



PGI 85



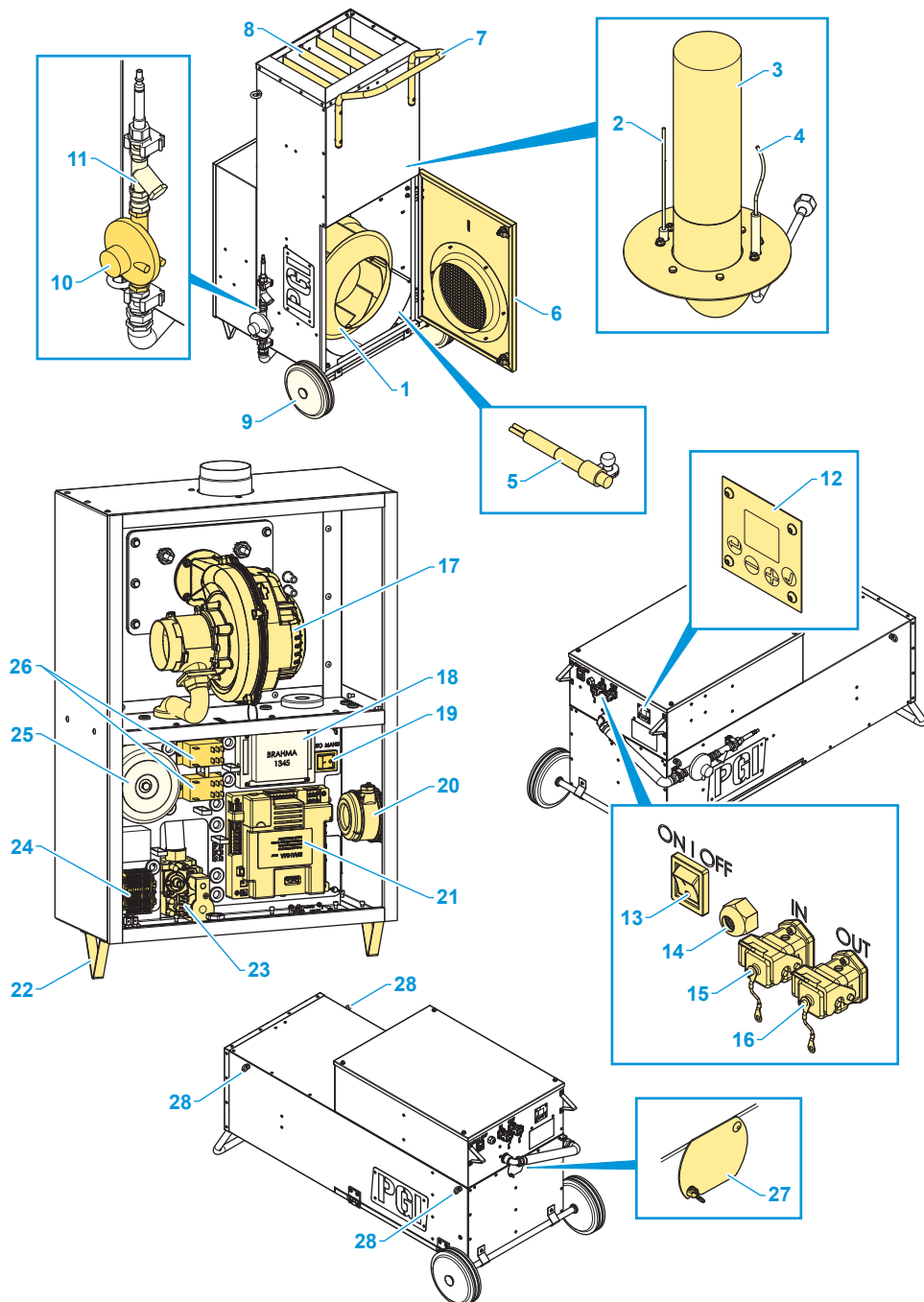
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Technical manual..... 16

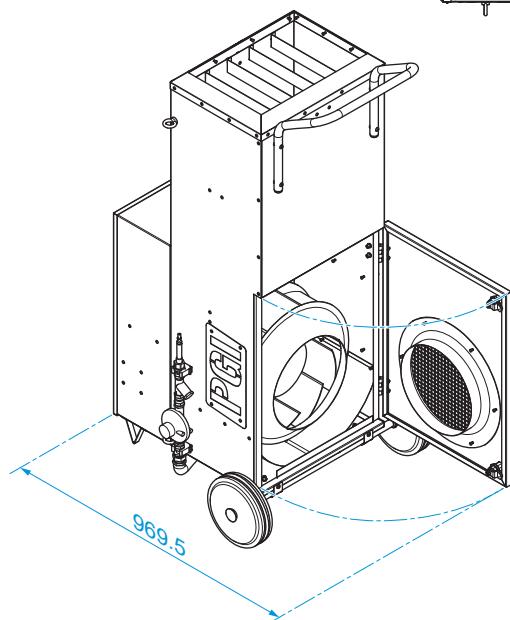
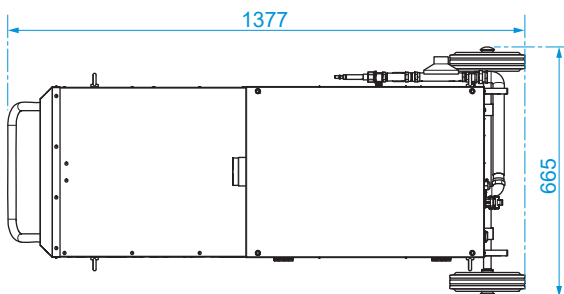
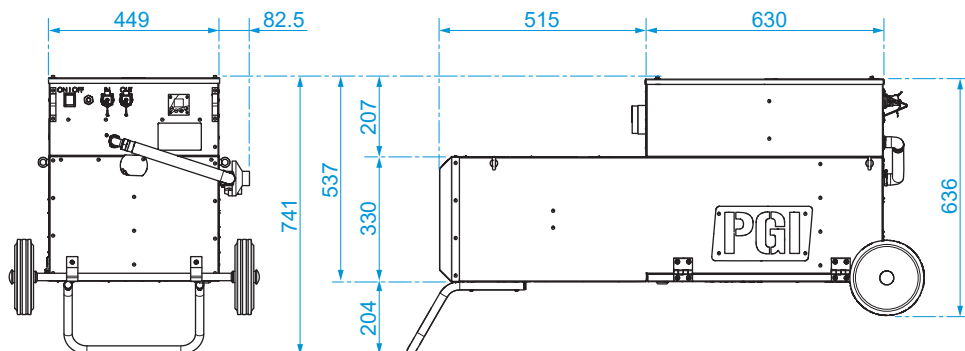
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SYSTEL[®] 
Heating mastermind

A

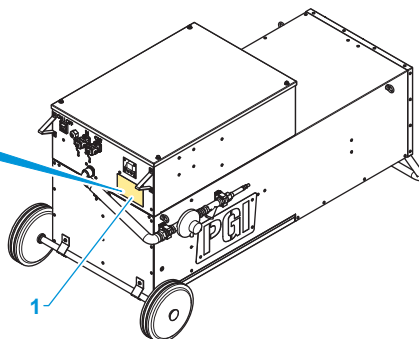


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C

PGI 85 PR		UNIQUEMENT POUR LE CHAUFFAGE DES LOCAUX D'HAUSSE		N° SÉRIE : 1312CU6358	CE 1312 1312CU6358
CAT ISP	GAZ : G31 PROPANE	PRESSIION PROPANE : 37 mbar	DEBIT NOMINAL 85 kW - 6,15 Kg/h		PAYS DE DESTINATION : FRANCE
ELEVATION DE TEMPERATURE 80°C pour de l'air à 10°C		SYSTEL Heating mastermind Fabrique par SYSTEL-INTERNATIONAL 4, rue de l'Essart Rocher 44140 LE BIGNON			
DEBIT D'AIR ALIMENTATION ELECTRIQUE 2500 m³/h 220V AC - 50 Hz - 2.5A					
Intended for use in domestic premises, for the heating of the rooms of the building. Cet appareil doit être installé par un professionnel conformément aux réglementations en vigueur. (Renouvellement d'air nécessaire 2500 m³/h)					



D

CERTIGAZ

Certificat
Certificate

MODULE B : EXAMEN DE TYPE - TYPE DE PRODUCTION
(Paragraph 1 - Annex III of the Regulation (EU) 2016/425 Appareils à gaz)
MODULE B : EU TYPE - EXAMINATION - PRODUCTION
(Paragraph 1 - Annex III of the Gas appliances Regulation (EU) 2016/425)

Certificat numéro: 1312CU6358 (rév.2)

