Installation and maintenance manual

DIRECT GAS HEATER

GLA30 / GLA60 / GLA100

CE

4heat°
heating & ventilation

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NOTIFICATION

CE marking

Concerning the technical demands that are required, the CE marking is the official recognition of the quality of design, manufacture and performance of this device. Its long lifetime and its performance will be at optimum level if its use and its maintenance are properly carried out and the regulations in force.

Responsibility

This equipment must be used expressly for the purpose for which ***4heat*** has designed and manufactured it. Any contractual liability of ***4heat*** is therefore excluded in case of damage undergone by persons, animals or goods, following errors in installation, settings, maintenance and inappropriate use.
The devices must be equipped exclusively with genuine accessories. ***4heat*** will not be held responsible for any damage whatsoever arising from the use of an accessory which is inappropriate to the device.
The devices must be installed by qualified professional workers, respecting the regulations and decrees in force, and in accordance with the instructions shown in this instruction manual. The installer is required to establish installation conformity certificates produced by the ministries responsible for the construction and safety of gas. References to standards, rules and directives mentioned in this manual are given for information purposes and are only valid at the date of printing this manual.
4heat is responsible for the conformity of the device to the rules, directives and standards of construction in force at the time of marketing. Knowledge and respect for the legal provisions as well as the standards inherent in the design, implantation, installation, commissioning.

Reception – Storage

The gas unit heater is delivered on a wooden pallet, protected by cardboard packing and a plastic film. It is essential to check the condition of the equipment delivered (even if the packing is intact) and its conformity compared to the order.
In case of damage or missing parts, you must report the observations on the transport company's receipt form in the most precise way possible, "subject to unpacking" has no legal value, and then you must confirm those reservations by registered letter within 48h to the transport company. We remind you that it is the responsibility of the buyer to check the delivered merchandise, no recourse will be possible if this procedure is not respected.
Store the equipment in a clean and dry room, away from shocks, vibration, divergences in temperature and in an ambient environment with a rate of hygrometry lower than 90%.

Guarantee

Your device benefits from a contractual guarantee against any manufacturing defect, the duration of that guarantee is shown in our catalogue.
Our liability as a manufacturer cannot be committed when incorrect use of a device has occurred, where there is a defect or of an insufficiency in the maintenance of that device, or an incorrect installation of the device (it is your responsibility, as regards this, to check that the latter is carried out by qualified professionals).
In particular we will not be held responsible for material damage, intangible losses or bodily injury resulting from an installation which does not conform:
- to the legal and regulatory provisions or those imposed by local authorities,
- to the national or local or particular provisions governing the installation,
- to our instructions and recommendations for installation, in particular the regular maintenance of the devices,
- to the rules of the trade.

Our guarantee is limited to the exchange or repair of only those parts which are recognised as being defective by our technical departments, excluding the cost of labour, travel and transport.
Our guarantee does not cover the replacement or repair of parts as a result of, in particular, normal wear, incorrect utilisation, service visits by unqualified third parties, a defect in or insufficiency of maintenance or surveillance, non-conforming electrical supply and the use of a fuel which is inappropriate or of bad quality.
Sub-assemblies, such as motors, pumps, electric valves, etc.…, are only guaranteed if they have never been removed.
The rights established under the European directive 99/44/CEE, transferred by the legislative decree No. 24 of 2 February 2002 published on the Official Journal No. 57 of 8 March 2002, remain valid.

PLEASE READ CAREFULLY BEFORE CONTINUING

This technical manual must be kept in good condition inside the unit.

THIS UNIT IS FOR PROFESSIONAL USE ONLY. ONLY SKILLED AND TRAINED PERSONNEL ARE ALLOWED TO HANDLE IT.
IT MUST NOT BE ACCESSIBLE TO THE PUBLIC.

The specifications, illustrations and description contained in this manual are, to our knowledge, accurate at the time of the approval to print. We reserve the right to stop offering some characteristics or to stop the production of a model without notice it, do not constitute an firm agreement of our share.

Safety rules

- It is forbidden to plug and/or reduce the aeration openings of the installation room or the device,
- Never obstruct the blowing and/or the combustion air intake,
- Never make any modifications to the settings made by qualified personnel,
- Never spray water on the unit heater, or touch the device with parts of the body which are wet and/or with naked feet,
- Never touch hot parts of the unit heater, and/or moving parts,
- Never put or hook any object on the device,
- Any operation on the device is forbidden unless it has been disconnected from the electricity network and the gas supply has been cut off.
- Do not modify the type of gas used, the settings of the device, the safety systems and regulation systems, since that could create dangerous situations.
- Warn the after-sales technician in the case of changing the gas, the gas pressure or modifying the supply voltage.
- In the case of a long period of non-operation, disconnect the electrical supply from the device. When starting the operation again, you are advised to call on qualified personnel. As a general rule all repair and/or maintenance visits must be carried out exclusively by authorised and qualified personnel.

The taking out of a maintenance contract is strongly recommended "see this with your installer".

Cautionary note

Electrical components, drive mechanism and combustible gas can cause injuries. To protect from those risks during the installation or the maintenance, the power supply must be cut and the gas valve closed. Any person involve in the installation or maintenance of this equipment must respect the health and safety standards.

What should you do if you detect a gas smell :

- Close the outside gas valve and the electrical supply then, inform a technician for maintenance.
- Do not try to switch on the device
- Do not switch on the power supply, do not use phone inside the building.
- Call your gas supplier from another phone. Follow the instructions given by your supplier.
- If you cannot contact them, call the fire department.

1-GENERAL INFORMATIONS

1-1 General recommendations

GLA Direct gas heaters are designed for horticultural premises, livestock or for supplementary heating in industrial premises.

