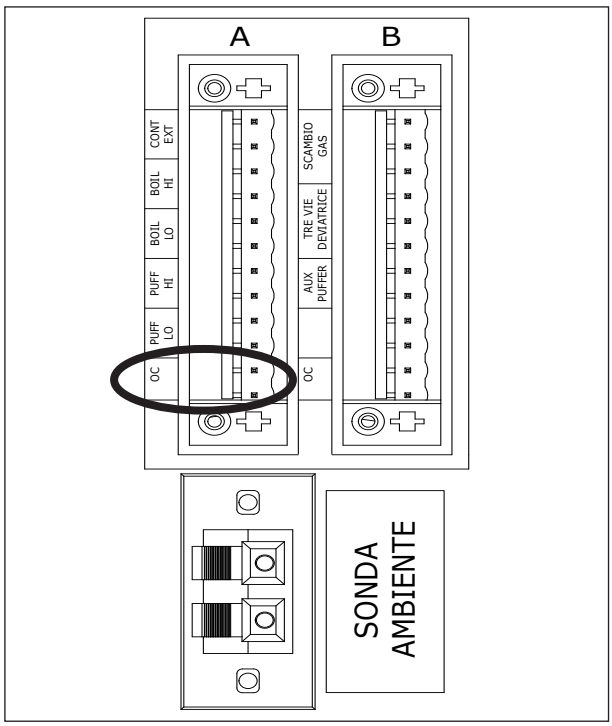
Summer operating mode cannot be set. Instead, the CRONO timer function or STAND-BY.

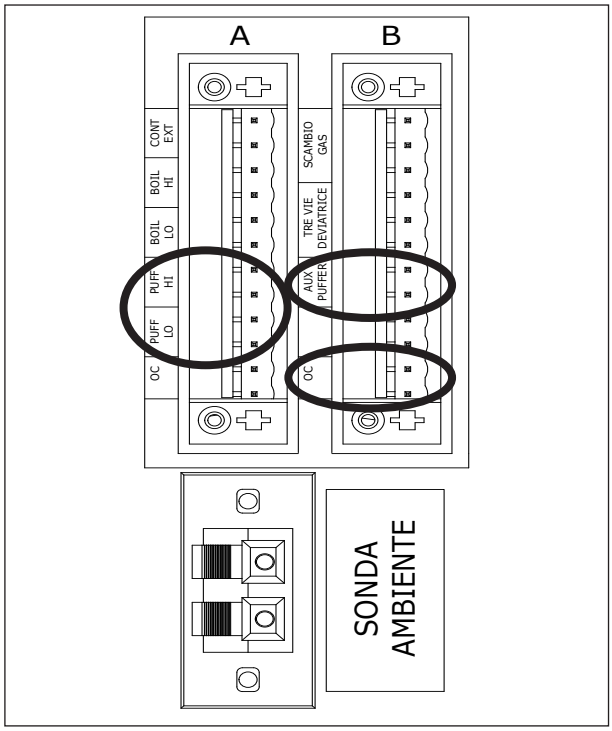
The appliance, once the ROOM TEMPERATURE and BOILER WATER are set, runs at the set power until one of the two temperatures is reached, then switching to ECONOMY. When the appliance is running in ECONOMY mode to reach ROOM TEMPERATURE, the water circulation pump turns off and only turns back on to run the discharge function when the stove temperature is 80°C, to then stop at 75°C, or at a new request by the room probe. It must be checked whether there are hydraulic interceptions between the device and system that could slow water flow and thus cause stove water overtemperature alarms (Alarm AL19 THERMIC WATER).

For the room probe type, a thermostat or chronothermostat can be used, connecting it to the device side terminal boards, inside the right side panel, in line with the terminal board, in the AMB PROBE connector, as illustrated.

To use the external thermostat (or Jolly Mec thermostat module), which must have a CLEAN CONTACT, set the THERMOSTAT as ROOM PROBE in MENU 4 – SET PROBE. A remote temperature probe can also be used as a room probe, always connecting it to the same terminal board but in this case, the temperature probed secured on the device back panel must be electrically disconnected from the electronic board by the Installation technician or by the specialised Technical Service Center.

We recommend using the Jolly Mec thermostat module as the room temperature probe, connecting it to the device back panel. With the thermostat module, all appliance functions can be fully controlled including setting operating times, selecting one of the 5 adjustable heat profiles, adjusting working temperatures, being alerted when pellets end.