CERTIGAZ, après examen et vérifications, certifie que l'appareil :
CERTIGAZ, after examination and verifications, certifies that the appliance :

- Fabricant : **SYSTEL**
Manufacture : **4 rue l'Essart Rocher
F-44140 LE BIGNON**
- Marque commerciale et modèle(s) : **SYSTEL**
Trade mark and model(s) : **> PGX 85 PR
> PGI 85 PR**
- Genre de l'appareil : **GENERATEUR D'AIR CHAUD A COMBUSTION DIRECTE**
Kind of the appliance :
- Désignation du type : **PGX 85 PR**
Type designation :

Pays de destination Destination countries	Pressions (mbar) Pressures (mbar)	Catégories Categories
FR-BE-LU-DE-AT-CHE IE-GR-PT-CZ-SK-FI-DK NL-IT-BG-HU-PL-RO	20 ; 37	ISP ; I2E ; I2H ; I2ES1

Eu confirmăm că aparatele conforme cu Regulamentul (UE) 2016/425, raportate la gaz și la presiune, sunt conforme cu cerințele de siguranță și de protecție a mediului.
We confirm that the gas appliances conforming to Regulation (EU) 2016/425, reported to gas and pressure, are in conformity with the safety and environmental protection requirements.
Ce certificat est valide à partir de la date de signature. Il annule tout certificat antérieur.
validity date: 13 years since signature day, it cancels any previous certificate

Neuilly, le 5 mars 2020

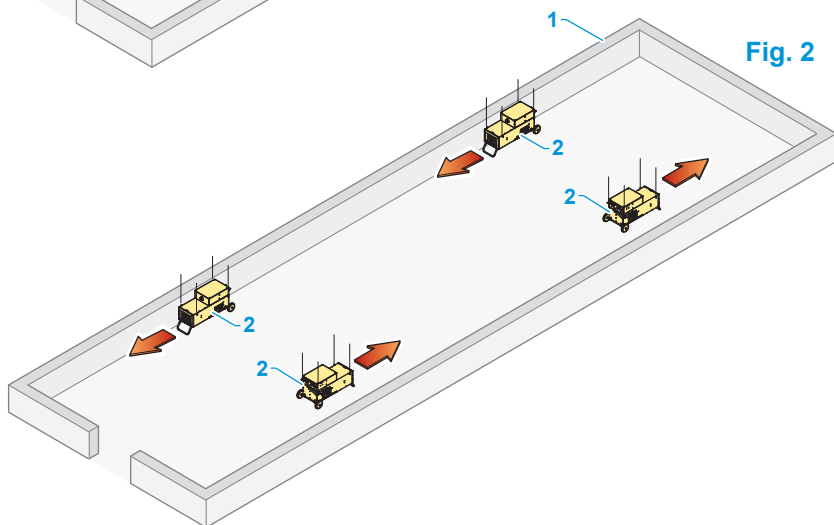
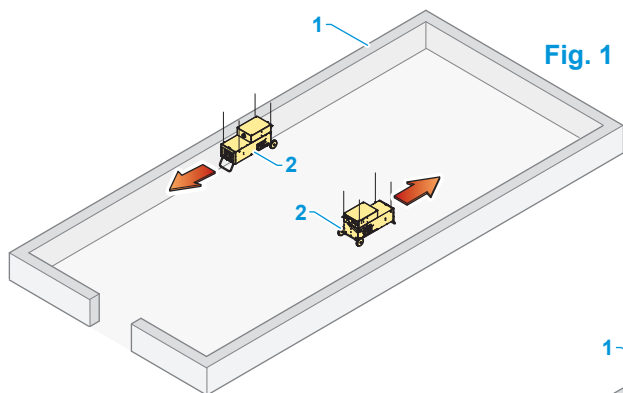
Le Président
Thierry CHAPUIS