The unit can only be installed in rooms which are sufficiently ventilated. If you intend to use the heater in a room with a dusty or dirty atmosphere, like poultry houses, the combustion air inlet must be well-sealed and connected to the outside.

Do not block the supply grille and ensure that the hot air circulates freely. Do not put anything within 5 meters from the supply grille of the unit.

This unit is designed for direct blowing, do not connect supply duct to the unit.

The proper functioning of the gas heater depends on correct installation and commissioning.

The installation and maintenance must be carried out by qualified personnel in conformity with the regulatory texts and the rules in force.

The non-compliance with such rules entails the rejection of all responsibility from the manufacturer.

DO NOT INSTALL GAS HEATERS IN :

- Rooms which have a risk of explosion,
- Rooms containing chlorinated combination steam,
- Rooms with a high content of combustible dust,
- Rooms which are excessively humid (electrical danger).
- Domestic premises

After having checked that the installation, respects the recommendations of this notice, it is the responsibility of the installer:

1) to inform the user:
- that he cannot carry out itself any modifications to the design of the devices or the method of carrying out the installation; the least modification (exchange, withdrawal....) of safety components or parts which influence the efficiency of the device or the hygiene of combustion will systematically cause the withdrawal of the EC marking.
- that it is necessary to recommend cleaning and maintenance operations.
An annual preventive maintenance operation is compulsory.

2) to give these instructions to the user. They form an integral part of the device and must be retained and must accompany the device, even in the case of sale to another owner or user.

Being always intent on improving the quality of our products, we seek to improve them on a permanent basis. We therefore reserve the right, at any moment, to modify the specifications shown in this document.

1-2 Unit description

The direct gas heater ***GLA*** is a direct combustion heater, running on natural or propane gas ; it is in conformity with the European directives 2009/142/CE and 2009/42/CEE applicable to gas devices (EN525:2009, certificate No. 1312CQ6091 from 06/10/2015).

It is a direct gas heating system. For all the range describe in this manual, the release of combustion products is made by a fan placed upstream of the combustion chamber. The combustion air can be taken from the room or the outside.

The direct gas heater ***GLA*** is running with different gas indicated on the label and in accordance with the European directive.

1.3 Operating systems

GLA heaters are designed to heat horticultural premises, livestock or to be used for supplementary heating in industrial premises.

They are composed of a premix burner, set into the flow of air, and a fan to diffuse the hot air.

The combustion air, sucked by a variable combustion fan, go through a Venturi system which controls the good quantity of gas according to the airflow. This mixing is moved to the burner. The ignition probe fires the air/gas mixing and the ionization probe checks if there is a flame.

The flame located in the air stream raises the temperature of the air supplied into the room. The gas and combustion residues are diluted in very low quantity in the heating air.

For versions with modulating burner or variable air fan, it is also possible to vary the power and/or the airflow.

1.4 Specific safety measures

The flame of ***GLA*** direct gas heaters is in the « open air », it is very important to respect a minimum space between the heater and the persons, the animals or the cultures (see Section No. 3 INSTALLATION). Failure to comply this obligation can be very dangerous, even if the unit is off because the ignition is automatic.

The combustion of gas produces CO2, amongst others. A CO2 content in the air can be a danger for people, animals and cultures. Therefore, you need to ensure that the fresh air supply is adapted to the room where units are installed. When the CO2 concentration is too high, the heater does not work correctly because of an incomplete combustion (danger with carbon monoxide CO). The CO2 concentration shall not exceed 1%, and the minimum ventilation requirements for the room where units are installed is 1000 m3/h for each 100 kW of installed power.

For use in greenhouses :

Additional measure to respect :

- The CO2 level shall not exceed 1% (10.000 ppm).

- If the greenhouse is totally closed, you must foreseen ventilation system to have 100m3 of fresh air by m3 of burnt gas and a minimum ventilation of 1 000m3/h for each 100 kW of installed power.

- In the absence of mechanical ventilation, it requires at least two opposite opening, to ensure enough air circulation.

- It is recommended to use the heater with one or several extraction fans and a CO2 detector.

- Do not use sulphurous fuels into the space where the heater is used, because they contain high quantity of sulphur that could be dangerous.

For use in poultry houses :

During the cleaning and/or the disinfection of a poultry houses or the spreading of the litter, the following precautions should be taken. The non compliance can cause an explosion or a fire.

- The CO2 content shall not exceed 0,3% (3000 ppm).

- In the absence of mechanical ventilation, it requires at least two opposite opening, to ensure enough air circulation.

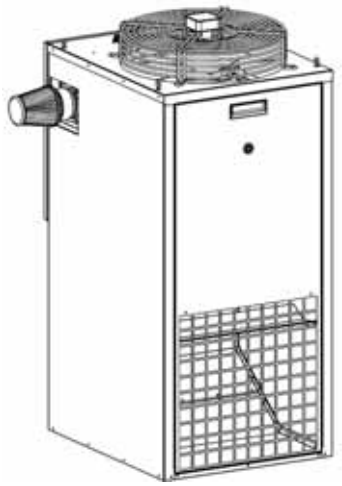
- Protect or remove the heater during the cleaning/disinfection of the building.

- During the spreading of the litter, the heater must be covered in order to prevent the particles from getting inside the unit and risking a fire. Disconnect the heater and cut off the gas to avoid unintentional start.

- Clean the unit after each batch of poultries to remove any residues and to avoid soiling.

- Do not use water when you are cleaning the heater.

2- CARACTERISTIQUES TECHNIQUES



GLA Model

Direct combustion heater GLA are equipped with axial fan.

