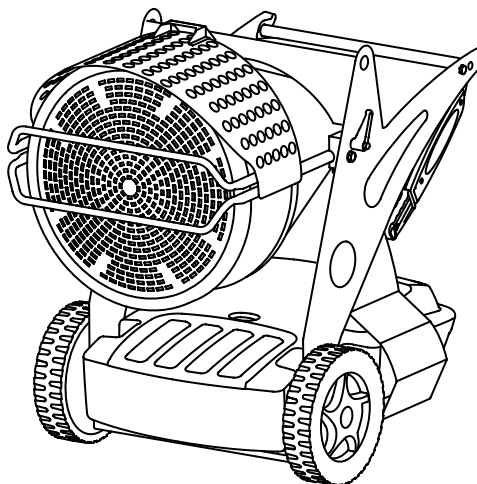


- ▶ en - Radiant hot air generator
- ▶ it - Generatore d'aria calda ad infrarossi
  - ▶ de - Infrarotheizgerät
  - ▶ es - Generador de calor por Infrarrojos
  - ▶ fr - Générateur de chaleur à l'infrarouge
  - ▶ nl - Infrarood warmeluchtgenerator
- ▶ da - Varmluft generator med infrarøde stråler
- ▶ pl - Promiennikowa nagrzewnica powietrza
  - ▶ lv - Karstā gaisa izstarotājs
  - ▶ et - Kiirgus-õhusoojendi
  - ▶ cs - Naftové infračervené topidlo
  - ▶ hu - Légbefűvós hőszugárzó
  - ▶ ro - Radiator infrarosu
- ▶ bg - Инфрачервен въздушен отоплител
- ▶ ru - Инфракрасный нагреватель воздуха

Operating manual - Libretto uso e manutenzione - Bedienungsanleitung - Manual de Uso y Mantenimiento - Manuel d'instructions - Handleiding voor gebruik en onderhoud - Brug- og vedligeholdelsesmanuale - Instrukcja obsługi - Eksploatacījas Instrukcija - Kasutus- ja hooldusjuhend - Návod k obsluze - Használati utasítás - Instrucțiunile de utilizare - Инструкція за експлоатация - Инструкция по обслуживанию



4117.399  
Edition 12



▶ en - **IMPORTANT:** Be sure to read and understand this operating manual before assembling, the set up and functioning or the maintenance of this heater. The misuse of this heater can cause serious injuries. Conserve this manual for future reference. ▶ it - **IMPORTANTE:** Leggere e comprendere questo manuale operativo prima di effettuare l'assemblaggio, la messa in funzione o la manutenzione di questo riscaldatore. L'uso errato del riscaldatore può causare lesioni gravi. Conservare questo manuale a titolo di futuro riferimento. ▶ de - **WICHTIG:** Lesen und verstehen Sie dieses Handbuch vor der Montage, der Inbetriebnahme oder der Wartung dieses Heizgerätes. Falscher Gebrauch des Heizgerätes kann zu schweren Schäden führen. Bewahren Sie dieses Handbuch für zukünftiges Nachschlagen auf. ▶ es - **IMPORTANTE:** Leer atentamente este manual de Uso y Mantenimiento, antes de utilizar por primera vez este equipo, prestando mucha atención a todas las recomendaciones indicadas. El uso inadecuado del calentador, puede causar daños graves a personas, animales o cosas. Conservar este manual en lugar seguro y siempre a disposición para futuras consultas. ▶ fr - **IMPORTANT:** Lire attentivement et comprendre ce manuel avant d'effectuer l'assemblage, la mise en marche ou l'entretien du réchauffeur. Le mauvais usage de celui-ci peut provoquer de graves lésions. Conserver ce manuel comme futur objet de référence. ▶ nl - **BELANGRIJK:** Bestudeer deze handleiding alvorens het apparaat in elkaar te zetten, in gebruik te nemen, of van een onderhoudsbeurt te voorzien. Verkeerd gebruik van de verwarming kan ernstig letsel tot gevolg hebben. Bewaar deze handleiding voor verdere naslag. ▶ da - **VIGTIG:** Denne manuale bør læses og forstås før monteringen, ibrugtagningen eller vedligeholdelsen af dette varmeapparat udføres. Et ukorrekt brug af varmeapparatet kan medføre alvorlige personlige skader. Opbevar denne manuale for yderligere henvisninger. ▶ pl - **WAŻNE:** Przed przystąpieniem do montażu, ustawiania i eksploatacji lub konserwacji promiennikowej nagrzewnicy powietrza należy przeczytać i zrozumieć informacje zamieszczone w niniejszej instrukcji obsługi. Niewłaściwe użytkowanie nagrzewnicy może skutkować poważnymi obrażeniami ciała. Instrukcję należy zachować do wykorzystania w przyszłości. ▶ lv - **SVARĪGI:** Uzmaniģi izlasiet visas instrukcijas pirms sāksiet iekārtas ekspluatāciju vai tehnisko apkopi. Ēenerators nepareiza lietodana var izraisīt nopietnus miesas bojājumus: tādus kā apdegumi ugunsgrēka vai sprādziena gadījumā, elektriskais doks, nosmakšana no tvana gāzes. ▶ et - **OLULINE TEAVE:** Enne soojendi paigaldamist, käivitamist või hooldamist lugege kogu käesolev kasutusjuhend hoolikalt läbi. Soojendi ebaõige kasutamine võib tekitada tõsiseid kehavigastusi. Hoidke kasutusjuhend alles. ▶ cs - **DŮLEŽITÉ UPOZORNĚNÍ:** Než přistoupíte k montáži, nastavení a používání či údržbě naftového infračerveného topidla, pečlivě si přečtěte informace uvedené v tomto návodu k obsluze. Nesprávné používání topidla může mít za následek vážná zranění. Návod pečlivě uschovejte pro pozdější použití. ▶ hu - **FONTOS:** A hőszugárzó összeszerelése, beállítás, működtetése vagy karbantartása előtt figyelmesen olvassa el és értse meg az alábbi használati utasításban leírt információkat. A hőszugárzó helytelen használata komoly testi sérüléseket okozhat. A használati utasítást tartsa meg későbbi használatra is. ▶ ro - **IMPORTANT:** Înainte de a trece la montarea, setarea, punerea în funcțiune sau orice altă operație legată de conservarea încălzitorului, trebuie să citiți cu atenție și să înțelegeți bine prezenta instrucțiune. Utilizarea neadecvată a încălzitorului poate duce la accidente și răni. Instrucțiunile trebuie păstrate pentru a fi utilizate în viitor. ▶ bg - **ВАЖНО:** Преди започване на работа на инфрачервения въздушен отоплител или на каквито и да било действия свързани с поддръжката му, внимателно трябва да се прочете тази инструкция за експлоатация. Неправилната експлоатация на инфрачервения отоплител може да доведе до сериозни наранявания, в резултат на изгаряне, пожар, експлозия, токов удар или отравяне с въглероден окис. ▶ ru - **ВАЖНО:** Перед началом монтажа, установки и эксплуатации или техобслуживания инфракрасного нагревателя воздуха следует ознакомиться и соблюдать указания, содержащиеся в данной инструкции по обслуживанию. Неправильная эксплуатация нагревателя может стать причиной серьезных телесных повреждений. Инструкцию следует сохранить для использования в будущем.