Révision du certificat: 1312CU6358 rev 02/10/2019

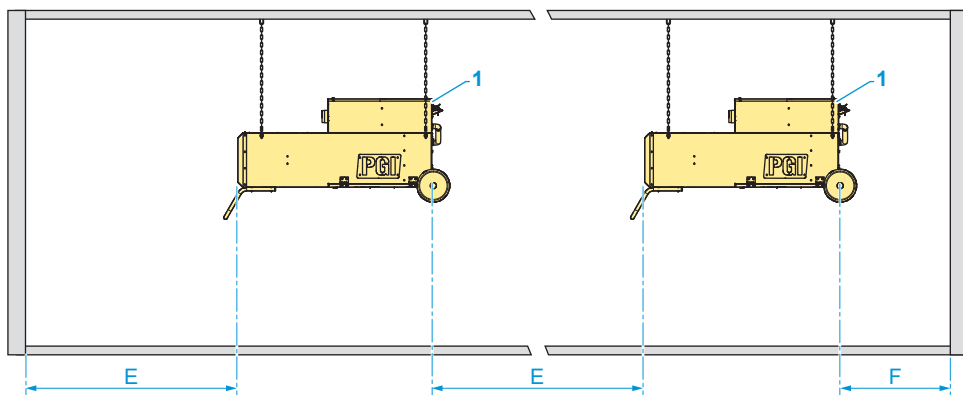
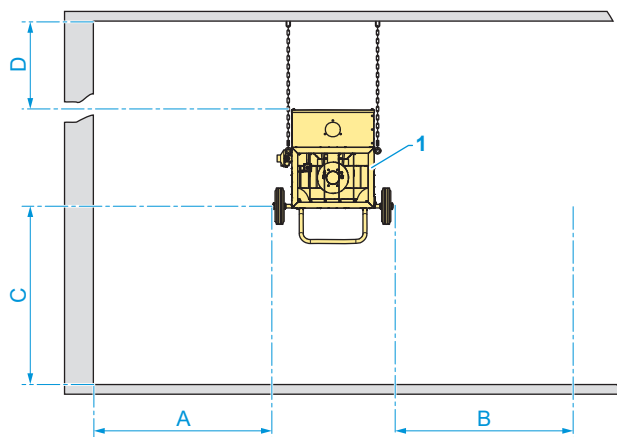
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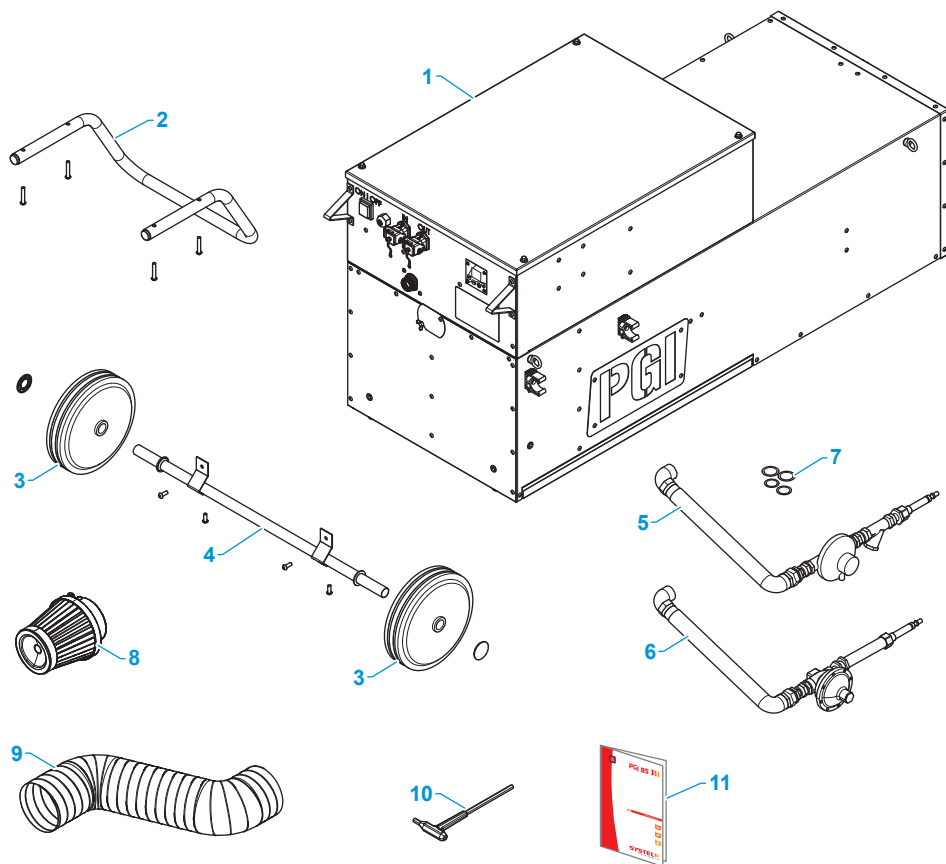
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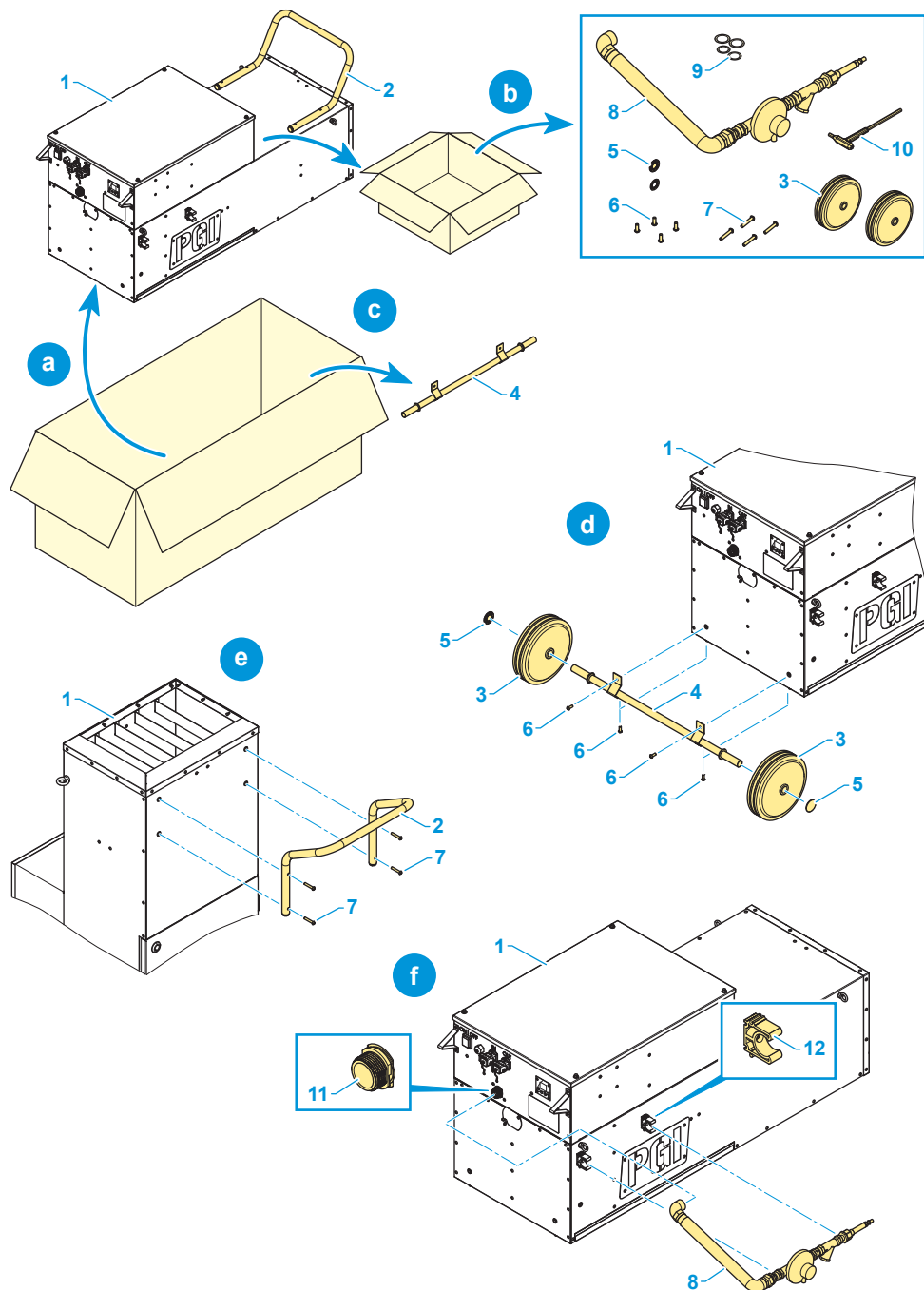
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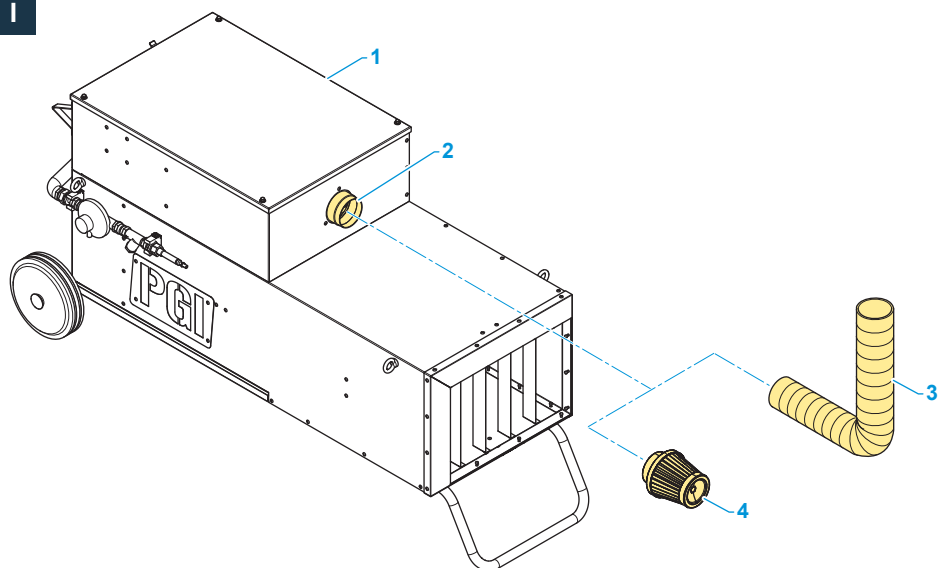
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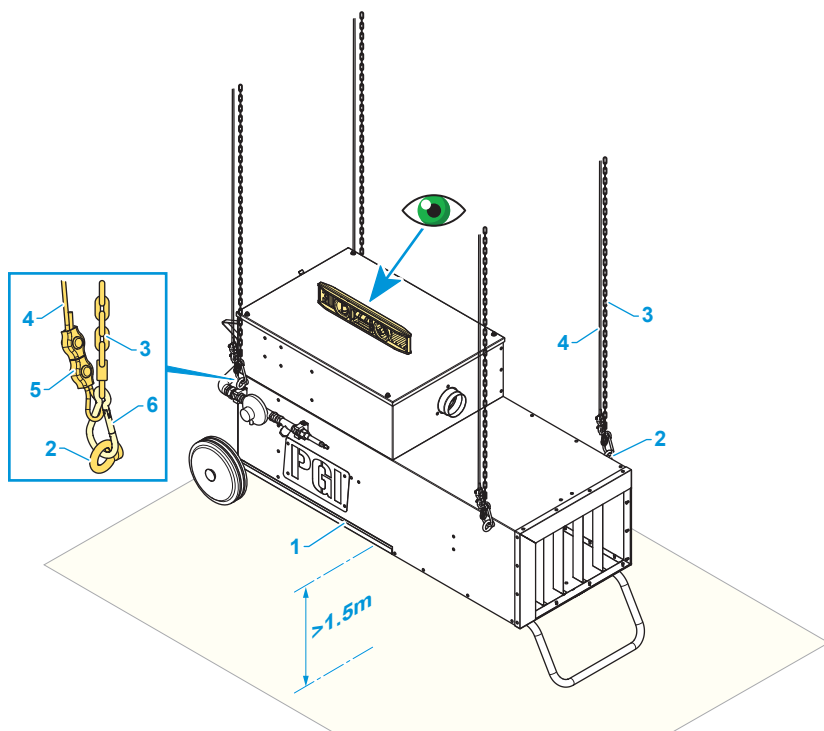