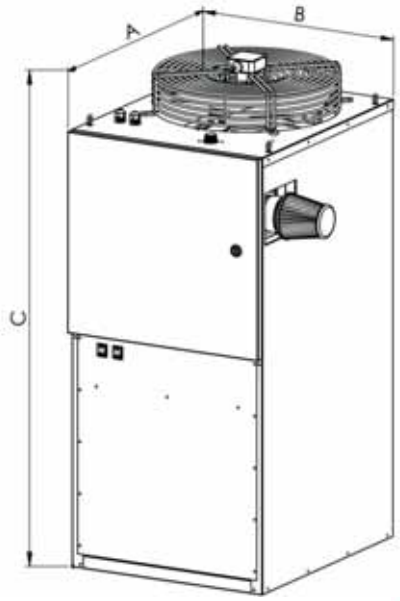
They are designed for direct blowing and are equipped in series with a protection grille

Performances

Model		GLA30	GLA60	GLA100
Maximum power	kW	32	65	99
Airflow	m^3/h	1 335	2 340	3 200
Delta T of air	°C	77	82	87
Fan diameter	mm	380	420	450
Fan speed	rpm	1350	1350	1350
Gas flow at 15°C Natural G20 Groningen G25 Propane G31	 20 mbar 25 mbar 37 mbar	 2.86 m^3/h 3.15 m^3/h 2.10 kg/h	 5.73 m^3/h 6.30 m^3/h 4.21 kg/h	 9.55 m^3/h 10.52 m^3/h 7.02 kg/h
Supply voltage		Single phase 230 Volts / 50 Hz - IP42		
Power consumption	W	150	200	420
Nominal intensity	A	0.65	0.85	2.0
Weight	kg	61	70	87

Dimensions

Modele	GLA30	GLA60	GLA100
A (mm)	590	630	660
B (mm)	475	515	635
C (mm)	985	1180	1315
Gaz (mm)	MALE 3/4''	MALE 3/4''	MALE 3/4''
Air (mm)	Ø80	Ø80	Ø80



– INSTALLATION

WARNING: The installation and maintenance must be carried out only by qualified personnel.

3-1 General rules

The direct gas heater can be installed directly into the heating room.

Nevertheless, the installer must comply with laws and rules applicable in the destination country. If there is any doubt, request information from inspection and security bodies.

Ventilation :

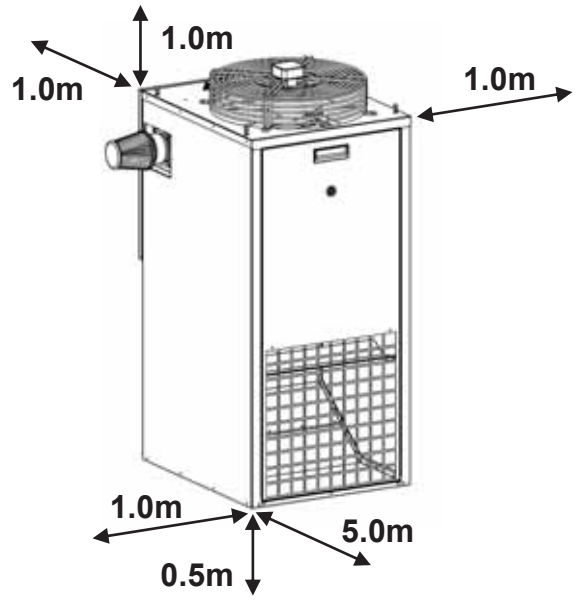
In rooms where direct gas heater is installed, must have continuous ventilation of minimum 100 m3 of fresh air per m3 of burnt gas or must be connected with airtight pipe from the outside. When the heater is working, the ventilation of the room must be at least 1000 m3/h for each 100 kW of power installed.

Blowing:
The Gas unit heater is designed for direct blowing. It is strictly prohibited to use duct system to the air inlet and/or outlet.

Gas connection :

Before installing the heater, it is necessary to check that the local supply conditions (type of gas, pressure) are compatible with the device setting.

Minimal safe distances :



ATTENTION :
It is mandatory to respect the minimum installation spaces for safety and maintenance of the unit heater.

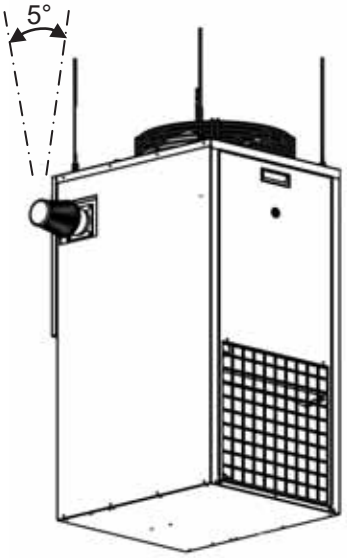
3-2 Fixation

The unit heater can also be suspended horizontally.

Before fixing the units, it is necessary to make sure of the support's strength.

- The heater has 4 fixing supports.
- The used slings must be adapted to the weight of the suspended device.
- Caution, the mounting must be perfectly aligned, as shown on the picture (maximum angle 5°).

- Fit the unit and make sure it is perfectly leveled.



3--4 Gas connection

First of all, check if the delivered unit is conformed with the distributed gas. For this, you must refer to the indications mentioned on the unit label. The gas supply must be appropriate to the power of the heater and must be fitted with all monitoring and safety devices required by the norms currently in force.

A precise study must be done on pipe diameter depending on the nature and flow of gas and the length of pipes. Make sure that pipe losses do not exceed 5 % of supply pressure.

Gas connection must be realized in accordance with indoor installation requirements, regardless the type of gas, by a qualified person with necessary approvals.

Check the tightness of the gas circuit after each intervention.