CONFIGURATION 3 – Zone heating -

Configuration identical to CONFIGURATION 1, with the addition of a zone module to manage a system with up to four zones per module, with zone valves or zone circulators. If the module is used, parameter Pr90 must be activated in the TECHNIC SETTINGS in the SETTINGS GENERAL page, setting the value to ON. The module allows all thermostats to be received in input (CLEAN CONTACT) and to activate the relevant outputs (CLEAN CONTACTS) that can be used for zone valves or circulators. Connection between the stove and expansion module must include the terminal from the module OC connector to the stove back panel OC terminal. Zone module electrical power must be protected by the same circuit breaker that powers the stove.

WARNING

! For stove maintenance, if the zone module is powered by a different mains than the stove, also cut off module power. Electrical connections between the two electronic parts could power the stove board even if unplugged and vice versa.

CONFIGURATION 5 – Puffer-

The appliance is connected to a Puffer (inert heat tank) and not directly to the heating system. PUFFER TEMPERATURE must be set. Room temperature control is not considered. However, make sure the room probe type is set to THERMOSTAT in MENU 4 and that the connection to the AMB PROBE terminal on the back of the appliance is always electrically open.

In CONFIGURATION 5, the appliance only ensures that the temperature probe connected to the PUFF Hi terminal meets set temperature settings.

When the puffer temperature is met, the appliance switches to ECONOMY mode, turning off the pump. When puffer temperature drops 5°C (default value that can be adjusted in MENU 9 – TECHNIC SETTINGS) under the set value, the appliance resumes operations at the set power, turning the circulation pump back on when stove water temperature is higher than PUFFER TEMPERATURE.

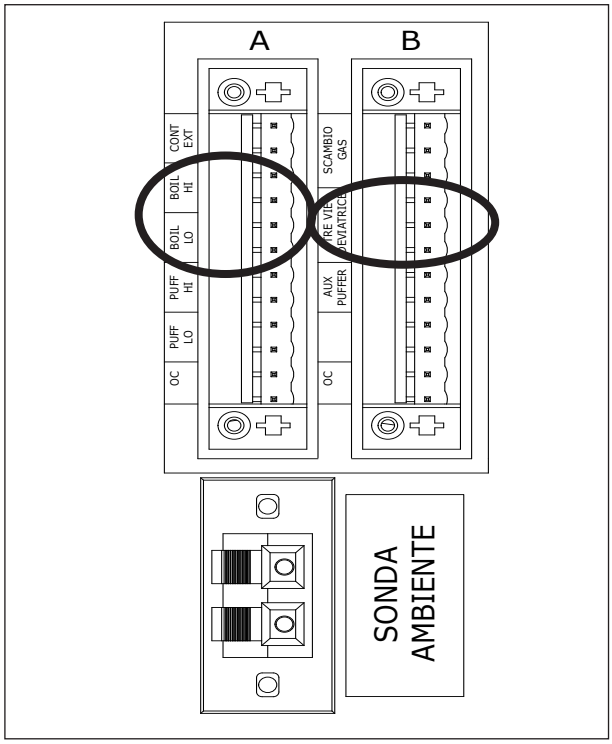
In this configuration, the STAND-BY function is automatically activated and turns the appliance off when in ECONOMY mode for a period of time longer than that set in MENU 5 – SET STAND-BY, at the DELAY OFF value.

When the appliance is in Stand-by, thus waiting to turn back on, the only input that can turn the appliance on is the PUFF Lo probe value which, at PUFFER SET TEMPERATURE -10 °C, permits restart. The differential restart value can be set in MENU 9, password protected for the service technician.

The zone module can be used with CONFIGURATION 5. In addition to the room thermostats and zone valves or circulators, a secondary circuit circulator can also be connected to the zone module and activated by a specific parameters in the TECHNIC SETTINGS menu.

For further information on zone module use, see the specific user manual.

If the heat accumulator is equipped with an internal coil for DHW production, summer mode can be set. In this mode the appliance only considers Puffer temperature settings and ignores any zone module and/or room requests.



CONFIGURATION 6 – Boiler -

The boiler is connected to the heating system and in parallel with an accumulation tank for DHW production. In this configuration, the heating part is identical to the functions described in CONFIGURATION 1 while the boiler takes precedence over the heating system request. The boiler probe, connected to the boiler back terminal board, works with a 5°C temperature differential from the set BOILER TEMPERATURE, to activate the three-way diverter valve. The stand-by function can also be set in this conditions and, if all utilities are met, the boiler will await restart. LO boiler probe request (low boiler probe) takes precedence with a -10°C set differential to the set BOILER TEMPERATURE (this differential can be modified by the service technician in the technical menu).

To use the zone module with CONFIGURATION 6, refer to the specific user manual.

If SUMMER mode is set, the three-way valve will be set towards the boiler and the STAND-BY function is automatically activated. When boiler temperature is met, the boiler awaits restart and, when shutting down, if heat dissipation is required, heat is dissipated to the heating system.