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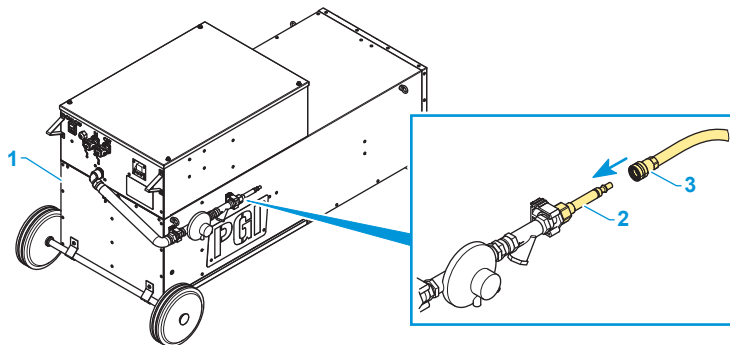
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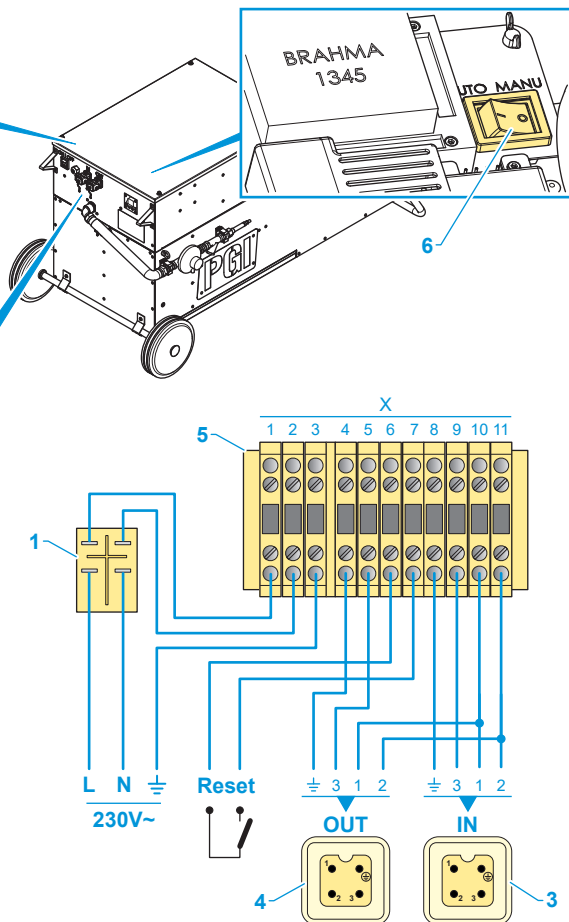
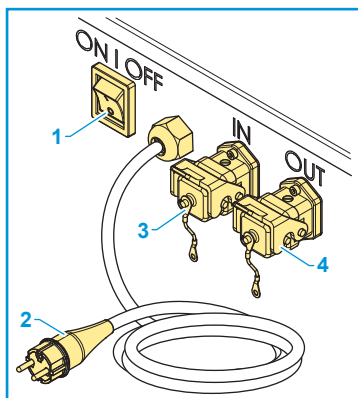
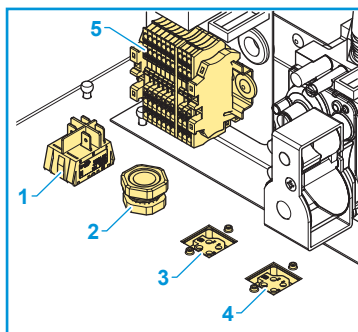
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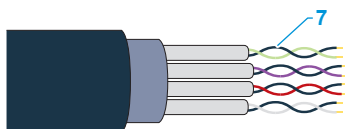
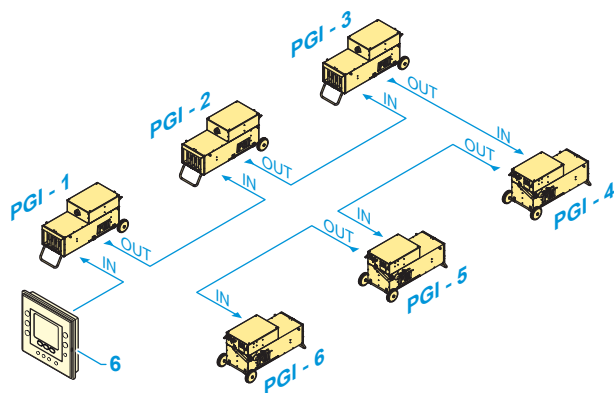
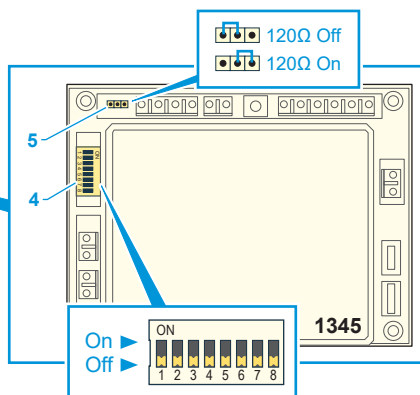
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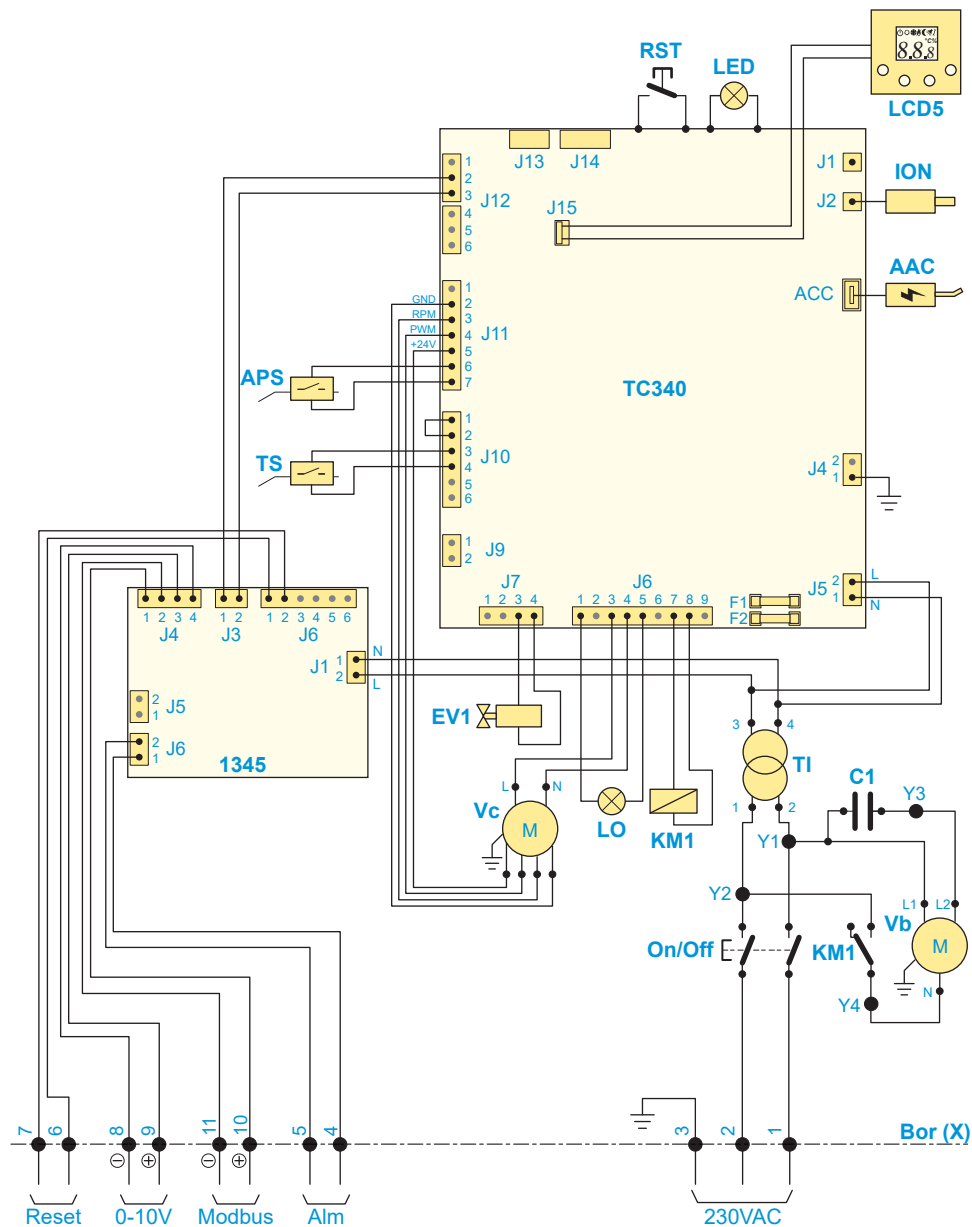