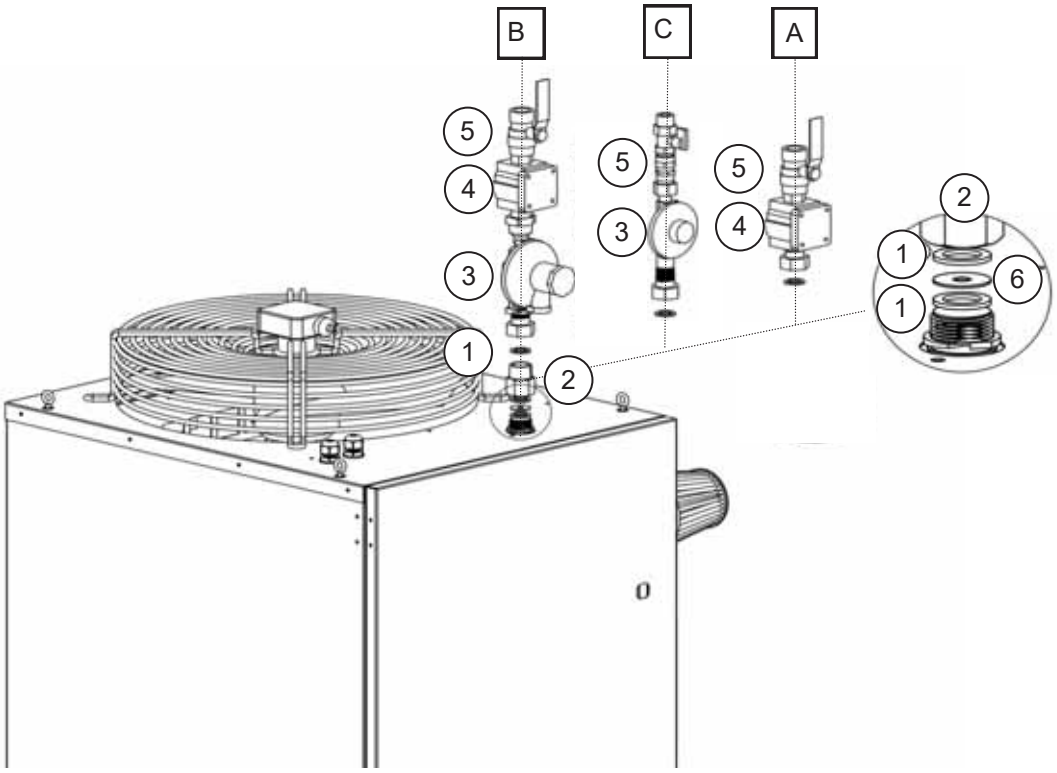
Types de raccordement gaz :

A– Natural gas - supply pressure lower than 50 mbar (stop valve + gas filter)
B– Natural gas - supply pressure higher than 50 mbar (stop valve + gas filter + gas pressure regulator)
C– Propane gas (stop valve + gas filter + gas pressure regulator)).

Gas connection kit :

(1) Gas seal
(2) Gas connector
(3) Gas pressure regulator
(4) Gas filter
(5) Gas valve
(6) Calibration washer

*To know the detail of the kits, refer to their notice



Caution: before opening the gas network, check the tightness until the gas valve

3-5 Change of gas

Those units are designed to run with different type of gas. To change the gas, follow the procedure below.

WARNING: This operation must be carried out by a qualified person.

Before any intervention, cut off the gas and electricity supplies.

During the change of gas, the sticker « gas setting » on the rear of the heater must be modified to report the new setup

WARNING: Check the tightness of the gas circuit after each intervention.

Procedure to move from natural gas to propane gas :

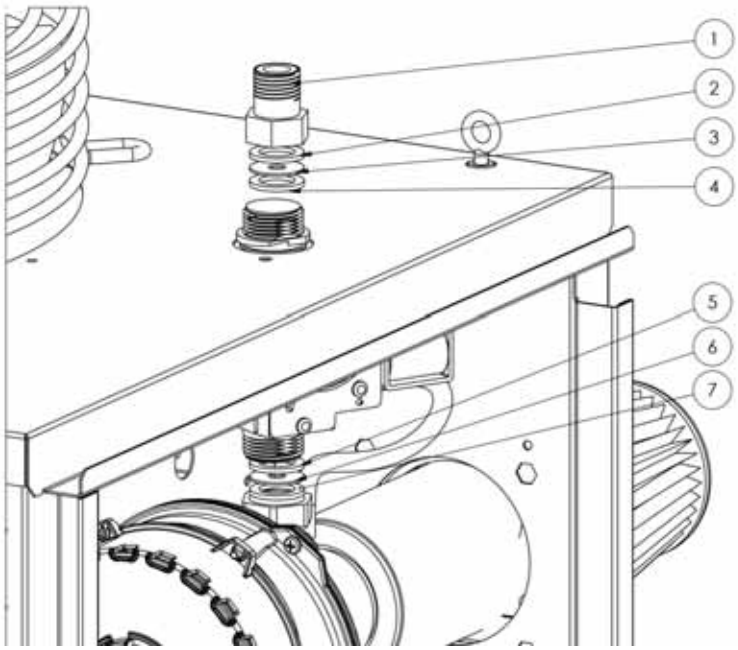
1– Unscrew the gas supply connection (1), Insert the calibration washer (3), see the table below, between 2 gas seals (2 et 4) and then connect back the gas supply..

2– Unscrew the connection nut, Insert the calibration washer (6), see the table bolew, between 2 gas seals (5 et 7) and then connect everything back, be careful not to damage the threading..

Be careful, only use new gas seals!

3– Check the tightness.

(Reverse procedure to move from propane gas to natural gas)



GLA	GAZ	ØEV IN	ØEV OUT	ØMIXEUR
GLA30	G31	4,5	3,5	30
	G20	5,5	4,5	30
GLA60	G31	7	5,5	-
	G20	-	7	
GLA100	G31	-	7,5	-
	G20	-	-	-

3-6 Connecting the air filter

Gas generators are supplied as standard with an air filter for the return of combustion air.
It filters dust to improve combustion and prevent damage to the pre-mix gas burner.