CONFIGURATION 7 – Puffer + Boiler -

CONFIGURATION 7 is a mix between CONFIGURATION 5 and CONFIGURATION 6, Puffer and Boiler are connected in parallel to the boiler. The functions described in the relevant configurations also apply to CONFIGURATION 7, with the domestic hot water boiler taking precedence.

WARNING

At the end of installation, accurately clean the heating system to eliminate all work residue. Dirt deposits can cause hydraulic components installed on the device such as the water circulator, anti-condensation valve, automatic air breather valve and safety valve to malfunction.
Maintenance for problems due to these faults are not covered by the Jolly Mec warranty.

CHAP.08 USE AND MAINTENANCE FOR THE USER

08.1 APPLIANCE FUNCTIONS

The appliance electronically controls pellet combustion and water distribution to utilities.
Pellets are taken from the storage tank by the gear motor driven auger and transported directly to the burn pot. The tank is filled through the lid, at the top of the cladding to permit access to the container chute. Pellets must be placed in the tank with a shovel and not directly poured from the bag (see vedi **CHAP.08.6 - ORDINARY MAINTENANCE (by the costumer)**)
Ignition is through air aspirated into the burn pot by the centrifuge fan and brought to high temperature by heating an electrical resistance.
The fireplace is made up of a special steel heat exchanger, closed at the front by a ceramic glass door. The exchanger has a gas pass that allows it to be defined as a flue stove, whose constructions fully exploits the heat produced by combustion.
The quantity of fuel, the feeding of comburent air and the extraction of fumes are regulated with an electronic card in order to obtain a highly efficient combustion.
All the operations for managing machine functions are handled by the supplied control unit installed on the device (see manual SM096 EN attached).

08.2 CONTROL UNIT

The electronic control unit controls all appliance functions and is controlled via a control display.
The electronic control unit features a timer function with customisable programmes and a user-friendly operating settings. Operations are controlled by the ROOM PROBE standard installed, that can be prolonged to the installation room in a more appropriate position to correctly measure room temperature. The Jolly Mec thermostat module can also be used as a room probe.
The electric/electronic elements also include certain systems that have a safety and also regulating function:

FUME TEMPERATURE PROBE	Fitted inside the fume exhaust fan
PRESSURE SWITCH	Connected to the fume exhaust fan
SAFETY THERMOSTAT	Triggers when temperature in the appliance is too high
WATER SAFETY THERMOSTAT	Triggers when water temperature is above the maximum permissible value

The control display lets you use the following main functions:

- Device start and stop
- 5 heating output level adjustment
- Regulate the desired ambient temperature.
- Optimise combustion.
- Manage the timed thermostat with several daily start ups.
- Report any function irregularities.
- Indicate the heating stove's operating mode.
- Regulating the boiler, stove and puffer water temperatures.

NOTE

For a full and detailed description of the content in this section, see the enclosed manual SM096 EN

08.3 APPLIANCE START AND USE

After professionally installing the room ventilation system, the fume exhaust system, the hydraulic system and electrical system according to the relevant regulations, the specialised Technical Service Center can do the optional Commissioning Service.

Follow these steps to start using the product: load pellet of the recommended quality in the tank, set the desired temperature and heat output level (we recommend setting level 3) and press Button 3 to turn on the device. The stove will run until the room probe, thermostat or accumulation tank probe temperature values are reached, according to the set configuration. When the set temperatures are reached, the stove switches to ECONOMY mode until a new request is sent by the probes.

When running in ECONOMY mode, the water circulation pump is off and only turns back on to dissipate heat when stove water reaches 80°C, turning back off at 75°C. For this reason, any system zone valves must be adequately controlled to permit water circulation with room temperature. For this purpose, the Jolly Mec ZONE MODULE (available separately) resolves the problem of alarms due to stove water overheating when zone valves are closed.

Activate STAND-BY mode in MENU 5 to turn off the stove when all probe temperatures are reached for a time over that set in MENU 5 (DELAY OFF). The stove is not actually off but is waiting to turn back on at a new probe request.

The STAND-BY function in system configurations 5 and 7, summer and winter mode, and configuration 6, summer mode, is automatically activated. When the Puffer and/or Boiler tank has reached the set temperature, the boiler will turn off and turn back on when the temperature measured by the Puffer Lo probe or Boiler probe is 10°C lower than the set temperature.The differential value can be modified by the specialised Technical Service Center.

Set SET CHRONO – MENU 2 to time operation start and stop. The crono can be quickly started by pressing Button 1 and 2 on the main display screen. CHRONO and STAND-BY modes cannot be activated simultaneously. The CHRONO function should be considered as a timer function, while STAND-BY is a temperature function. It is possible to set the desired temperature level for each time band.