This diagram shows the internal components of the control panel. A yellow pressure switch is mounted on the left, and a pressure sensor is mounted on the right. A blue line indicates the connection between the pressure switch and the pressure sensor. The pressure switch has a yellow label with the text 'MANNESMANN' and '1000'. The pressure sensor has a yellow label with the text '1' and '2'. The pressure switch is connected to the pressure sensor via a yellow cable. The pressure sensor is connected to the pressure switch via a yellow cable. The pressure switch is connected to the pressure sensor via a yellow cable. The pressure sensor is connected to the pressure switch via a yellow cable.

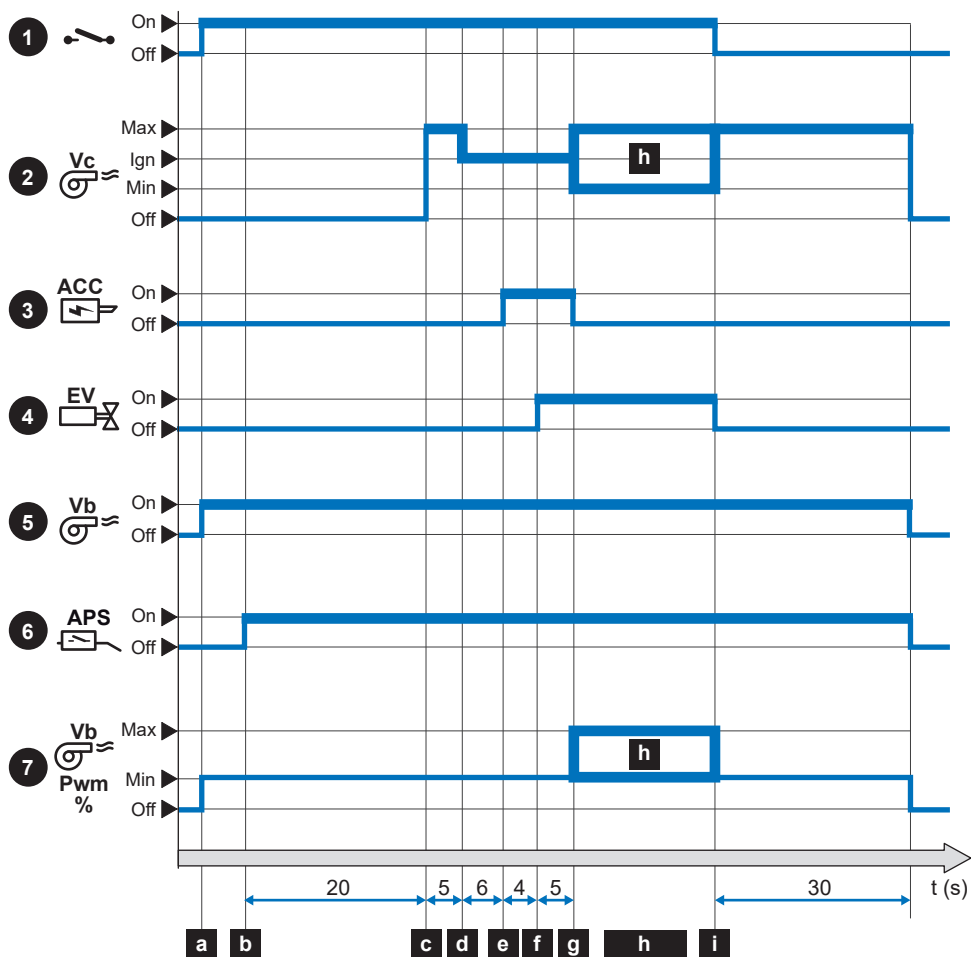


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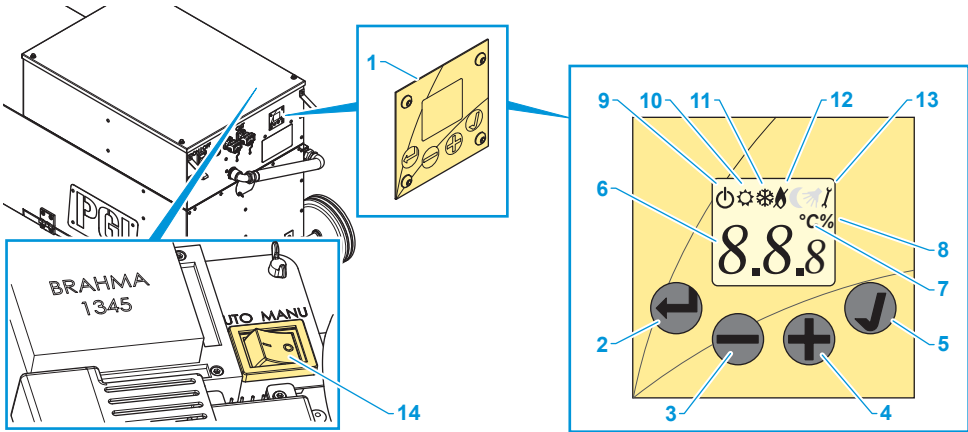
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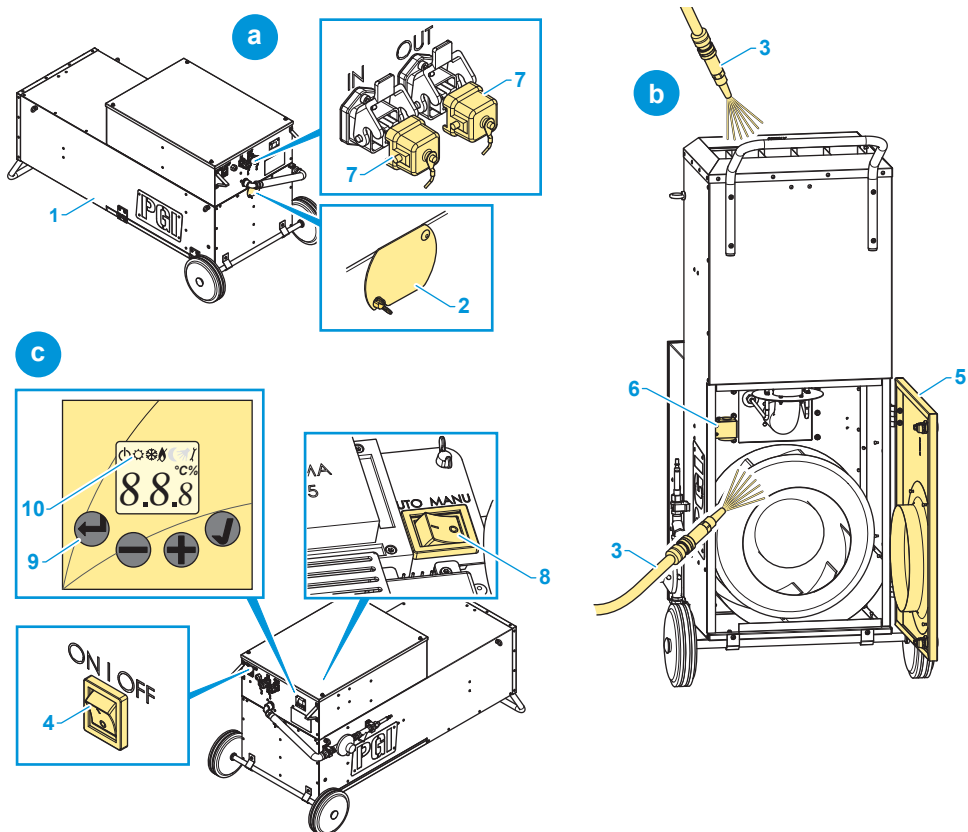
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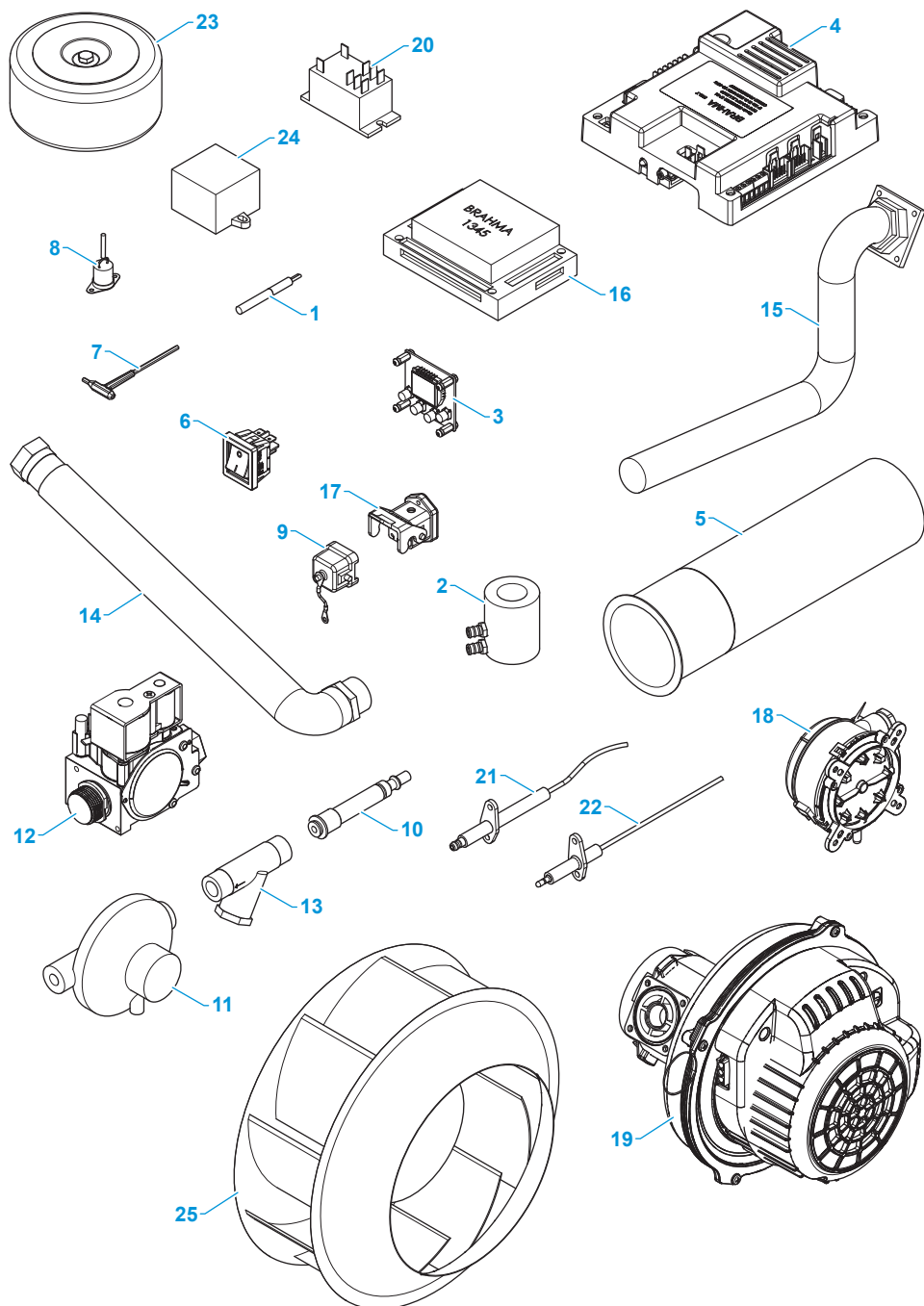