The air filter must be mounted on the device before the first start-up.

Insert the air duct into the hole provided for this purpose on the upper side of the appliance.

Make sure that the air duct and extractor duct connects correctly.

Secure the duct with the 4 screws provided and a screwdriver.

Place the filter on the air duct.

Tighten the air filter clamp with a screwdriver.

Once the collar is tight, the air filter is properly installed.

If the appliance is used in a livestock building, for example a poultry house, the air filter must be cleaned after each batch of animals, or more if the degree of pollution requires.

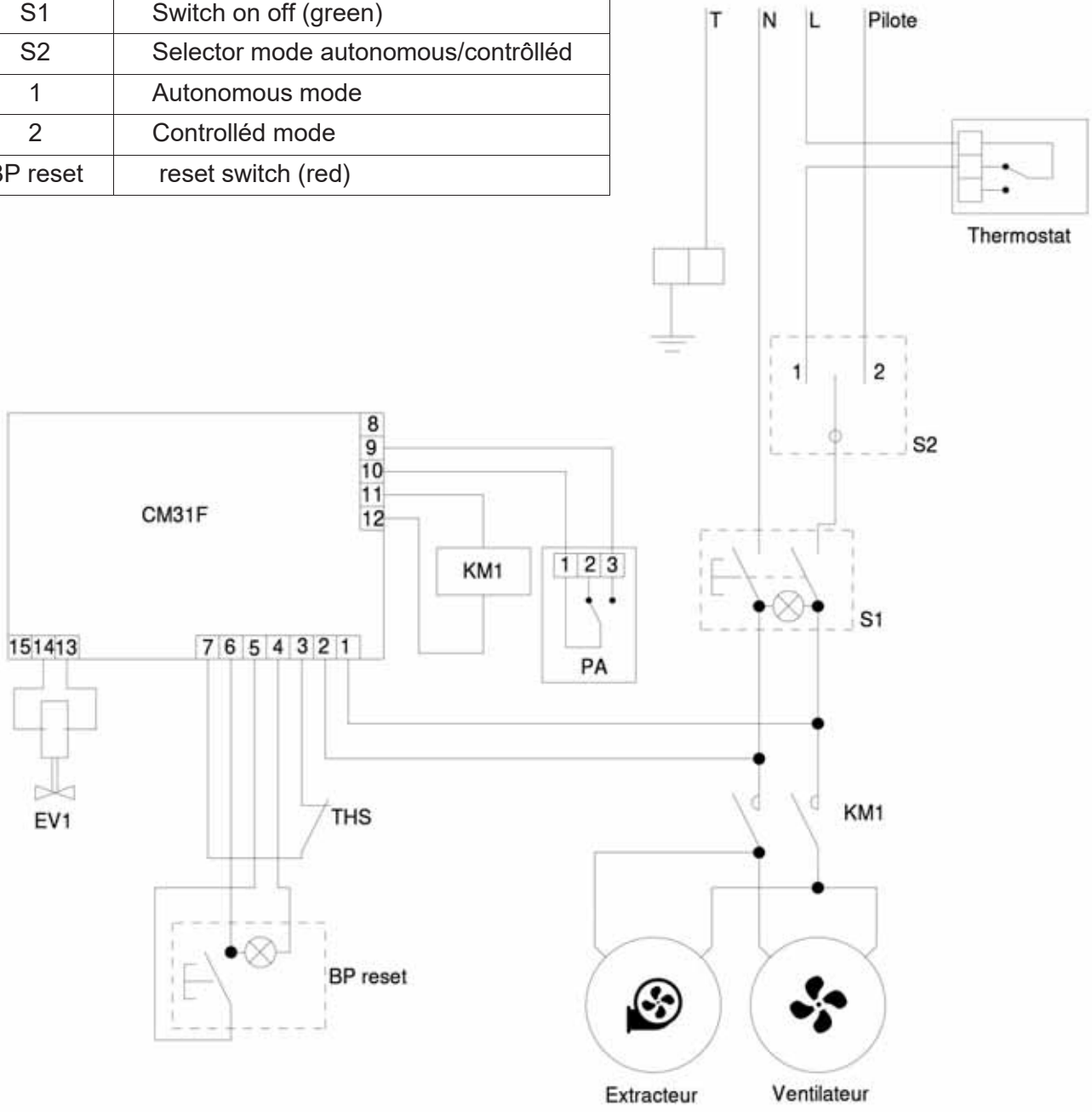
4- ELECTRICAL WIRING

WARNING : Be careful, before attempting any work, be sure that the electrical supply is cut off, risk of electrical shock. Those operation must be carrying out by a qualified person with required approvals.

4-1 Electrical diagram

CM31F	Control board
EV1	Gas valve
THS	Overheat safety Thermostat
KM1	Contact fan/ extractor
PA	Ventilation safety pressure sensor
S1	Switch on off (green)
S2	Selector mode autonomous/contrôlléd
1	Autonomous mode
2	Controlléd mode
BP reset	reset switch (red)

T: Ground
N: Neutral
L: Phase
Pilot : Phase for controlled mode



4-2 Connecting the command

The device can operate autonomously or be connected to a remote thermostat or building control.

I- Autonomous mode:
The unit is equipped as standard with an adjustable thermostat located in the technical compartment and a temperature sensor on the return air of the blower.
To activate the stand-alone mode, switch the switch to the "I" position. Then set the thermostat to the desired set temperature. The device starts when the return air temperature (fan probe) is lower than the set temperature (desired temperature) and stops when the set temperature is reached.

0- Stop:
If the switch is set to the "0" position, the unit will not turn on any command given by the built-in or remote thermostat.