The message ORDINARY SERVICE is periodically displayed, every 100 hours of operation, to remind the user to clean the stove thoroughly CHAP.08.6 - ROUTINE MAINTENANCE (By the Customer). Press Button **3** in the main screen to cancel the message.

In the event of alarms and/or manual pellet load from MENU 7, message CLEAN BRAZIER is a warning to be sure not to turn on the stove with excessive pellets in the brazier. To cancel the message, clean the brazier and press and hold down Button **3** for three seconds. Cleaning the firebox obviously involves opening the combustion chamber door, an important step to reset the CLEAN FIREBOX message, as it is not possible to restart the device without opening and closing the door. This restriction is managed by a door probe, installed on the bottom front part of the stove, which also checks that the door is opened during operations. If the user wishes to voluntarily open the door, the problem will cause the device to shut down immediately.

The stove also has ANTIFREEZE AND ANTI-JAM functions. The first turns on when stove water temperature is 5°C, starting the water circulator until temperature increases 1°C. If a THERMOSTAT MODULE is used, this function turns on when room temperature reaches the anti-freeze temperature set in the module so that the stove runs a start cycle and runs until room temperatures increases 2°C. The ANTI-JAM function starts the water circulator after 24 hours of disuse for 30”. In addition to the water circulator, if the stove is installed in configurations 6 or 7, the hot water boiler 3-way diverter valve is also started. If the ZONE MODULE is installed, all actuators connected to outputs are run for 30”.

The shutdown phase takes about 20 minutes and the circulator is activated in this interval to perform a heat dissipation cycle.

WARNING

The installation technician must attend the optional Commissioning service since system components may require adjustments not pertinent to the specialised Technical Service Center at this time.
Any additional work or intervention of the specialised Technicat Service Center due to the failure to complete the above adjustments during the optional Commitioning service are at the user’s expense.

NOTE

We recommend activating STAND-BY mode when permitted by factory and/or use conditions. Frequent starts and stops may cause appliance malfunctions, possible no start alarms and waste energy and fuel.

08.4 SAFETY THERMOSTAT WITH MANUAL RESET

Two safety thermostats are installed on the appliance to read pellet hopper and circulating water temperature respectively and trigger the shutdown of the appliance when the temperature in the vicinity of the respective probes detect values above the limits set for safety devices.
The safety thermostats can shutdown the appliance when, for example, the pellet hopper overheats, triggering the pellet thermostat, or when there is no water circulation in the stove, triggering the water temperature thermostat.
To restore normal appliance operations following forced shutdown by a thermostat, proceed as follows:

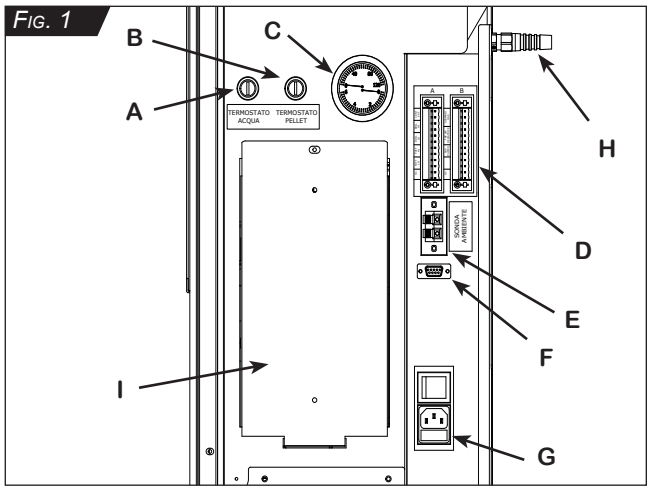
1. Wait until the appliance is completely cold (on average 20 minutes);
2. Unscrew the thermostat reset button lid on the right side of the device, below the side panel (see *Fig. 1*, positions A or B)
3. Press the button (A or B) until you hear a CLICK;
4. Refit the hood;
5. Reset the alarm from the device on board display by pressing Button 3 and waiting for the OFF message;
6. Start up again the appliance.

If the alarm persists, contact the specialised Technical Service Center.

PELLET thermostat, to reset alarm AL07 SAFETY THERMOST

WATER thermostat, to reset alarm AL19 THERMIC WATER

Fig. 1



Socket unit (*Fig. 1*):

A. Water safety thermostat with manual reset
B. Pellet safety thermostat with manual reset
C. Thermal hydrometer
D. Probe input and actuator output terminal boards
E. 2-way connector for use with external ambient probe where installed
F. Board/PC programming connector
G. Main electrical socket with bipolar switch
H. Room temperature probe
I. Motherboard support