# XL 9ER - XL 9SR

## INDEX

1. PRODUCT PRESENTATION
  1. UNPACKING
  2. SAFETY INFORMATION
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  4. THEORY OF OPERATION
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6. ACCESSORIES
7. FAULTS AND THEIR LIKELY CAUSES

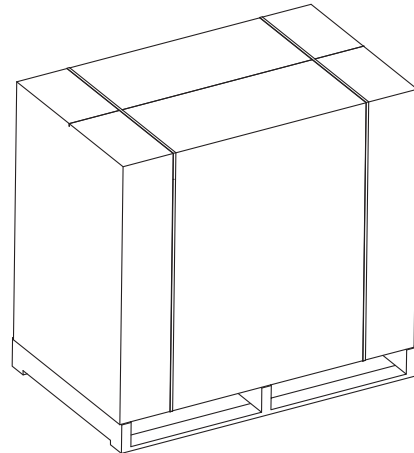
## PRODUCT PRESENTATION

XL 9 is a generator of heat by radiation. Radiation technology is based on the same physical principle behind the warmth of sunlight. The sun heats bodies without a flow of warm air but by waves of radiation. The radiation method is becoming highly popular among professional clients because of the countless advantages it offers. XL 9 was designed on the basis of this physical principle and has become irreplaceable in environments which require a constant, even source of heat for warmth, defrosting and drying. In addition, its extremely low noise level makes it suitable for working without having to put up with the noise that other types of heater normally produce. The generator has rubber wheels for ease of movement and it can also be raised and set at different heights by means of eyebolts. Its extended autonomy and automatic thermostat function grant the operator maximum freedom of use. The external fuel-tank indicator provides an easy check on whether fuel needs topping up. The S model has a dual power device that enables a more efficient use of the machine under different conditions and during the various seasons of the year.

## UNPACKING AND PACKAGING

### UNPACKING

- Remove the supports used to pack the appliance (Fig. 1).
- Open top side of the box.
- Remove the cardboard from the top.
- Remove the supports that hold the generator to the pallet (Fig. 2).
- Delicately lower the heater off the pallet.
- Dispose of the material used to pack the generator according to the current government regulations in your area.
- Check the machine for eventual damages incurred during transportation, if the machine appears damaged immediately inform the store where you purchased it.

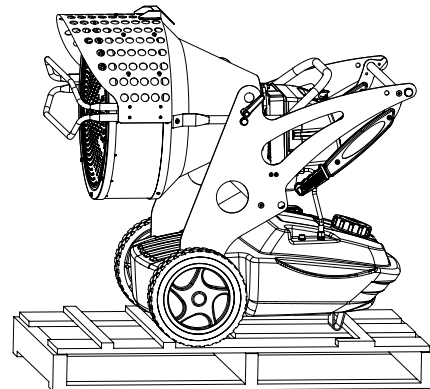


**Figur 1 - Packaging**

### ON PACKAGING AND STORING

If the generator needs to be placed in storage, or if it has suffered major damage in transport, or needs to be repaired:

- Check for damage, in particular of a nature which could cause loss of fuel. In this case, empty the tank of the remaining fuel.
- For storage, place the generator on the same pallet from which it was unpacked and, for return, on any suitable EPA-branded euro-pallet.
- Firmly anchor the generator to the pallet (Fig. 2).
- Whenever possible, slide the cardboard packing from the top down over the pallet and anchor it firmly using suitable materials (Fig. 1).
- Store the machine in a suitable, dry place and do not stack more than two. Despatch the generator preferably as shown Fig. 1 or at least as shown in Fig. 2.



**Figur 2 - On pallet**

## SAFETY INFORMATION

### WARNING

**IMPORTANT: Read this entire manual carefully before operating or effectuating any maintenance procedures on this generator. The misuse of the generator can cause serious of fatal injuries due to burns, fires, explosions, electrical shock or asphyxiation from carbon monoxide.**

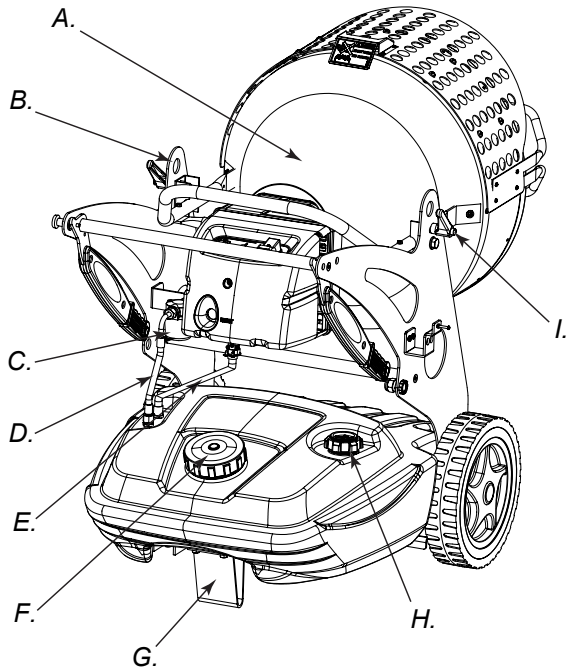
**DANGER: Carbon monoxide asphyxiation can be fatal.**

**Carbon Monoxide Asphyxiation** - The first symptoms of carbon monoxide asphyxiation are similar to that of the flu, headaches, dizziness and/or nausea. These symptoms could be caused by the malfunctioning of the generator. **In this case go outside immediately.** Have the generator repaired. Then you may start it again. Some people are more affected by the effects of carbon monoxide than others, especially pregnant women, those who suffer from heart or lung disease or anaemic people; also those who have consumed alcoholic beverages, and those who are at high altitudes. Be sure to read and understand all of the warnings. Conserve this manual for future reference: it will provide you with instructions to operate your generator safely and correctly.