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1 - Foreword

Thank you for purchasing a PGI 85 hot air generator.

Our French design and manufacturing appliance has been designed, manufactured and tested rigorously to give you maximum satisfaction.

SYSTEL develops a range of products and accessories for heat generation, lighting, energy savings, visit our website to discover these innovative product:

www.systel-international.com

In accordance with its policy of continuous improvement, SYSTEL reserves the right to modify the specifications of all products described herein without prior notice.

This document contains sections written in French (original version) and translated sections. The French sections will be the reference in case of dispute.

All measures are expressed in metric units. Converted values to other systems (notably US and UK) are given for reference only.

Pictures are non-contractual ones.

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2 - General

Installation and the first running of the appliance should only be carried out by a qualified engineer.

They are responsible for the conformity of the installation and the commissioning in accordance with the standards in force.

2.1 - Intended use of the appliance

SYSTEL appliances are manufactured in conformity with the latest technical evolutions and safety regulations in force.

The air hot generator PGI 85 is scheduled to heat farm buildings by production of hot air.

All other uses are considered as inadequate and prohibited.

In no case will the manufacturer be held responsible for damages or harm caused by using the appliance for any purpose other than that for which it is designed. The user wholly assumes all risks.

The notion of intended use also includes compliance with the instructions in this manual and all accompanying documents, as well as compliance with the installation and maintenance conditions.

2.2 - Documents

- Please keep this manual and, all the documents that accompany it, nearby so that you can consult them if necessary.

We decline all responsibility for damages caused by not observing the instructions of this manual.

3 - Prescriptions and security

A air hot generator can be dangerous if is not properly maintained and used. Read this manual carefully, especially the notes and safety instructions.

- Not following the safety instructions in this manual may subject you to liability in case of accident.
- Pay particular attention to the instructions preceded by the following text.



Indicates a strong possibility of serious personal injury or death if instructions are not followed.



Indicates a risk of electrical shock and damage the appliance if the instructions are not followed.



Indicates a risk of property damage if instructions are not followed.



Provides useful information.



Provides useful information for recycling.

Warnings and cautions in this manual can not cover all the risks associated with the use of the appliance.

In addition to the messages given, it is important to apply good judgement and apply the basic principles of safety.

3.1 - What to do if you smell gas?

- Do not turn on, do not turn off the light.
- Do not operate an electrical switch.
- Do not use the phone in the risk area.
- Do not light a live flame (for example, a lighter or match).
- Do not smoke.
- Turn off the gas tap.
- Open doors and windows.
- Notify other occupants of the room.
- Inform the gas company or your qualified professional.

3.2 - Prescriptions

You must comply with the following safety instructions:

- Do not use or store explosive or inflammable materials (e.g. petrol, paint etc.) in the same room as the appliance.
- Not use the appliance in the hour following the cleaning of the local where it is located.
- Never disable security devices and do not try to adjust them as you may make them malfunction.
- Do not modify:
 - the appliance,
 - the appliance's environment,
 - the air, gas pipes or electrical cables.
- Never perform any maintenance or repair of the appliance yourself.
- Do not damage or remove the seals on any component. Only SYSTEL After Sales Service professionals are allowed to work on sealed components.
- Do not modify the technical or architectural conditions near the appliance, in so much as these can have an effect on the safe usage of the appliance.
- To limit the accumulation of CO₂ in the heated room, make sure it is properly ventilated (3000 m³/h).
- It is essential to provide a sufficient air exchange rate in the premises. The air exchange must take into account, the air necessary for the combustion of the appliances and the air necessary for the animals and the operators. Correct operation for the combustion of appliances requires a renewal of 23 m³ / h of fresh air per kW.
- It is essential to fix the device by its fixing system, any other system is prohibited.

3.3 - Appliance safety devices

The device is equipped with 4 safety devices:

- A thermocouple safety that automatically closes the gas supply, in case of extinction of the flame.
- A thermal switch safety that automatically closes the gas supply, in case of abnormal rise of temperature (flashback, fire at the injector).
- A pressure switch that controls the operation of the mixing fan.
- A copy of the combustion fan speed to check its operation.



In the event of a leak, the gas supply must be shut off at the gas supply tap.

3.4 - Thermal balance

Each building has its own constructive and environmental characteristics. They are likely to significantly alter the thermal profile of the building.

It is essential to have the study carried out by a thermist. The heating power must be adapted to the specificities of the building and the zootechnical constraints of the breeding.

3.5 - Decrees, regulations, directives

During the installation and activation of the appliance, the decrees, directives, technical regulations, standards and clauses hereafter must be complied with in the versions that are currently in force.

3.6 - Recycling

The appliance is largely composed of recyclable materials.



The packaging, the appliance, and the package content should not be thrown away with domestic refuse, but rather eliminated according to regulations in force.

4 - Constructor Guarantee/Responsibility

Thank you for choosing SYSTEL.

The PGI 85 hot air generator has undergone several qualitative controls. This device must be installed in accordance with the standard practice, according to the current regulations and the specific instructions contained in the installation manual. Notwithstanding, in order that you can best benefit from its performance, as soon as your PGI 85 hot air generator is installed, it must imperatively undergo an activation consisting of appliance operation controls and adjustments specific to the room to which it is installed.

SYSTEL offers you a parts guarantee of: ONE YEAR on its equipment, from the date of original installation of your PGI 85 hot air generator, which cover any replacement of defective part.

This manufacturer's warranty is subordinated to an annual maintenance which must be carried out by a professional. This professional will check, clean and set the unit at least once a year, or even more if necessary.

Therefore, we will repair or replace, purely and simply, recognized defective parts, after return in our factories for review.

Parts repair or replacement during the warranty period constructor cannot have the effect to extend the initial term thereof.

Constructor parts warranty cannot be accepted due to a bad installation, inappropriate storage conditions as well as in the event of faulty operation or damage to your PGI 85 hot air generator resulting from misuse or abuse, insufficient maintenance.

The constructor parts warranty does not cover damage resulting from a change in characteristics of the electric power supply.

5 - Appliance description

A See page 2.

- 1 Mixing fan
- 2 Ionization electrode
- 3 Burner
- 4 Ignition electrode
- 5 Temperature probe
- 6 Door
- 7 Handful
- 8 Hot air outlet flap
- 9 Wheel
- 10 Regulator
- 11 Filter
- 12 Control Panel
- 13 "On/off" switch
- 14 Tow press power cable 15
- Connector "IN"
- 16 Connector "OUT"
- 17 Oxidizing fan
- 18 RS485 Interface
- 19 "Auto/Manu" switch
- 20 Pressure switch
- 21 Control box
- 22 Feet
- 23 Gas solenoid valve
- 24 Bornier
- 25 Transformer
- 26 Power Relays
- 27 Visit hatch
- 28 Lifting ring

5.1 - Dimensions et poids

B See page 3.

5.2 - Nameplate

C See page 4.

- 1 Nameplate



Warning! The appliance must only be used with the types of gas and pressure indicated on the information plate.

5.3 - Certificate of conformity

D See page 4.

- 1 Certificate of conformity



6 - Choice of location

Before choosing a site for the appliance, carefully read the safety warnings and instructions in the user guide and installation manual.