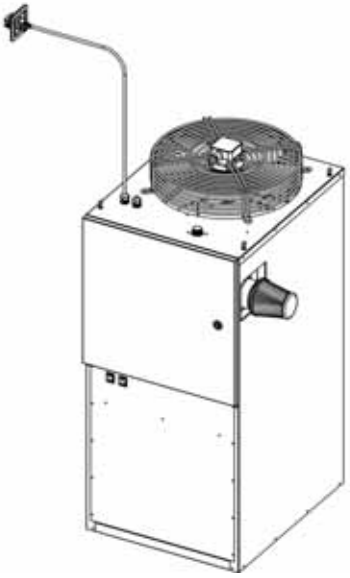
II- Controlled mode
It is possible to control the start-up or shutdown of the unit via a remote thermostat or building control. To do this, simply connect the controlled phase 230V / 50HZ of the power cable of the device to the thermostat or building control. To activate the mode, toggle the switch to the "II" position.

4-3 Electrical connection

The installation must comply with local and / or national regulations.

The electrical power supply of the devices is made in single phase at 230V / 50Z with a 4G1 power cable protected at the top. The cable section and its protection should be dimensioned according to the number of devices on the line and its length. In particular, ensure that a ground connection of adequate size is available. Check that the voltage and frequency of the mains supply correspond to those required.

In the case of a mains connection, pay attention to the phase / neutral polarity and the earthing.



5 - COMMISSIONING

5-1 Commissioning

1– Before the start-up and heater powering on , check that the different connection have been realized correctly, especially :

- air inlet connection and/or fan grille,
- gas connection,
- electrical connection, ground connection ...

Check also :

- gas or combustion air connections are perfectly sealed.
- protective film on panels is take off.
- gas pressure tube is connected to the solenoide gas valve and to the pressure tap of combustion air supply.
- safety spaces around the heater are respected.

2– Check the supply voltage: between 110 V and 120 V alternating. Take care to respect the polarity Phase /Neutral. In case of « impedent » neutral, foresee a non-polarized control box.

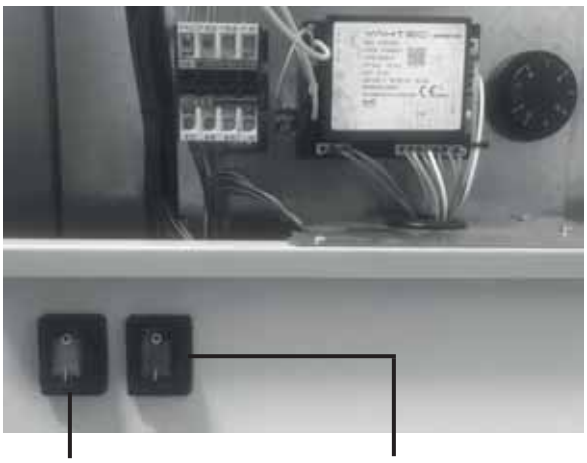
3– Check that the type of gas and the pressure supply fit with the heater, maximum pressure is 50 mbar, refer to chapter No. 5.

4- Put into service the heaters.

- Open the general gas valve and purge the pipeline.
- Open the gas valve of each unit.
- Check that switch disconnectors of the units are ON.
- Check that the blowing grille is unobstructed.
- Check that the on / off switch of the appliance is set to "On" (Fig.1)
- Set the thermostat of the appliance to the desired set temperature in the room .
- The generator starts to reach the set temperature and stops when the set temperature is reached .

5- Perform the gas safety test by closing the gas supply, the appliance must shut off and make three attempts to restart before going into safety (the red light on the switch lights up). Reset the unit by pressing the red switch (Fig.1) .

Fig.1



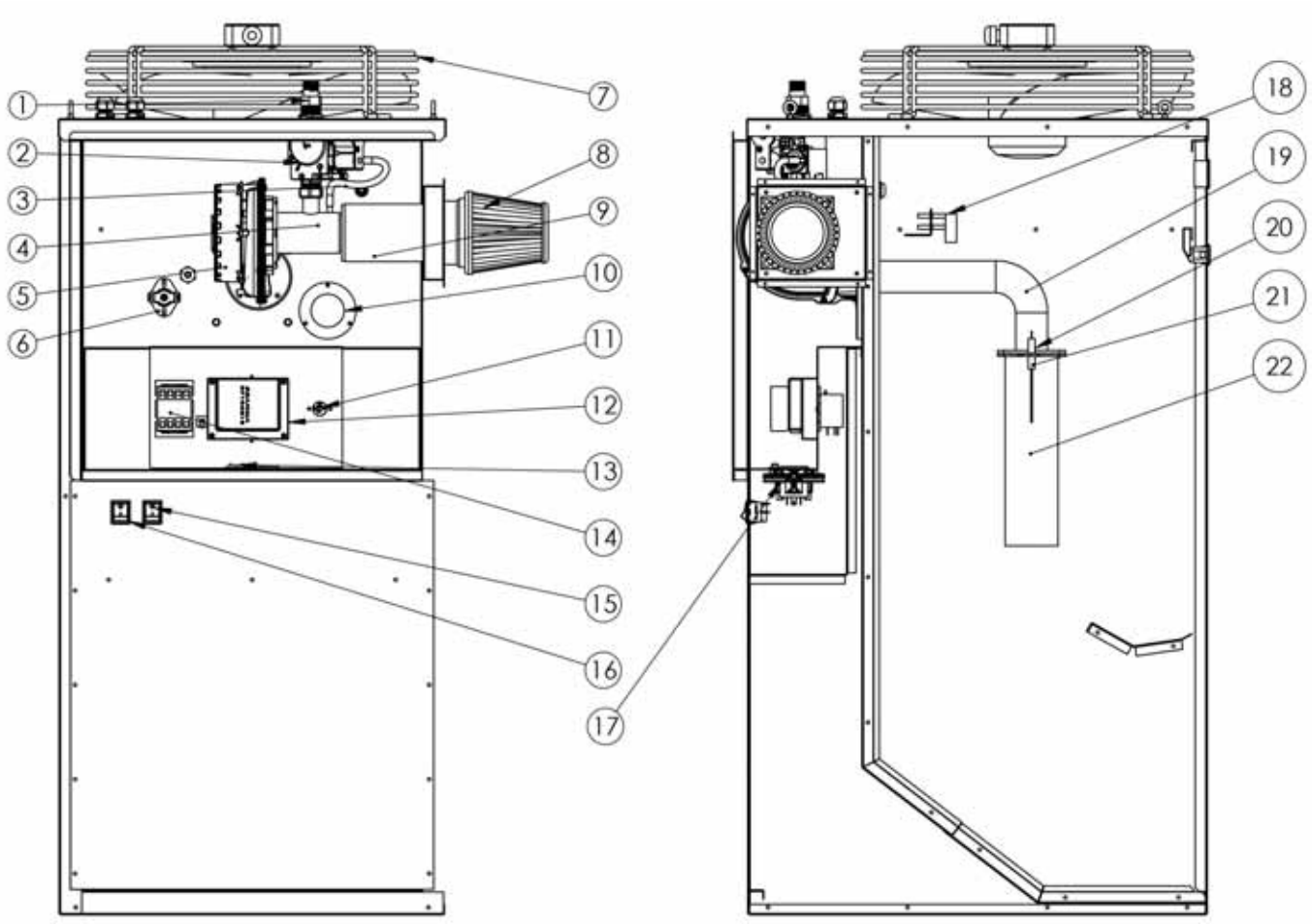
Light switch On / Off (Green)