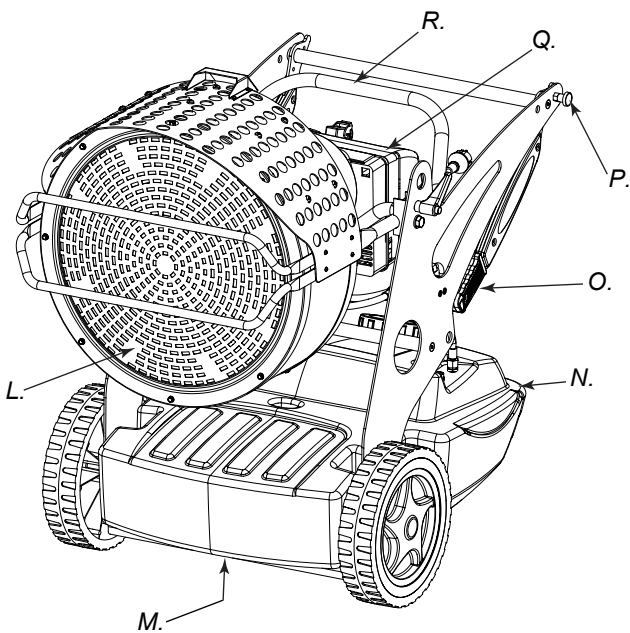
- Use only kerosene or diesel to diminish the risk of fire or explosion. Never use gasoline, naphtha, paint thinners, alcohol or other highly flammable combustants.
- Filling the tank:
  - a) The personnel charged with filling the tank should be qualified and completely familiar with the factory instructions and the current governmental regulations regarding the secure provision of generators.
  - b) Use only the type of fuel expressly specified on the identification plate located on the generator.
  - c) Before filling the tank, extinguish all of the flames, including the pilot light and wait for the generator to cool down.
  - d) While filling the tank inspect all of the fuel lines and their junctions to check for fuel losses. Any losses must be repaired before starting the generator again.
  - e) Under no circumstances should you conserve a quantity of combustible superior to that which is necessary to maintain in function the heater for one day in the same building or nearby the heater. The fuel storage cisterns should be located in a separate building.
  - f) All of the fuel tanks should be located a minimum safety distance from the heater, (like current government regulation), as well as oxyhydrogen blowpipe/ torches, welding equipment and similar ignition sources (with the exception of the fuel tank incorporated in the generator).
  - g) The fuel should be stored in areas where the flooring will not soak up any fuel spills or any drips of fuel line, the flame underneath that could cause a fire.
  - h) All fuel storage must be effectuated in compliance with the current government regulations.
- Never use the generator in rooms where gasoline, paint thinner, or other highly flammable materials are located.
- While the heater is in use follow all of the local ordinances and current government regulations.

- Heaters used close to large pieces of fabric, curtains or other similar materials must be situated at a safe distance from these objects. The minimum safety distance is that which is advised by the current regulations in the your country. It is also advisable to use fireproof materials for coverings. Such materials should be fastened in a safe manner, so as to avoid their catching fire and prevent interference with the generator caused by wind.
- Use only well ventilated areas. Predispose an opening or at least an air exchange system that meets the current governmental regulations in your area so that fresh air will be provided.
- Supply the generator with the proper voltage and frequency as specified on the identification plate.
- Use only extension cords with three wires correctly connected to a grounded plug.
- The minimum safety distance is the distance required by the current governmental regulations in your area.
- Place the generator in a position so that when it is hot or in function it will be on a stable and level surface, so that you avoid starting a fire
- When you move or store the generator, maintain it in a level position in order to avoid fuel loss.
- Keep children and animals away from the generator.
- Disconnect the generator when it is not in use.
- When it is controlled by another device (like a thermostat or a timer), the heater could turn itself on at any time.
- Never place the generator in inhabited rooms.
- Never obstruct the aspiration or dissipation vents.
- When the heater is hot, connected to the power supply or in function it should never be moved, handled, or refilled and no maintenance should be performed on it.
- Smoke that is produced from the first combustion is due to the evaporation of organic materials (ceramic) present in the combustion tank and anticorrosion oil present on the surface of the burner. After a few minutes the smoke will stop.
- The environmental operating temperature is -30°C +40°C.

## PRODUCT IDENTIFICATION

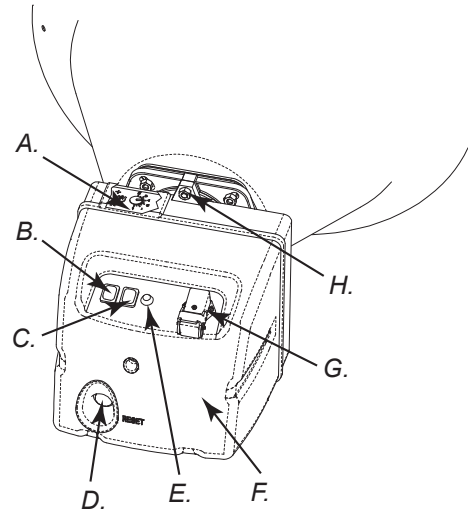


Figur 3

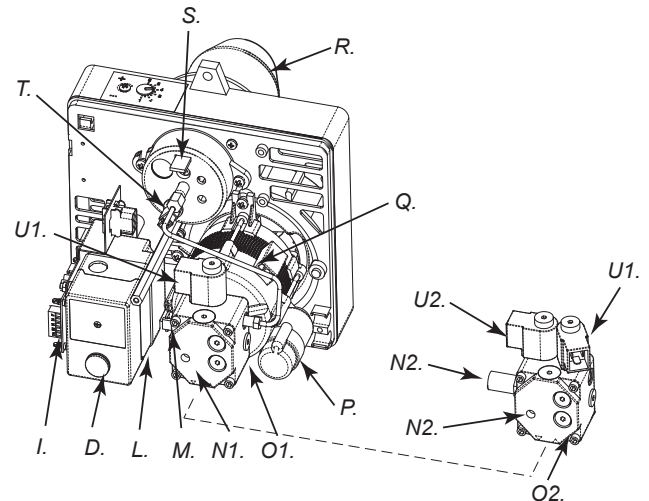


Figur 4

**A.** Combustion chamber, **B.** Hole for raising generator, **C.** Fuel filter or pre-heated filter (optional), **D.** Fuel supply, **E.** Fuel Return, **F.** Fuel tank cap, **G.** Foot or wheel (optional), **H.** Fuel level indicator, **I.** Block of the group combustion, **L.** Radiant deflector, **M.** Fuel drain plug, **N.** Fuel tank, **O.** Handle to move the generator, **P.** Hinge block, **Q.** Burner, **R.** Inclination regulator



Figur 5 - Function controls



Figur 6 - Components burner

**A.** Air vent regulator, **B.** Lighted ON/OFF button, **C.** ON/OFF switch depending on power option (XL 9SR), **D.** RESET Button, **E.** Power indicator, **F.** Burner cover, **G.** Thermostat plug, **H.** Screw for burner block, **I.** Post-ventilation device, **L.** Flame control device, **M.** Transformer, **N1.** Pressure regulator (XL 9ER) of the pump, **N2.** Pressure regulator (XL 9SR) of the pump, **O1.** (XL 9ER) fuel pump, **O2.** (XL 9SR) fuel pump, **P.** Condenser, **Q.** Motor, **R.** Burner tube, **S.** Combustion head regulator, **T.** Photoresistance, **U1.** Electrovalve 1° flame step (XL 9ER-SR), **U2.** Electrovalve 2° flame step (XL 9SR)



## COMBUSTIBLE

**WARNING: The generator runs ONLY on kerosene or diesel fuel.**

The use of impure combustibile can cause:

- Blockage of the combustibile filter and nozzle.
- Formation of carbonaceous deposits on the electrodes.

At low temperatures use non-toxic antifreeze.

## THEORY OF OPERATION

The ventilation needed for proper combustion is produced by a fan inside the burner. The air exits the burner sleeve and mixes with the fuel which is nebulised by a high-pressure nozzle. The fuel is aspirated from the fuel tank by a rotary pump which forces it at high pressure up to the nozzle for nebulisation.