08.5 TIPS FOR THE USER

- If condensation appears inside the stove, the causes could be:
  - The heat pump is set too low (recommended minimum threshold 60°- 65°)
  - Poor draught by the flue (clean the flue)
  - Insufficient comburent air (check comburent air conduit)
- If the glass becomes very dirty (with visible blackening) while operating, the possible causes could be:
  - Low draught by the flue (clean the flue or check its characteristics)
  - Insufficient comburent air (add more air with the combustion fan, clean the air intake)
- Check for obstructions in the flue and in the external air intake before starting the machine after a prolonged period of disuse.
- When the stove is not used for a long period of time (spring-summer period) it is necessary to completely empty the tank, the auger and the basket using a vacuum cleaner, then carefully clean to prevent the residual pellets from clogging and subsequently damaging the components.
- Every 300 kg of pellets loaded into the container, check that there are no deposits of sawdust on the bottom, and remove any sawdust there. Sawdust reduces the auger's capacity and creates functional problems for the appliance.
- The pellets must be fed into the hopper using a scoop. Do not empty the sack directly into the hopper.
- The pellet hatch must be closed while the machine is running, and opened only when refuelling is necessary.
- Prompt and systematic maintenance is a fundamental component for perfect functioning and continuous maximum heat efficiency.
- Annually it is necessary to perform extraordinary cleaning unit by specialized Technical Service Centre (see **CAP. 08.7 MANUTENZIONE PROGRAMMATA PREVENTIVA**)

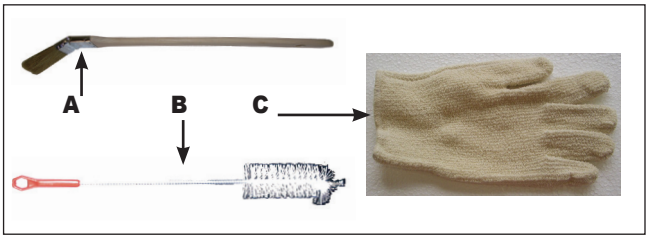
MORE CLEANING = HIGHER PERFORMANCE

WARNING

The device MUST only be used with the combustion chamber door closed. NEVER open it during operations. The safety microswitch installed on-board the machine, the alarm will be triggered if the door is opened and the device will shutdown in 3 seconds.

08.6 ORDINARY MAINTENANCE (by the costumer)

WARNING Before starting any type of cleaning, switch off the main switch and make sure that the appliance is cold. Never restart the stove before completing these operations and correctly reassembling all components.



Cleaning tools supplied

A) Cleaning brush
B) Flue cleaning brush
C) Heat proof glove

To facilitate and improve device cleaning, use an ash vacuum (not supplied with the stove but available from retailers and/or specialised Technical Service Centers).

- **ORDINARY CLEANING**

  TO BE PERFORMED AT INTERVALS INDICATED TO THE SIDE OF EACH ILLUSTRATION.

  A ROUTINE MAINTENANCE MESSAGE IS DISPLAYED EVER 100 OPERATING HOURS. THIS MESSAGE IS NOT THE MINIMUM INTERVAL BETWEEN ONE MAINTENANCE OPERATION AND ANOTHER, BUT ACTS AS A REMINDER FOR THE USER TO ENSURE THE STOVE UNDERGOES PERIODIC CLEANING.

Fig. 1

Fig. 2

Fig. 3

1. Opening the stove door

To open the stove combustion chamber door, turn the handle to unlock and pull to fully open (*Fig. 1-2*). Close the door making sure it is correctly locked. Periodically check seam sealing integrity inside the door (*Fig. 3*).

NOTE Time between one cleaning and the next is strictly tied to fuel quality. The most suitable cleaning frequency can also be established a few days after use according to the actual amount of deposited residue and may vary from recommended Jolly Mec intervals.