Reset switch (Red)

Green switch:
0 - Stop
I - Walking
Green light on: appliance is heating up
Green LED off: no heating request

Red switch:
0- Standard position
I- Reset the device: press 1s max
Red light on: Fault

5-2 Nomenclature



Nº	Désignation	Référence des pièces détachées		
		GLA30	GLA60	GPV90
1	Raccord laiton	UTC0597		
2	Electrovanne gaz	UTC0400		
3	Tube pression gaz	NC		
4	Venturi	UTC0606	UTC0607	UTC0608
5	Ventilateur de combustion	UTC0420	UTC0421	UTC0422
6	Thermostat de sécurité	THE147		
7	Ventilateur de soufflage	ATE802S	ATE803S	ATE804S
8	Filtre à air	UTC0622		
9	Conduit d'air	NC	NC	NC
10	Verre d'observation + Joints	UTC0533 + 2xGAZ0112		
11	Thermostat	PB181		
12	Boitier de contrôle	ATE532		
13	Interrupteur 3 positions	ATE110		
14	Contacteur AC bobine 230V50HZ	ELE0313		
15	Interrupteur de réarmement à voyant rouge	ATE243		
16	Interrupteur ON/OFF à voyant vert	ATE228		
17	Pressostat	ATE226	ATE226	ATE204/2
18	Venturi pour pressostat	ATE106		
19	Burner set	NC	NC	NC
20	Electrode d'allumage + câble	ATE502V3	ATE502V3	ATE502V3
21	Sonde d'ionisation + câble	ATE508	ATE508	ATE508
22	Brûleur gaz à pré-mélange	UTC0070	UTC080	UTC080

6. MAINTENANCE

We recommend a proper and regular maintenance, at least once per year. The heaters used in dirty or dusty atmosphere must be maintained more frequently.

WARNING : These interventions must be carrying out by qualified professional.

6.1 Maintenance

The maintenance must be carrying out when the unit is cold and the gas and electricity are cut off.
Do not use water to clean the unit.
Perform the following operations :
- Clean the body, inside and outside the unit, the fan (blades, motor, protection grill)… Clean carefully all components.
- Check if the cables, nuts and bolts are properly tight.
- Check the mounting and tightness of gas connections.
- Electrodes : Ignition flame and control cables must be inspected. In case of damages, replace it. Check electrode gap., see section « Burner cleaning ».

6.2 Burner dismounting

WARNING : This operation must be carrying out by a qualified professional with necessary approvals.

The burner assembly can be easily removed from the appliance, to do this as follows:
1°/ Shut off the gas at the stop valve and electrically disconnect the appliance .
2°/ Disconnect the gas from the device
3°/ Open the technical compartment access hatch
4°/ Remove the burner fan, fig.1 / 2:
- Remove the M6 screws from the mixer, reserve them
- Remove the M5 screws between the fan and the burner plate, reserve them
- Reserve the seal, note the direction of assembly for reassembly
- Remove the assembly taking care not to spoil anything and nothing gets inside.

fig.1

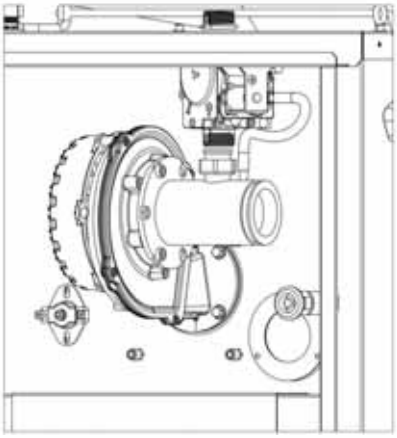
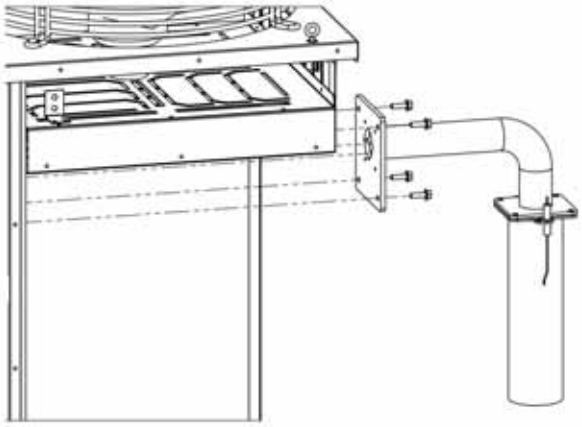


fig.2



5°/ Remove the burner assembly, fig.3 / 4:
- Disconnect the ignition electrode and the ionization probe from the control box
- Remove the M6 screws on the ventilation side
- Remove the burner assembly taking care not to spoil anything and nothing gets inside .