## OPERATING INSTRUCTIONS

**WARNING: Before putting the generator in function, and therefore before connecting it to the electrical system, you must check to see if the electrical systems technical characteristics correspond to those on the identification plate of the generator.**

### STARTING THE GENERATOR


1. Follow all of the safety information.
2. Fill the tank with diesel fuel or kerosene.
3. Close the fuel cap.
4. Plug the alimentation cord into a grounded wall plug with the same tension as the one written on the generator's identification plate.

### STARTING WITHOUT A THERMOSTAT


#### • XL 9ER

Set the switch (B Fig. 5) to the ON position (I). It begins the period of pre-ventilation and after approximately 10 seconds ones the combustion has beginning.

#### • XL 9SR

**WARNING: Before starting the generator to make sure that the button (C Fig. 5) is in position .**

Set the switch (B Fig. 5) to the ON position (I). It begins the period of pre-ventilation and after approximately 10 second ones the combustion has beginning.

For having the maximum potentiality portare set the switch (C Fig. 5) to the  position.

### STARTING WITH A THERMOSTAT

Regulate the thermostat or the control device (for example a timer), if connected, so that it will allow the generator to function.

**WARNING: The generator can ONLY function automatically when the control device, for example a Thermostat or a Timer, is connected to the generator. To connect the control device to the machine consult the paragraph entitled "ELECTRIC DIAGRAM".**

Before starting the machine or after the fuel line has been completely emptied, the fuel flow to the nozzle should be insufficient to cause the intervention of the security device which controls the flame (see the "SAFETY DEVICE" paragraph) that stops the generator. In this case, after having waited approximately one minute, push the Reset button (D Fig. 5 and 6) and start the machine.

If the machine isn't working you should first control the following:

1. Make sure that the fuel tank (N Fig. 4) still contains fuel.
  2. Press the Restart button (D Fig. 5 and 6).
- If the generator still isn't functioning consult the "FAULTS AND THEIR LIKELY CAUSES" paragraph to identify the cause.

**WARNING: Before the second ignition (machine extinguished and adequately cold) to assure the blocking of the screws that block the anterior deflector (L Fig. 4).**

**WARNING: The electric power that feeds the generator must be grounded and have a differential magnetic-thermal switch. The generator's electric cord must be attached to a plug equipped with a section switch.**

### TURNING THE GENERATOR OFF

Turn the switch (B Fig. 5) to the OFF position (O) or turn the thermostat or control device (Timer) off if there is one connected. The flame will go out and the ventilation will continue until it has finished its post-ventilation cycle (cooling down).

**WARNING: Before unplugging the alimentation cord from the wall, wait until the post-ventilation cycle is completely finished (it will take approximately 3 minutes to cool down).**

## SAFETY DEVICE

The generator is equipped with a safety device (L Fig. 6), which controls the flame. If one or more anomalies occur when the generator is functioning, the device will block the burner and the RESET button (D Fig. 5 or 6) will light up.

The generator also has a post-ventilation device which enables optimal, automatic cooling of the combustion chamber for some 3 minutes.

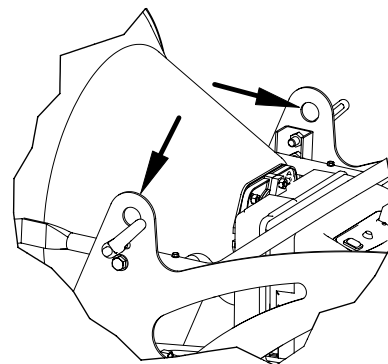
Before turning the generator on again you must identify and eliminate the cause that blocked the machine.

## MOVING AND TRANSPORTATION

**NOTICE: Before raising or moving the machine ensure that the fuel tank caps (F and H Fig. 3) are firmly closed.**

### TRANSPORT

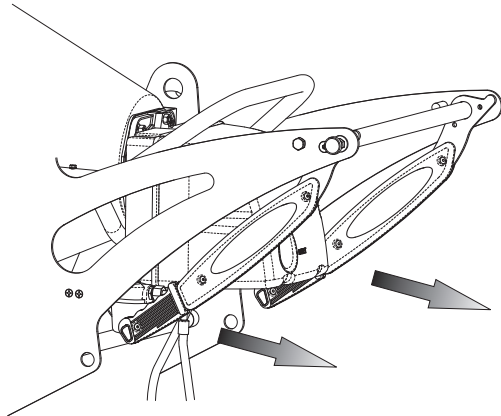
The generator is easy to move and it may be fixed in a raised position thanks to its special eye-bolt mechanism (B Fig. 3 or Fig. 7). This enables it to be set in the most suitable position for heating, defrosting and drying.



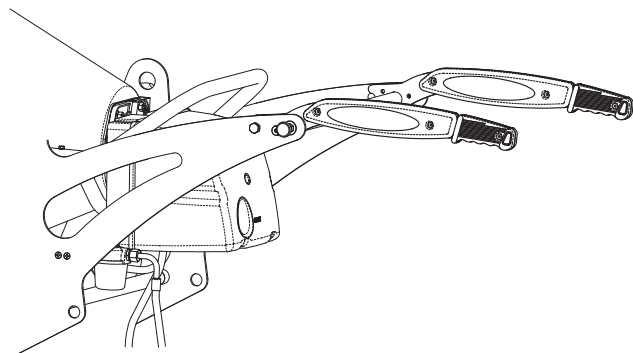
Figur 7 - Hooks in order to raise

**MOVEMENT**

Before picking up or moving the machine you must check to insure that the tank caps (G Fig. 3) are tightly shut. The generator may be supplied with a rotating wheel. In this case, if the flooring allows it you may push the generator like a cart. In the case the machine does not have rotating wheels it is necessary to unblock the hinge (P Fig. 4) located on one of the lateral struts of the generator. Lower the handle from its "resting position" (Fig. 8) Turn the handle to the "Transportation Position" (Fig. 9). Lift the generator and position it so that it is resting on the two anterior wheels.



Figur 8 - Position close handles



Figur 9 - Position open handles

**WARNING:** Before moving the machine you must: turn the machine off by following the indications provided in paragraph "TURNING OFF THE GENERATOR"; unplug the electrical source by pulling the plug out of the wall and waiting for the generator to cool down.

**PREVENTATIVE MAINTENANCE SCHEDULE**

**WARNING:** Before beginning any maintenance operation you must: turn off the machine following the instructions in the "TURNING OFF THE GENERATOR" paragraph; unplug the electrical alimention by unplugging the cord from the wall plug and waiting for the generator to cool down.

The instructions in this paragraph regarding the time between service checks depend a lot on the cleanliness of the fuel and the type of environment the generator is used in - the times given are for well-ventilated environments with little dust and considering the use of clean fuel.

Every 50 hours of operation you must:

- Dismantle the on-line cartridge (see "CLEANING THE FUEL FILTER") extract and clean the cartridge.