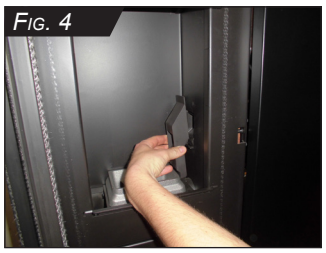


Fig. 4


Fig. 5

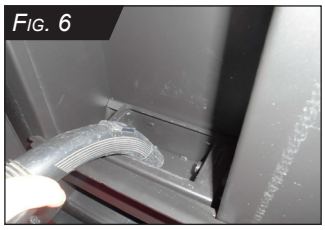


Fig. 6


Fig. 7

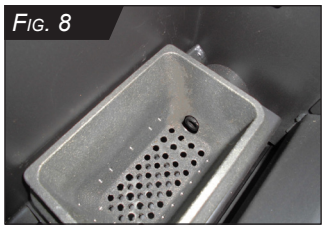


Fig. 8

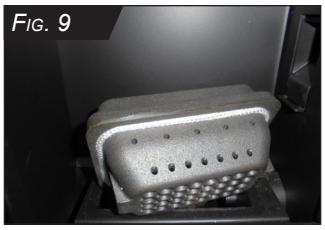


Fig. 9

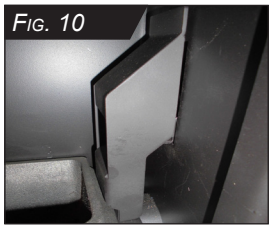


Fig. 10

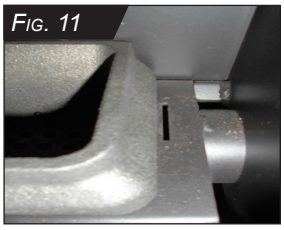


Fig. 11

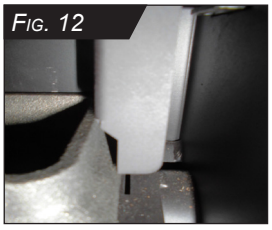


Fig. 12


Fig. 13


Fig. 14

2. Burn pot removal for cleaning (daily)

Let open the combustion chamber door and remove both the pellet chute slide (*Fig. 4*) and the burn pot by lifting upright (*Fig. 5*).
A careful cleaning of the burning pot is required so that all holes are duly swept.
Remove the residual ashes stacked in the burning pot overturning them and knock off the fouling eventually formed against the internal sides by means of a suited tool and by shaking the pot.
For an easier cleaning, it is advised to pull out the burning pot from its casing. Clean carefully all air through holes in the pot by means of a sharp tool.
Check that the support casing is cleaned out and the burning pot lies in the proper casing and taking care to replace suitably the sealing seam.
Before replacing the firebox, check there is no ash or dirt in the firebox housing. Vacuum this area thoroughly too (*Fig. 6*).
After cleaning the burning pot make sure to replace it properly (*Fig. 7*).
The ignition resistance has to be properly centred in the burning pot casing and the support seat must be standing level with the casing compartment (*Fig. 8*).
Check that the gasket located under the burning pot is correctly placed and embedded in the apposite slot. (*Fig.9*)
Replace also the pellet loading slide (*Fig.10*).
Insert both strips of the pellet slide into the apposite slots, the one located on the burning pot support surface (*Fig.11-12)* and the other one next to the pellet outlet conduct (*Fig.13-14*).
Once embedded, the pellet slide right side must be juxtaposed with the right side of the combustion chamber.


Fig. 15

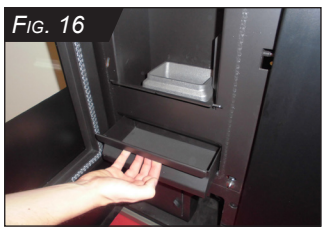


Fig. 16


Fig. 17

3. Ash tray removal and cleaning (daily)

Let open the combustion chamber door and pull out the tray located under. (*Fig. 15-16*). Once removed and emptied the tray, clear the residual ashes in its support base by means of a vacuum cleaner. (*Fig. 17*).
Use a “drum type” vacuum cleaner equipped with a fine mesh filter, which will simplify cleaning as it prevents the vacuumed ash from returning to the environment. When finished, make sure the pan is correctly reassembled.


Fig. 18


Fig. 19


Fig.20

4. Exchanger scraping and cleaning (daily on cold device)

Pull up the cladding cover flap (*Fig. 18*) and grapple the scraper lifting hook through the lower part of the opening door handle (*Fig. 19*).

Move the scraper vertically (*Fig. 20*) at least 5 times to ensure thorough cleaning and removal of all ash and soot from inside the exchanger.


Fig. 21


Fig. 22


Fig. 23


Fig. 24


Fig. 25


Fig. 26


Fig. 27


Fig. 28

5. Fume inspection cleaning (weekly)

Open the fume inspection flap (*Fig. 21* e *22*).

Loosen the locking knobs (*Fig. 23*) of the fume inspection door and remove the cap (*Fig. 24*). Use the brush supplied to clean the ash pan (*Fig. 25-26*) and use the ash vacuum spout to suction all the residual ash left at the bottom of the exchanger (*Fig. 27*) entering the inspection hatch with the ash vacuum handle.

Check that the silicone seal is fitted correctly (*Fig. 28*) when closing the inspection cap.

Put on the tap again and strengthen tight the locking knocks.

Fig.29

Fig.30

Fig.31

Fig.32

Fig.33

Fig.34

Fig.35

Fig.36

Fig.37

Fig. 38

6. Fume deflector cleaning and removal (weekly)

Clean the fume deflector at least once a week (*Fig. 29*). After opening the combustion chamber door, grasp the tab at the back of the part and pull horizontally forward to free it from its rear rests (*Fig. 30*). Accompany deflector rotation until vertical (*Fig. 31-32*). Shake the part in this position and vacuum dust residue. Furthermore, fully remove the deflector at least once every two weeks to fully clean the upper part of the combustion chamber. To remove, starting from the vertical position indicated for cleaning, tilt the deflector back and, once at a 30° angle, lift and push inward to unhook it from the front supports (*Fig. 33)*. Lower the deflector vertically and slightly rotate it to remove (*Fig. 34-35*).