- Consider the weight of the appliance (see "Technical Data" chapter).
- Choose a location which allows for a proper positioning of the gas conduits.
- To allow periodic maintenance, keep a minimum distance from each side of the appliance.
- Make sure that the materials used for installation are compatible with those of the appliance.
- The device must be installed inside a building.
- The device must be installed horizontally.
- There must be no obstacles in front of the air inlet and air outlet.
- Explain these requirements to the user of the device.

6.1 - Position of the appliances

E See page 5.

- 1 Building
- 2 Heat generator PGI 85



For optimum heat distribution the generators should be evenly distributed along the length of the building.

The recommendations below are given as an indication. They can vary depending on the ventilation and insulation of the building.

Building surface area (m ²)	1000 to 1200	1200 to 1500	1500 to 2000
Building length (m)	≤ 80	80 to 100	> 100
Number of generators	2	4	4
See fig.	1	2	2

6.2 - Site preparation



Careful!
Respect the safe zone.

F See page 6.

- 1 Heat generator PGI 85
- 2 Safe zone

Item	Dimension
A	1.5 m
B	1.5 m
C	1.5 m
D	1 m
E	5 m
F	3 m

7 - Installing the device

- Before installing the device, check that the local distribution conditions (gas type and pressure) are compatible with the device.

7.1 - List of delivered material



See page 7.

- 1 Heat generator PGI 85
- 2 Handful
- 3 Wheel + screws
- 4 Wheel axle + screws
- 5 Propane gas kit (*)
- 6 Natural gas kit (*)
- 7 Seal
- 8 Filter (Option)
- 9 Sheath Ø100
- 10 Allen key
- 11 Technical manual



(*) Depending on your installation.

7.2 - Monting

H See page 8.

- 1 Heat generator PGI 85
- 2 Handful
- 3 Wheel
- 4 Wheel axle
- 5 Self-locking shell
- 6 Screws
- 7 Screws
- 8 Gas kit
- 9 Seal
- 10 Allen key (not provided)
- 11 Gas valve inlet
- 12 Support

7.2.1 - Wheel and handful

- Unpack the carton containing the self-locking wheel attachment caps (5), wheel fastening screws (6) (3) and handle fastening screws (7) (2).
- Remove the wheels (3), wheel axle (4) and handle (2) from the carton containing the PGI 85 heater.
- Attach the wheel axle (4) to the PGI 85 heater using the 4 screws (6).
- Attach the 2 wheels (3) to the wheel axle using the 2 self-locking caps (5).
- Attach the handle (2) to the PGI 85 heater using the 4 screws (7).

7.2.2 - Gas inlet



Be careful not to forget the seals during assembly.
Use only suitable seals.

- Connect the gas kit (8) to the gas valve inlet (11).
- Clip the gas kit to (8) on the supports (12).

7.2.3 - Combustion air

I See page 9.

- 1 Heat generator PGI 85
- 2 Inlet air combustion
- 3 Sheath Ø100 (Length 6 m)
- 4 Filter (Option)

- Connect the sheath (3) to the combustion air inlet (2).
- Secure the sheath (3) using a collar (not supplied).
- Connect the other end of the sheath (2) to an outside air inlet.



As an option, it is possible to connect a filter (4) to the combustion air inlet (2) instead of the duct (3).

7.3 - Attachment

J See page 9.

- 1 Heat generator PGI 85
- 2 Lifting ring
- 3 Chain (not included)
- 4 Lifting cable (not included)
- 5 Cable greenhouse (not included)
- 6 Karabiner



Choose the type of fastener adapted to your support (stone, concrete...) and the load to be supported (see chapter "Technical data").
Position the PGI 85 (1) level heater.

- Attach the cables (2) of the winch lifting system using cable clamps (5).
- Pass the cables (2) through the carabiners (6).
- Pass the chains (3) through the carabiners (6).
- Pass the carabiners (6) through the lifting rings (2).
- Use the winch lifting system to position the PGI 85 heater (1) at the desired height (1 m from the minimum floor).
- Attach the chains (3) to the ceiling.

8 - Gas connection



The diameter of the pipes connected to the PGI 85 heater must correspond to the gas needs of the application (flow, pressure, pipe length).
The length of the flexible hose between the appliance and the gas circuit must be a maximum of 2.5m.

K See page 10.

- 1 Heat generator PGI 85
- 2 Tube
- 3 Quick connector

- Close the gas shut-off valve.
- Connect the building's gas supply to the tube (2) using the quick coupling (3).

The pipes must be arranged in such a way as to avoid any tractive effort.
They must be observable along their entire length.

8.1 - Pipe sizing

In order to guarantee a correct supply to the hot air generators, it is necessary to respect the diameters and lengths of the supply pipes according to the type of gas and the number of appliances to be supplied.



Dimensions for copper connecting pipe.

Type of gas	Ø pipe
Propane (1 bar)	12/14
Natural gas (300 mbar)	26/28
Natural gas (1 bar)	20/22

9 - Electrical connections



Important: the electrical connection of the appliance must be made only by a qualified professional. All work inside the appliance must be carried out by a qualified professional or the SYSTEL after-sales service.



Danger! In the case of incorrect installation, there is a risk of electric shock and damage to the appliance.

The connection must be made via a double pole switch or circuit breaker in order to disconnect the appliance from the mains for cleaning and maintenance.



See page 10.

- 1 "On/Off" switch
- 2 Power cable
- 3 Connector "IN"
- 4 Connector "OUT"
- 5 Terminal block
- 6 "Auto/Manu" switch

- Connect the generator directly to an outlet with a ground terminal (2 pins + ground).



Check that the ground is properly connected.
Do not use an extension cord or multiple outlet to connect the generator to the power grid.

9.1 - Connector

Terminal block	Connector		Designation
	IN	OUT	
4	-		Defect
5	-	3	Defect
6	-	-	Reset
7	-	-	Reset
8		-	0V (0-10V)
9	3	-	Signal (0-10V)
10	1	1	Modbus A
11	2	2	Modbus B

9.2 - Heating control (0-10V)

The generator is switched on and off by means of a temperature control system generating a 0-10V signal. This system shall be equipped with a temperature sensor to measure the temperature in the building to be heated.

- Consult the technical manual of your appliance for its installation and electrical connection.
- Make sure that the temperature sensor is not exposed to the sun or air currents.
- Do not install the temperature sensor near a door.

To regulate the temperature correctly, the temperature probe must be installed close to the animals.

If the size of the animals changes, the temperature probe must be moved accordingly.

- Connect the 0-10V regulation on terminals 3 and ground of the connector "IN" (3).



It is imperative to connect the 0-10V control via a shielded cable of at least 0.5mm² away from the power cables.

9.3 - Alarm

A dry contact is available on terminals X4 and X5 of the terminal block to signal a malfunction of the appliance.



Your alarm must be electrically powered in order to operate.

- Connect your light or sound signal to this terminal block.

9.4 - Remote reset

To be able to remotely rearm your PGI 85 heater, it is necessary to connect terminals 6 and 7 of the terminal block (5).

- Connect a push button on terminals 6 and 7 of the terminal block (5).



If the Modbus mode is not used, it is possible to use terminals 1 and 2 of the "OUT" connector (4).
It will be necessary to have, beforehand, connected terminals 6 and 7 of the terminal block (5) to terminals 1 and 2 of the connector "OUT" (4).

9.5 - ModBus



See page 11.

- 1 Interface 1345
- 2 Connector "OUT"
- 3 Connector "IN"
- 4 Switch addressing
- 5 Terminating resistance
- 6 Regulation
- 7 Cable

It is possible to connect up to 6 PGI 85 heaters on the same regulation (6) via a Modbus protocol.



PGI 85 heaters must be wired in series.
The connection between the different elements of the network must be made using a cable consisting of shielded twisted pairs (7) with a minimum cross-section of 0.25mm².

Generator addressing

In the network constituted, each PGI 85 heater must have a different address to be able to interact with the regulation.

- Position the switches (4) on the 1345 (1) interface of each PGI 85 heater to address them.

Terminating resistance



By default the terminating resistor (5) is disabled on the interface 1345 (1).

In the Modbus network constituted, the termination resistor (5) must be activated on the last PGI 85 heater constituting the network.

- Position the jumper in the "120Ω On" position.

9.6 - Electrical diagram



See page 12.

Item	Designation
Bor	Terminal block
On/Off	Start / Stop switch / Drying
Ti	Isolation transformer
EV1	Gas solenoid valve
RST	Reset push button
LED	Defect LED
TS	Thermal switch safety (Klixon)
APS	Pressure switch
ION	Ionization electrode
AAC	Ignition electrode
Vc	Combustion fan
Vb	Mixing fan
KM1	Mixing fan relay
LCD5	Control panel
1345	Interface 1345

10 - Appliance use

10.1 - Commissioning



See page 2.