Every 200 hours of operation you must:

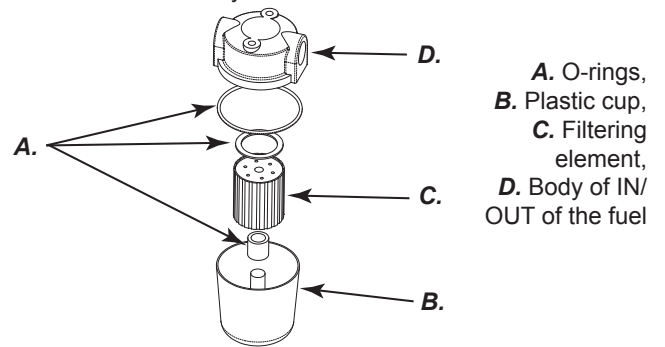
- Dismantle the pump filter (see "CLEANING THE PUMP FILTER") extract and clean it.

Every 300 hours of operation you must:

- Dismantle the burner and clean inside the burner's tube, the flame disk and the electrodes regulating, if necessary the distance (see "CLEANING OF THE BURNER").

**CLEANING THE FUEL FILTER**

- Unscrew the plastic cup and extract the filtering element (cartridge).
- Clean it well with kerosene.
- Insert the filter element back into its place and screw the cup back into the main body of the combustion filter.

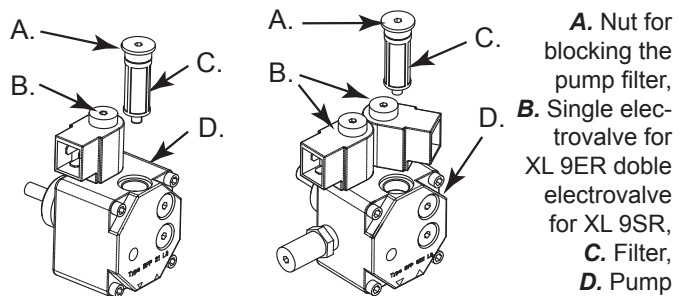


- A.** O-rings,
- B.** Plastic cup,
- C.** Filtering element,
- D.** Body of IN/OUT of the fuel

Figur 10 - Filter

**CLEANING THE PUMP FILTER**

- Dismantle the burner coffer (F. Fig. 5), to identify the pump of the burner (O Fig. 6).
- Unscrew the nut (A Fig. 11) that blocking the filtering element to the pump.
- Extract the filtering element (C Fig. 11) outside its place.
- Clean it well with kerosene.
- Insert the filtering element back into its place and screw the nut to the pump.

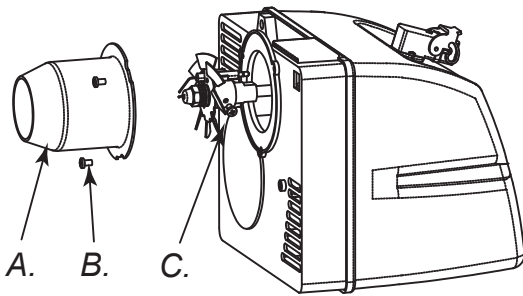


- A.** Nut for blocking the pump filter,
- B.** Single electrovalve for XL 9ER doble electrovalve for XL 9SR,
- C.** Filter,
- D.** Pump

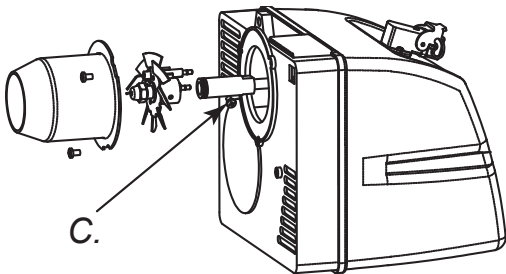
Figur 11 - Pomp of burner

### CLEANING THE BURNER

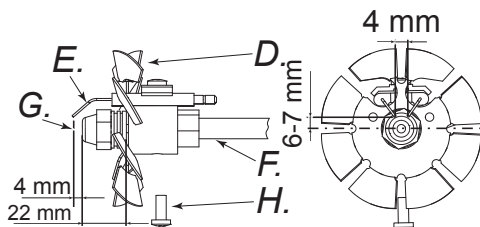
- Remove the screw (H Fig. 5) that blocks the burner (A Fig. 3) in the combustion chamber.
- Extract the burner from the combustion chamber (Fig. 3).
- Remove the three screws (B Fig. 12) that hold the burner tube (A Fig. 12).
- Dismantle the tube.
- Remove the screw (C Fig. 13) that holds the group diskflame-electrodes and pull out the nozzle holder (F Fig. 14).
- Clean the flame disk (D Fig. 14) and the electrodes (E Fig. 14).
- Unscrew the nozzle (G Fig. 14) from the nozzle holder (F Fig. 14) clean it and if necessary replace it.
- Mount the nozzle (G Fig. 14) in its holder.
- Remount the group diskflame-electrodes placing it at a correct distance as the illustration (Fig. 14) shows.



Figur 12 - Disassembly shell-burner



Figur 13 - Disassembly group diskflame-electrodes

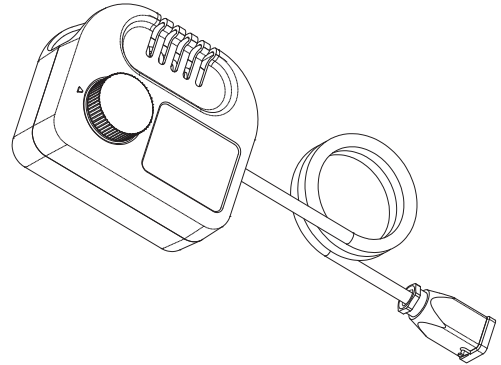


Figur 14 - Distances electrodes nozzle

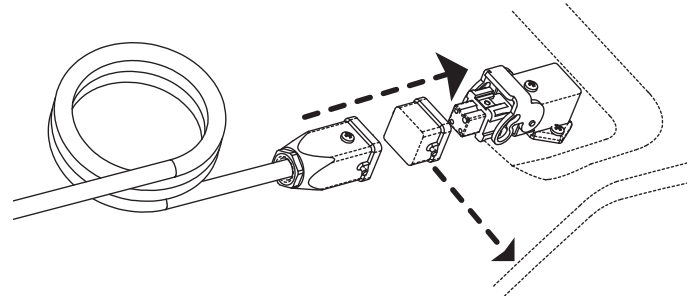
**A.** Burner tube, **B.** Screw of the burner tube, **C.** Screw of the group diskflame-electrodes, **D.** Flame disk, **E.** Electrodes, **F.** Tube, **G.** Nozzle, **H.** Screw

### ACCESSORIES

#### THERMOSTAT

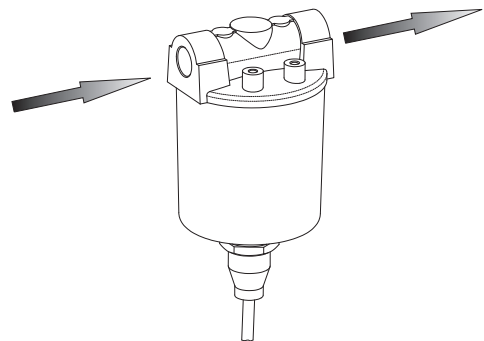


#### CONNECTING THE CONTROL DEVICE

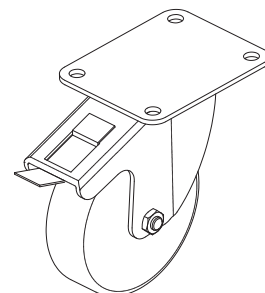


**WARNING:** Before beginning any maintenance operation you must: stop the machine according to the instructions provided in the paragraph "TURNING OFF THE GENERATOR"; disinsert the electrical supply by unplugging it and waiting for the generator to cool down.