Use the brush supplied to remove any ash content from the fume deflector seat and the flue deflector itself (*Fig. 36-37*).

Repeat the steps in reverse order to reassemble the deflector, making sure it is correctly fitting on its supports in the horizontal position.

7. Stove body cleaning (1 - 3 days)

Remove the burn pot and deflector (as described in points **2. Burn pot removal for cleaning** and **6. Fume deflector cleaning and removal**), Use the supplied swap and brush to clean the exchanger, letting dust drop into the tray (*Fig. 38*). Remove the ash tray, empty it and accurately clean (as described in point **3. Ash tray removal and cleaning**).


Fig. 39


Fig. 40


Fig. 41

8. Cleaning the glass (daily)

Clean the glass every day with a damp sponge or paper towel (*Fig. 39-40)*. If the glass becomes dirty with black fume, the burn pot is probably dirty or the combustion air must be increased.
Be careful not to use overly aggressive products to avoid ruining the paint. Never spray detergents directly onto the parts to be cleaned (*Fig. 41*).
If the stove requires more frequent and deeper cleaning, check the flue draught performance and the chimney cap. A windproof chimney cap is strongly recommended.

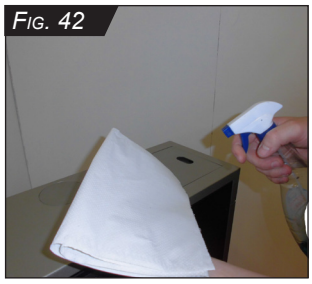


Fig. 42


Fig. 43

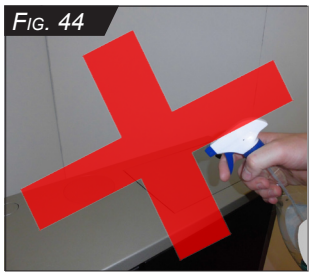


Fig. 44

9. Cleaning the cladding (as necessary)

Only use neutral water-based detergents to clean the cladding with a damp cloth (*Fig. 42-43*). Never spray detergents directly on painted cladding parts (*Fig. 44*).
Use of abrasive and/or corrosive chemical products can damage the painted parts and are reason for invalidation of the warranty on these parts.

No claims can arise concerning the colour variations of the painted surfaces, especially if the different materials and finishes are subject to different temperatures, as they depend on the natural characteristics of the materials and relative use of the product.


Fig.45


Fig.46

10. Pellet tank opening and cleaning

Apply light pressure to lift the pellet hopper cover, pulling upwards, to release the magnet closure (*Fig. 45 - 46*).
Once burned 20 bags of pellets (300 kg), it is advised to empty out the pellet tank and check there is no residual sawdust stacked at the bottom.
Clean carefully the bottom of the tank by means of a vacuum cleaner.
In case of a long period of disuse, eg in summer, empty out the pellet tank as well as the screw conveyor.
Remember that the use of quality fuel is essential to ensure the best operating conditions for the product, preventing the mechanical action of the load auger from turning them into sawdust.

FIG. 47

FIG. 48

11. Resetting the safety thermostat (see CHAP.08.4)

Loosen the red tap located under the side panel on the right. (*FIG. 47*).

Press the white button (*FIG. 48*), cusing a pointed instrument, until you hear the safety switch reset “CLICK”.

Refit the black hood.


FIG. 49


FIG. 50


FIG. 51

12. Connecting the power socket

Before connecting the plug on the cord supplied with the stove to the domestic electrical system, plug it into the socket fitted on the back of the right side panel (*FIG. 49-50*)) threading it through the groove on the back of the stove, making sure the switch is in the “O” position.

After inserting the plug into the power socket, press the switch O – I on pos. “I” (*FIG. 51*).


FIG. 52


FIG. 53

13. Loading the pellet hopper

Located on the rear part of the device, the hopper is filled through an openable lid. The hopper must be filled with pellets using a shovel (not supplied) (*FIG. 52-53*) and not poured in directly from the bag.