- 6 Door
- 12 Control panel
- 13 "on/off" switch
- 19 "Auto/Manu" switch

- Put the heating regulation in heat demand.
- Make sure that:
 - The device is electrically powered.
 - The gas tap is open.
 - The door (6) of the device is closed.
 - The "Auto/manu" switch (19) is on the "AUTO" position.

- Toggle the "On/Off" switch (13) to the "ON" position.
- The heater should start within 2 minutes.

- To check the proper functioning of the installation, run the device for a minimum of 15 minutes.
- Adjust the heating regulation to the desired temperature.



At the first start, it is necessary to repeat the commissioning 3 times.
This makes it possible to purge the gas pipes.



10.2 - Boot cycle

O See page 13.

- 1 Heating control (0-10V)
- 2 Combustion fan
- 3 Ignition electrode
- 4 Gas solenoid valve
- 5 Mixing fan
- 6 Pressure switch
- 7 Fan mixing control
- t Time (in seconds)

a - Heating demand by regulating heating (1).

Mixing fan start (5).

b - Pressure switch closure (6).

c - Combustion fan start (2) to max speed.

d - Combustion fan (2) at speed of ignition.

e - Starting the ignition electrode (3). f - Gas solenoid valve opening (4).

g - Flame ignition.

Shutdown of the ignition electrode (3).

h - Heating.

i - Request to stop heating by the heating control (1).

Shutdown of the combustion fan (2).

Shutting down the mixing fan (5).

10.3 - Turn the device off

A See page 2.

- 13 On/Off switch

- Set the On/Off switch (13) in position "OFF".

Arrêt prolongé

- Set the heating regulation to the minimum temperature.
- Wait for the burner and fan to stop.
- Close the gas valve.
- Toggle the "On/Off" switch (13) to the "OFF" position.



Take the device down from its supports and clean it (see cleaning chapter). After drying, store the device in a clean, dry place away from dust.

10.4 - Control panel

P See page 14.

- 1 Control panel
- 2 "Selection" button
- 3 Button "-"
- 4 Button "+"
- 5 Button "Valider"
- 6 Display
- 7 Temperature in °C
- 8 Percentage of heating
- 9 "On/Off" icon
- 10 "Ventilation only" icon
- 11 "Heating mode" icon
- 12 "No heating" icon
- 13 "Fault" icon
- 14 Auto/Manu switch




The control panel is only active if the Auto/Manu switch (14) is in the "MANU" position.
The activation time in "MANU" mode takes up to 1 minute.

- Using the "Selection" button select the operating mode.

Icon	Designation
	OFF : Stop
	Ventilation only
	Heating

After powering on, the following information is displayed in cyclic mode (2 seconds for each visualization).

Screen	Designation
	Manual mode.
	Display of the measured temperature.
	Display if the temperature probe is not connected or defective.
	System status.
St	Waiting for heating request.
FAn	Mixing fan start.
tP1	Ventilation phase.
tP2	Ventilation and ignition phase.
TS	Ignition and opening gas valve.
rP	Functional (burner on).
Po	Post-purge position.

Screen	Designation
	Operating power.

10.4.1 - Temperature setting in manual mode

- Using the "+" (4) and "-" (3) buttons, set the desired temperature.
- Press the "Validate" button (5) to confirm.



Temperature range: 5°C to 30°C (in steps of 0.5°C).
Default: 21°C.

11 - Defect codes

Code	Designation
06E	Reset not allowed.
07E	Internal error.
10E	Flame not detected.
11E	Temperature too high.
12E	Loss of flame detection
13E	Pressure switch loss.
14E	Combustion fan defect.
15E	Parasitic flame.
17E	General lock.
19E	Pressure switch defect.
20E	Contact pressure switch closed.
22E	Open contact pressure switch.
E-	LCD communication defect.

12 - Servicing



Maintenance should be carried out cold. Do not use compressed air to clean the burner. The projected dirt may become embedded in the perforations of the burner grid and clog it.

To increase the life of your device, it is recommended that you inspect and clean it regularly.



For poultry premises: clean and check the generator at each batch change or every 35 days of use (maximum duration).
Clean the generator before spreading the ground litter.

Regularly check:

- That the air inlets are not obstructed.
- That there are no obstacles in front of the hot air outlet.

Before starting the maintenance:

- Turn off the gas.
- Turn off the power supply.
- Lower the heater to the floor.

12.1 - Cleaning



See page 14.

- 1 Hot air generator PGI 85
- 2 Visit hatch
- 3 Water pipe
- 4 Start / Stop switch
- 5 Door
- 6 Venturi
- 7 Protective cover
- 8 Auto/Manu switch
- 9 Button "Selection"
- 10 "Ventilation only" icon



It is forbidden to clean the device with a pressure washer.

- Open the visit hatch (2).
- Plug the connectors with the protective covers (7).
- Place the PGI 85 heater in an upright position.
- Open the door (5).
- Clean the exterior and interior of the PGI 85 heater using a water hose (3).
- Clean the venturi carefully (6).
- Check that the venturi (6) is clean and not obstructed.
- Check the status of the ionization probe and replace it if necessary.

- Check the status of the ignition electrode and replace it if necessary. Check its setting in relation to the burner (3 to 5mm).
- Close the door (5).
- Replace the PGI 85 heater in a horizontal position.
- Close the visit hatch (2).
- Turn the PGI 85 heater back on.
- • Put the PGI 85 heater in "MANU" mode.
- • Using the "Select" button (9) select the "ventilation only" mode (10).
- • Dry the device for 5 minutes.
- • Return the PGI 85 heater to its original position.
- • Restore the gas supply.
- • Turn on the device (see chapter "Commissioning").
-



If the device should not be used directly after cleaning, store it in a clean, dry place away from dust.

13 - User information

The user of the appliance must be informed of the handling and operation of the appliance.

- Explain the operation of the appliance in such a way that he is familiarized with its use.
- Examine together the user manual and respond to its questions, if needed.
- Give to the user all manuals and documents concerning the appliance, and ask him/her to keep them close the appliance.
- In particular, inform the user of the safety instructions that must be observed.
- Remind to the user the need of a regular maintenance.
- Recommend him/her to sign a maintenance contract with a qualified professional.

14 - Maintenance/After Sales Service

If cleaned and properly adjusted, your appliance will use less gas and will last longer.

Regular maintenance of the appliance by a qualified professional is essential to the proper functioning of the appliance.

It will extend the life of the appliance and reduce its energy consumption and pollution emissions.

We recommend that you take out a maintenance contract with a qualified professional.

Know that inadequate maintenance can compromise the safety of the appliance and can cause material damages and bodily harm.

15 - Spare parts

R See page 15.

In order to guarantee a durable operation of all of the parts of the appliance and to conserve the appliance in good condition, only spare parts originating from SYSTEL should be used during repair and maintenance work.

- Only use original spare parts.
- Ensure the proper mounting of these parts, respecting their initial position and orientation.

Rep.	Désignation	Ref.
1	Temperature probe	SOTEST07
2	Venturi	A108114
3	LCD screen	AFLCD
4	Control box	BOCOTC340
5	Burner	BRLPGX
6	Switch	BTNMACA
7	Key 6 hollow sides	CL6PC
8	Safety thermostat	CLK80M
9	Connector cover	CVJIF
10	Grommet socket	DOUILGROM
11	Regulator 37 mbar	DTD37
12	Gas solenoid valve	EVPGX
13	Propane filter	FILTPFIL20X150
14	Flexible stainless steel M/F 3/4	FLINMF34L220400
15	Flexible (270mm)	FLINMF34L220400
16	Interface 1345	IN1345
17	Connector	INSF3PT10A
18	Pressure switch	PRESHUB
19	Fan NG150	PVTPGX + VEPRPGX + BRIEVHE
20	Power relay	RE2CB230
21	Ignition electrode	SDIONIHE
22	Ionization electrode	SDIONIHE
23	Isolation transformer (135VA)	TRIS135VA
24	Capacitor	VTCE400
25	Mixing fan	VTCE400

16 - Technical data

Description	Unit	PGI 85
Heater		
Useful power	kW	85
Airflow	m3/h	3500
Propane Gas		
Maximum operating pressure	mbar	37
Minimum pressure	kW	45
Natural Gas		
Maximum operating pressure	mbar	20
Minimum pressure	kW	55
Electrical characteristics		
Supply voltage	VAC	230
Frequency	Hz	50
Maximum electrical consumption	W	575
Current	A	2.5
Dimensions and weight		
Height	mm	741
Width	mm	665
Depth	mm	1377
Weight	kg	70
Operating temperature	°C	-20 / +60



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