#### PRE-HEATING FILTER



#### ROTATING WHEEL WITH BRAKES









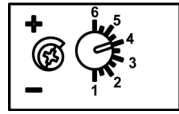
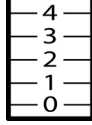
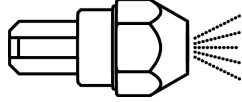

## FAULTS AND THEIR LIKELY CAUSES

**WARNING:** Before beginning any maintenance operation you must: stop the machine according to the instructions provided in the paragraph "TURNING OFF THE GENERATOR"; disinsert the electrical supply by unplugging it and waiting for the generator to cool down.

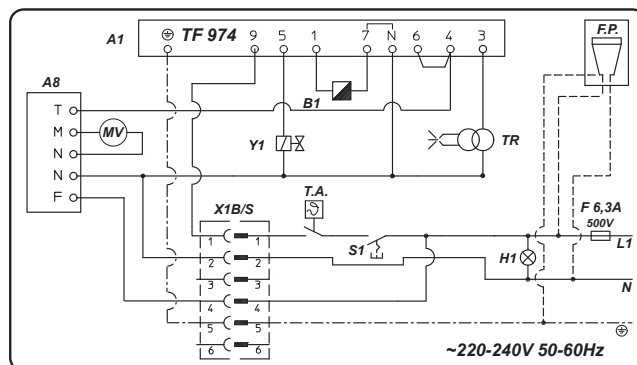
SYMPTOMS	POSSIBLE CAUSE	SOLUTION
The machine stops with flame. RESET button (D Fig. 5 o 6) on	<ol style="list-style-type: none"> <li>1. Photo-resistance circuit is broken or the Photo-resistance is dirty with smoke residue</li> <li>2. Dirty fuel filter</li> <li>3. Flame Control device Circuit is broken</li> <li>4. Flame disk or tube (Fig. 12, 13, 14) dirty</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace the Photo-resistance</li> <li>2. Remove filter and clean it</li> <li>3. Replace the flame control the circuit</li> <li>4. Dismantle and clean it</li> </ol>
The machine stops, spraying fuel without verifying the flame. RESET button (D Fig. 5 o 6) on	<ol style="list-style-type: none"> <li>1. The electrical system is not compatible</li> <li>2. Ignition Transformer (M Fig. 6) disconnected or broken</li> <li>3. Ignition Transformer wires short circuit to ground</li> <li>4. The electrodes are not at the proper distance</li> <li>5. The electrodes short circuit to ground because they are dirty or the insulation is damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Verify the entire circuit</li> <li>2. Replace it</li> <li>3. Replace it</li> <li>4. Reposition them at the correct distance (see Fig. 14)</li> <li>5. Clean them or, if necessary replace them</li> </ol>
The machine doesn't spray fuel and stops. RESET button (D Fig. 5 o 6) on	<ol style="list-style-type: none"> <li>1. Photo-electric cell sees a strong source of light</li> <li>2. The power supply is missing a phase to the motor</li> <li>3. Fuel is not arriving to the pump</li> <li>4. No fuel in the tank</li> <li>5. Nozzle clogged</li> </ol>	<ol style="list-style-type: none"> <li>1. Place the machine so that the light source does not directly face the front deflector</li> <li>2. Control the electric system</li> <li>3. Control the fuel supply lines (D Fig. 3)</li> <li>4. Resupply the fuel tank</li> <li>5. Dismantle and clean or replace it</li> </ol>
The burner doesn't start	<ol style="list-style-type: none"> <li>1. The control device (Thermostat or Timer) is on</li> <li>2. Short circuit in Photo-resistance (T Fig. 6)</li> <li>3. Power loss due to: disconnected switch (4) or disconnected main switch due to power loss in the line</li> <li>4. The installation of the control device (Thermostat or Timer) is not correct</li> <li>5. Break inside the flame control device</li> <li>6. Fuse inside the burner bonnet</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise the value or control the Timer settings</li> <li>2. Replace it</li> <li>3. Turn off the electric system and then turn off the switches or wait for the power supply to return</li> <li>4. Control the installation following the description in the "CONNECTING THE CONTROL DEVICE" paragraph</li> <li>5. Replace it</li> <li>6. Open the burner coffer (F Fig. 5) and replace it</li> </ol>
Flame is not well confirmed with an unpleasant odour, black smoke or flames coming out of the anterior deflector	<ol style="list-style-type: none"> <li>1. Low pulverisation pressure</li> <li>2. Insufficient combustible air</li> <li>3. Nozzle clogged because it is dirty or old</li> <li>4. Water in the fuel. Poor quality fuel</li> <li>5. The tank is running out of fuel</li> </ol>	<ol style="list-style-type: none"> <li>1. Reestablish the correct value</li> <li>2. Increase the combustible air</li> <li>3. Clean or replace the nozzle</li> <li>4. Drain the fuel from the appropriate drain plug (M Fig. 4)</li> <li>5. Resupply the tank</li> </ol>



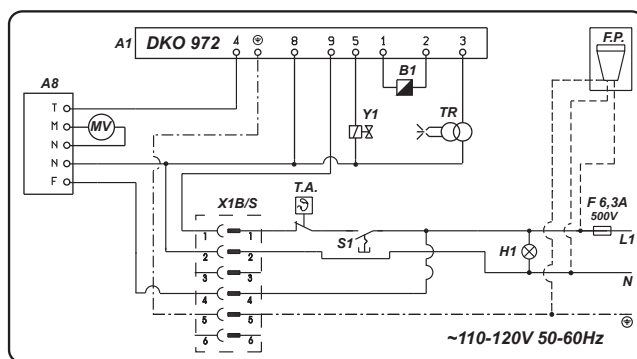
TECHNICAL DATA - DATI TECNICI - TECHNISCHE DATEN -  
 CARACTERÍSTICAS TÉCNICAS - DONNÉES TECHNIQUES - TECHNISCHE  
 GEGEVENS SPECIFIKATIONER - DANE TECHNICZNE - TECHNICKÉ  
 PARAMETRY - ТЕХНИЧЕСКИЕ ХАРАКТЕРИСТИКИ