08.7 SCHEDULED PREVENTIVE MAINTENANCE (To be done by a specialised Technical Service Center)

We wish to remind you that the Extraordinary Maintenance to be carried out on this type of product must be done obligatorily every year by qualified maintenance personnel, in order to maintain its functionality, efficiency and comfort.
For any further queries you may have, we invite you to contact the specialised Technical Service Center through your retailer.
Scheduled maintenance must include:

- Cleaning of the flue (with special focus on horizontal segments and the chimney pot)
- Stove fume pass cleaning
- Cleaning of any deposits in the stove
- Cleaning of fans
- Check safety valves
- Checking good water circulator operations
- Check air breather valves
- Check expansion tank pressure
- Check good ignition resistance operations
- Check electric/electronic system integrity
- Check safety device, thermostat and pressure switch status and efficiency
- Check real water pressure measurements using the gauge and electronic pressure transmitter

WARNING

To carry out these operations, the appliance must be disconnected from the mains; wait until the appliance is cold and comply rigorously with the safety regulations in force.

Device cleaning and maintenance schedule chart.

Description	Daily	From 1 to 3 day	Weekly	Monthly	Annually	As necessary
Burn pot removal for cleaning	U					
Ash tray removal and cleaning	U					
Exchanger scraping and cleaning	U					
Fume inspection cleaning			U			
Fume deflector cleaning and removal			U			
Stove body cleaning		U				
Cleaning the glass	U					
Cleaning the cladding						U
Pellet tank cleaning				U		
Cleaning of the flue					T	
Stove fume pass cleaning					T	
Cleaning of any deposits in the stove					T	
Cleaning of fans					T	
Check air breather valves					T	
Checking good water circulator operations					T	
Check air breather valves					T	
Check expansion tank pressure					T	
Check good ignition resistance operations					T	
Check electric/electronic system integrity					T	
Check safety device, thermostat and pressure switch status and efficiency					T	
Check real water pressure measurements using the gauge and electronic pressure transmitter					T	

KEY: U: routine maintenance by the customer user
T: extraordinary maintenance by a specialised Technical Service Center.

CHAP.09 FAULT DIAGNOSIS AND TROUBLESHOOTING

09.1 PROBLEMS

WARNING

In accordance with the laws in force on safety for electrical appliances, a specialised Technical Service Center or qualified personnel must obligatorily be contacted for all installation, maintenance or interventions that require access to electrical parts.

PROBLEM	MAIN CHECKS TO BE PERFORMED
The pellets are not moving to the firebox	• The pellets have run out, refill the hopper. • The gear motor is not running, check the reason: - Not connected to the mains. - Mechanically disconnected from the auger. - Gear motor broken. • The auger is blocked by a foreign body which has fallen into the hopper. • The auger is blocked by very hard pellets; use the recommended pellet types (see **CHAP.06.2 - RECOMMENDED FUELS**).
The appliance does not start automatically	• The basket is dirty. Clean carefully and reposition it correctly. • The basket is positioned incorrectly, replace it. • The resistance is faulty, replace it. • Stove started with correct pellet pre-load.
The pellets burn incorrectly and unburnt elements gather in the basket, the door glass quickly dirties	• The amount of pellets loaded in the basket for the various output modes does not correspond to the amounts indicated in the Technical Specifications (see **CHAP.06 - TECHNICAL DATA**), check and correct the parameters. • Low flue draught, do not use the fireplace, it could be dangerous; carefully clean the flue, the appliance and the fume extractor. • Firebox very dirty. Switch off the appliance and clean the firebox. • Humid pellets. Replace the fuel. • The comburent air is scarce; make sure that the pellet drawer is well closed, that it is not full of ash. • Insufficient comburent air settings, change the comburent air flow value. • Check air inlet in the burner.
The appliance switches off when running at minimum power.	• The combustion fan speed is very high and the pellets are burning too quickly. • The pellet supply is running out. • The flue draught rate is high. • The amount of loaded pellet is high, it does not all burn within the set time and fresh pellets accumulate inside the firebox. Adjust the load level, or correct the combustion fan speed. • Pellet size is very small, adjust loading time
The flame is very inconsistent	• Check the bottom of the pellet container; there may be large deposits of sawdust. • The gear motor may have broken gearings, running empty.
A lot of condensation is created in the stove	• The pump start temperature limit is too low. Raise temperature to minimum 65°C. • The anti-condensation valve may require replacement.
The electric components are running when the appliance is switched off	• The electronic circuit board is broken. Replace it.
The circuit breaker trips	• At first start up or after prolonged disuse, condensation may form on resistances. Repeat start up until the resistance expels all humidity.
The radiators do not get hot even if the water in the boiler is hot and the pump is running	• Air in the system: Vent all radiators, pump and boiler. • Check whether any intercepts (zone vales) are closed.

NOTE

For a detailed list of alarm messages, see the enclosed manual SM096 EN.

NOTES

Via S.Giuseppe 2 - 24060 Telgate (Bg) Italy
Tel. +39 035.83.59.211 Fax +39 035.83.59.203
www.jolly-mec.it - info@jolly-mec.it

SM094 EN REV07 2018_05