fig.3

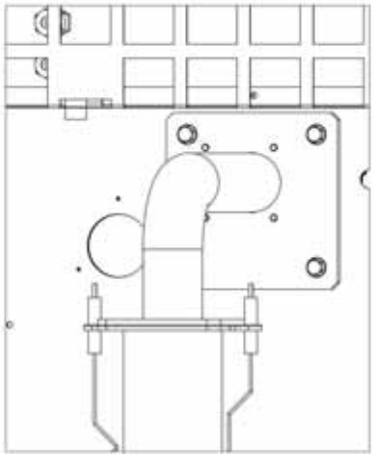


fig.4

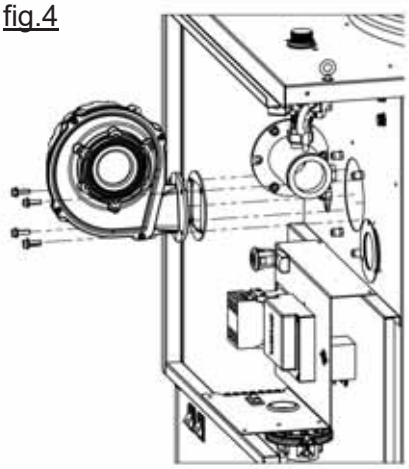
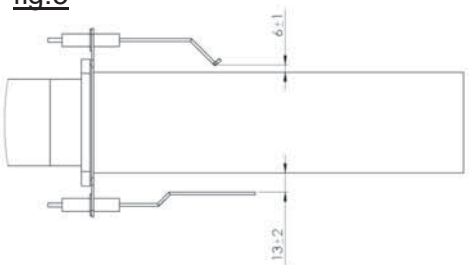


fig.5



Clean the different parts with a soft brush, non-metallic flexible, be careful not to use compressed air, the projected dirt may become embedded in the perforations of the burner grate and clog!

Check the spacing, fig.5, of the ignition electrode (3 +/- 1mm) and the ionisation probe (13 +/- 2mm) with respect to the burner tube. Proceed in the same way to reassemble the burner assembly.

CAUTION : The gas seals must be replaced by new ones for each operation of mounting/dismounting! The others seals must checked and replaced systematically in case of damage. If there is any doubt, replace them as a preventative measure.
Only genuine parts guarantee a perfect tightness! Use only manufacturer seals or genuine parts!

7- TROUBLESHOOTING

In case of problems, make sure that the conditions required prior to operating the heater are present.
If the control box is in the safety position, reset it.

CAUTION : All electrical or mechanical operations must be carried out when the electrical supply is cut off and the gas supply is closed.

DEFAULTS	CAUSES	REMEDY
The device does not start	- Master switch OFF - The room thermostat is not triggered - Improper wiring - Voltage lack - Overheat thermostat triggered - Combustion fan out of service	- Switch ON - Raise the set point of room thermostat - Check the cabling - Check the electrical power - Restart the overheat thermostat - Replace the combustion fan
The combustion fan starts several times without flame and the control box turns on safety (burner default)	- No gas - Air into the pipe - Wrong air/gas setting - Defective gas valve - Ignition electrode not properly adjusted or defective - Defective control box	- Check the pressure - Purge the pipe - Set up the ratio air/gas (Page 25) - Replace the gas valve - Adjust it or replace it - Adjust it or replace it
The burner starts, the flame develops, land the control box turns on safety.	- Inversion of neutral and phase - Electrical supply without neutral - Defective ionization sensor	- Invers the phase and neutral on the electrical supply - Use a control box without impedent neutral - Replace the ionization sensor
The combustion fan is in full speed but there is no full power.	- Air intake grille is blocked - Wrong burner setting - Air intake temperature too high	- Unblock the air intake grille - The combustion setting must be controlled by a factory-based technician - Room temperature is too high
The unit turns on safety during operation	- Gas supply stops	- Reset by pressing the reset button on the control board
Le ventilateur de soufflage et bruleur s'enclenchent mais pas d'allumage	- Tube de pression pressostat de sécurité débranché ou inversé - Pas de bascule pressostatique	- Vérifier le raccordement des tuyaux souples. - Vérifiez la propreté des tuyaux souples et du pressostat ainsi que du venturi.

CAUTION: only genuine parts allow to maintain safety of the unit and the people. The use of other parts involves only the responsibility of the person and voids the warranty of the product.

8– USER'S RECOMMANDATIONS

IT IS VERY IMPORTANT TO RESPECT THE FOLLOWING RULES :

- Never make changes to the settings made by the qualified professional.

- Never spray water on the appliance.

- Notify the service technician in case of a gas change, gas pressure or supply voltage modification.

-In general, scrupulously respect all instructions described in this manual.

Subscription to a maintenance contract is highly recommended (see with your installer).

What should be done in case of problems?

PROBLEMS	REMEDIES
Smell of gas	- Close the external gas valve and the electricity supply then warn the maintenance technician
The burner stays in safety position	- Press the burner reset button which is on the control board. - If the problem persists, contact the after sales technician.

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