<b>MODEL</b>	<b><i>XL 9ER</i></b>	<b><i>XL 9SR</i></b>	
	43 kW 37.000 kcal/h 146.900 Btu/h	29 kW 25.000 kcal/h 99.300 Btu/h	43 kW 37.000 kcal/h 146.900 Btu/h
	3,37 kg/h	P1 2,3 kg/h P2 3,37 kg/h	
	DIESEL / KEROSENE	DIESEL / KEROSENE	
	60 l	60 l	
	~220-240 V 50-60 Hz 0,6 A ~110-120 V 50-60 Hz 1,2 A	~220-240 V 50-60 Hz 0,7 A ~110-120 V 50-60 Hz 1,4 A	
	69 kg	69 kg	
	4 - 4,5	4 - 4,5	
	4	4	
	0,85 GpH 60°H DANFOSS	0,60 GpH 60°H DANFOSS	
	10 bar	10 bar / 18 bar	

## ELECTRIC DIAGRAM - SCHEMA ELETTICO - SCHALTPLAN - ESQUEMA ELECTRICO - SCHÉMA ÉLECTRIQUE - BEDRADINGSSCHEMA ELEKTRISK SKEMA - SCHÉMA ELEKTRICKÉHO ZAPOJENÍ - SCHEMAT POŁĄCZEŃ ELEKTRYCZNYCH - ЭЛЕКТРОСХЕМА



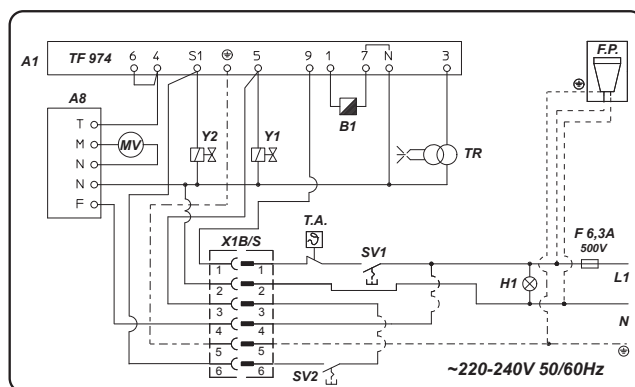
~220-240V 50-60Hz



~110-120V 50-60Hz

- |   |   |
|---|---|
| <b>L1</b> Phase - Fase - Fase - Fase - Phase - Faza - Fáze -<br>Предохранитель  | <b>B1</b> Photo-resistance - Fotoresistenza - Fotowiderstand - Fotocélula<br>- Photo-résistance - Fotoresistentie - Modstand med fotocelle -<br>fotorezystor - Fotoelektrický odpor - Фото-сопротивления  |
| <b>N</b> Neutral - Neutro - Neutral - Neutro - Nulleiter - przewód<br>zerowy - Nulový vodič - Нейтральный   | <b>MV</b> Motor fan - Motore ventola - Brennermotor - Motor ventilador -<br>silnik wentylatora - Motor ventilátoru - Двигатель вентилятора  |
| <b>TA</b> Thermostat ambient - Termostato ambiente - Umgebungs-<br>thermostat - Termostato ambiente - Thermostat ambient -<br>Thermostaat - Omgivende termostat - Termostat reagujący<br>na temperaturę otoczenia - Termostat okolí - Термостат<br>окружающего  | <b>TR</b> Ignition transformer - Trasformatore d'accensione - Zün-<br>dungstransformator - Transformador de encendido - Transfor-<br>mateur - transformator zapłonu - Zapalovací transformátor<br>- Трансформатор зажигания   |
| <b>S1</b> ON/OFF light - Interruttore ON/OFF - ON/OFF-Schalter -<br>Interuptor ON/OFF - Interrupteur ON/OFF - AAn/UITknop<br>- ON/OFF afbryder - Wyłącznik - mo - Spínač ZAPNUTO/<br>VYPNUTO - ВКЛ/ВЫКЛ свет  | <b>Y1</b> Electric valve - Electrovalvola - Elektroventil - Electroválvula<br>- Electrovanne - Magnetventil - elektrozawór - Elektrický ventil -<br>Электрический клапан  |
| <b>H1</b> Operate lamp - Spia di rete - Funktionsleuchte - Piloto<br>stan-bay - Voyant tension - Lichtnetcontrolelampje -<br>Sprændingslampe - kontrolka zasilania - Kontrolka provozu<br>- Эксплуатация лампы  | <b>X1B/S</b> Power connector - Connettore alimentazione - Stromzufuhr -<br>Conexión para alimentación eléctrica - connecteur alimentation -<br>Lichtnetconnector - Forvarmningsfilter - złączka doprowadzania<br>zasilania - Napájecí konektor - Разъем питания         |
| <b>A1</b> Control equipment - Apparecchiatura controllo fiam-<br>ma - Steuergerät - Centralita de control - Appareillage<br>contrôle flamme - Vlamcontroleapparatuur - Apparat til<br>flammekontrol - urządzenie sterujące - Ovládací zařízení -<br>Контрольно-измерительные приборы  | <b>F.P.</b> Pre-heating filter - Filtro pre-riscaldamento - Beheizungsfilter - Filtro<br>pre-calentador de combustible - Filtre de préchauffage - Voor-<br>verwarmingsfilter - Filtr wstępnie podgrzewający paliwo - Filtr s<br>předehříváním paliva - Подогрев фильтра |
| <b>A8</b> Post-ventilation Vent - Apparecchiatura post-ventilazione<br>- Nachventilationskarte - Tarjeta post-ventilación - Fiche<br>post-ventilation - Apparaat voor naventilatie - Apparat til<br>efterfølgende ventilation - Zespół wentylacji następczej -<br>Ventilace pro následné ochlazování - После вентиляции<br>Вентиляция |   |

## ELECTRIC DIAGRAM - SCHEMA ELETTRICO - SCHALTPLAN - ESQUEMA ELECTRICO - SCHÉMA ÉLECTRIQUE - BEDRADINGSSCHEMA ELEKTRISK SKEMA - SCHÉMA ELEKTRICKÉHO ZAPOJENÍ - SCHEMAT POŁĄCZEŃ ELEKTRYCZNYCH - ЭЛЕКТРОСХЕМА



~220-240V 50-60Hz

<b>L1</b>	Phase - Fase - Fase - Fase - Phase - Faza - Fáze - Предохранитель	<b>B1</b>	Photo-resistance - Fotorresistenza - Fotowiderstand - Focélula - Photorésistance - Fotorresistentie - Modstand med fotocelle - fotorezistor - Fotoelektrický odpor - Фото-сопротивления
<b>N</b>	Neutral - Neutro - Neutral - Neutro - Nulleiter - przewód zerowy - Nulový vodič - Нейтральный	<b>MV</b>	Motor fan - Motore ventola - Brennermotor - Motor ventilador - Moteur - silnik wentylatora - Motor ventilátoru - Двигатель вентилятора
<b>TA</b>	Thermostat ambient - Termostato ambiente - Umgebungsthermostat - Termostato ambiente - Thermostat ambient - Thermostaat - Omgivende termostat - termostat reagujący na temperaturę otoczenia - Termostat okolí - Термостат окружающего	<b>TR</b>	Ignition transformer - Trasformatore d'accensione - Zündungstransformator - Trasformatore de incendio - Transformateur - transformator zapłonu - Zapalovací transformátor - Трансформатор зажигания
<b>SV1</b>	ON/OFF light - Interruttore ON/OFF - ON/OFF-Schalter - Interruptor ON/OFF - Interrupteur ON/OFF - AAn/UIT-knop - ON/OFF afbryder - wyłącznik - Spínač ZAPNUTO/VYPNUTO - ВКЛ / ВЫКЛ свет	<b>Y1</b>	1° St Stage Electricvalve - Elettrovalvola 1° stadio - Elektroventil 1° Stufe - Electroválvula 1° Etapa - Electrovanne 1° Allure - Magnetventil første trin - elektrozawór - Elektrický ventil 1° - 1° й этап электрический клапан
<b>H1</b>	Power indicator - Spia di rete - Funktionsleuchte - Pilot stan-bay - Voyant tension - Lichtnetcontrolelampje - Spændingslampe - kontrolka zasilania - Kontrolka provozu - Эксплуатация лампы	<b>Y2</b>	2° St Stage Electricvalve - Elettrovalvola 2° stadio - Elektroventil 2° Stufe - Electroválvula 2° Etapa - Electrovanne 2° Allure - Magnetventil andet trin - elektrozawór 2° - Elektrický ventil 2° - 2° й этап электрический клапан
<b>A1</b>	Control equipment - Apparecchiatura controllo fiamma - Steuergerät - Centralita de control - Appareillage contrôle flamme - Vlamcontroleapparaat - Apparat til flammekontrol - Urządzenie sterujące - Ovládací zařízení - Контрольно-измерительные приборы	<b>X1B/S</b>	Power connector - Connettore alimentazione - Stromzufuhr - Conexión para alimentación eléctrica - connecteur alimentation - Lichtnetconnector - złączka doprowadzania zasilania - Napájecí konektor - Разъем питания
<b>SV2</b>	Lighted ON/OFF button second potentiality - Interruttore ON/OFF seconda potenzialità - ON/OFF Schalter mit Leuchte zweite Potentialität - Interruptor de la segunda potencialidad ON/OFF - Interrupteur lumineux ON/OFF deuxième potentialité - AAn/UITknop - wyłącznik I/II - Sekundární podsvícený spínač ZAPNUTO/VYPNUTO - Освещенные кнопки ВКЛ/ВЫКЛ второй потенциальность	<b>F.P.</b>	Pre-heating filter - Filtro pre-riscaldamento - Beheizungsfilter - Filtro pre-calentador de combustible - Filtre de préchauffage - Voorverwarmingsfilter - Forvarmingsfilter - filtr wstępnie podgrzewający paliwo - Filtr s předehříváním paliva - Подогрев фильтра
<b>A8</b>	Post-ventilation Vent - Apparecchiatura post-ventilazione - Nachventilationskarte - Tarjeta de post-ventilación - Fiche post-ventilation - Apparaat naventilatie - Apparat til efterfølgende ventilation - zespół wentylacji następczej - Ventilace pro následné ochlazování - После вентиляции Вентиляция		



**CE CONFORMITY CERTIFICATE - DICHIARAZIONE DI CONFORMITÀ CE - EG-KONFORMITÄT-SERKLÄRUNG - DECLARACIÓN DE CONFORMIDAD CE - DECLARATION DE CONFORMITE CE - EG-CONFORMITEITVERKLARING - DECLARAÇÃO DE CONFORMIDADE CE - EU-OVERENSSTEMMELSESERKLÆRING - EY-VAATIMUSTENMUKAISUUSVAKUUTUS - CE-SAMSVAR-SERKLÆRING - EG-FÖRSÄKRAN OM ÖVERENSSTÄMMELSE - DEKLARACJA ZGODNOŚCI WE - ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ CE - PROHLÁŠENÍ O SHODĚ CE - EK MEGFELELŐSÉGI NYILATKOZAT - IZJAVA O SKLADNOSTI IN OZNAKA CE - CE UYGUNLUK BEYANI - IZJAVA CE O SUKLADNOSTI - ES ATITIKTIES DEKLARACIJA - EK ATBILSTĪBAS - DEKLARĀCIJA - EÜ VASTAVUSDEKLARATSIOON - DECLARAȚIE DE CONFORMITATE CE - PREHLÁSENIE O ZHODE CE - ДЕКЛАРАЦИЯ ЗА СЪВМЕСТИМОСТ CE - ДЕКЛАРАЦИЯ ВІДПОВІДНОСТІ CE - IZJAVA CE O PRIKLADNOSTI ΔΗΛΩΣΗ ΣΥΜΜΟΡΦΩΣΗΣ CE - CE 符合性声明**

**MCS ITALY S.p.A. Via Tione, 12 - 37010 - Pastrengo (VR) ITALY**

Product: - Prodotto: - Produkt: - Producto: - Produit: - Product: - Produto: - Produkt: - Tuote: - Produkt: - Produkt: - Produkt: - Изделие: - Výrobek: - Termék: - Izdelek: - Ürün: - Proizvod: - Gaminys: - Iešice: - Toode: - Produsul: - Výrobok: - Продукт: - Виріб: - Proizvod: - Προϊόν: - 产品:

**XL 9ER - XL 9SR**

We declare that it is compliant with: - Si dichiara che è conforme a: - Es wird als konform mit den folgenden Normen erklärt: - Se declara que está en conformidad con: - Nous déclarons sa conformité à: - Hierbij wordt verklaard dat het product conform is met: - Declara-se que está em conformidade com: - Vi erklærer at produktet er i overensstemmelse med: - Vakuutetaan olevan yhdenmukainen: - Man erklærer at apparatet er i overensstemmelse med: - Härmed intygas det att produkten är förenlig med följande: - Oświadczam się, że jest zgodny z: - Заявляем о соответствии требованиям: - Prohlašuje se, že je v souladu s: - Kijelentjük, hogy a termék megfelel az alábbiaknak: - Izpolnjuje zahteve: - Aşağıdaki standartlara uygun olduğunu beyan ederiz: - Izjavljuje se da je u skladu s: - Pareiškiame, kad atitinka: - Tiek deklarēts, ka atbilst: - Käesolevaga deklareeritakse, et toode vastab: - Declarăm că este conform următoarelor: - Prehlasuje sa, že je v súlade s: - Декларира се че отговаря на: - Відповідає вимогам: - Izjavljuje se da je u skladu s: - Δηλώνουμε ότι είναι σύμφωνα με: - 兹证明符合:

**2004/108 EEC, 2006/95 EEC**

**EN 55014-1 (2006) + A1 (2009), EN 61000-3-2 (2006), EN 61000-3-3 (2008), EN 55014-2 (1997) + A1 (2001) + A2 (2008), EN 62233 (2008), EN 60335-2-102 (2006), EN 60335-1 (2002) + A11 (2004) + A1 (2004) + A12 (2006) + A2 (2006) + A1/EC (2007) + A13 (2008)**

Pastrengo, 15/05/2012

Stefano Verani (CEO MCS Group)