

Installation Guide

# Safety Standards

**General safety precautions**

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**Safety during receipt, storage and unpacking**

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- Recommendations for storing a HIMOINSA generator set for periods of more than 12 months
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**Safety during installation and commissioning**

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**Safety during operation**

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**Safety during maintenance**

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**Environmental safety**

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**Safety and information stickers**

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## General safety precautions

**Before working on the machine it is important to carefully read the safety standards indicated, and find out about any local requirements in terms of safety.**

**Installation, operation, maintenance and repairs must only be carried out by authorized and competent personnel, with the owner of the generator set responsible for ensuring these operations are conducted safely. Parts and accessories must be replaced if they are not in safe operating conditions.**

For your own safety and that of others, pay particular attention to the following basic safety criteria:

- Do not allow unauthorized persons to access the generator set or people with pacemakers, due to possible electromagnetic interference on cardiac stimulation devices.
- Do not approach the generator set while wearing loose clothing or objects that may be attracted by the flow of air or the genset's moving parts.
- Do not smoke or cause sparks near the generator set or the external fuel installation.
- Exercise extreme caution with exhaust gases because depending on the fuel used these gases may contain carbon monoxide, a colourless, odourless gas which is very dangerous and harmful if inhaled.
- It is prohibited to by-pass and/or remove the safety devices as well as modify the settings of the generator set.
- It is forbidden to lean on the generator set or leave objects on it.

In the case of gensets which are automatically operated, it is also recommended to:

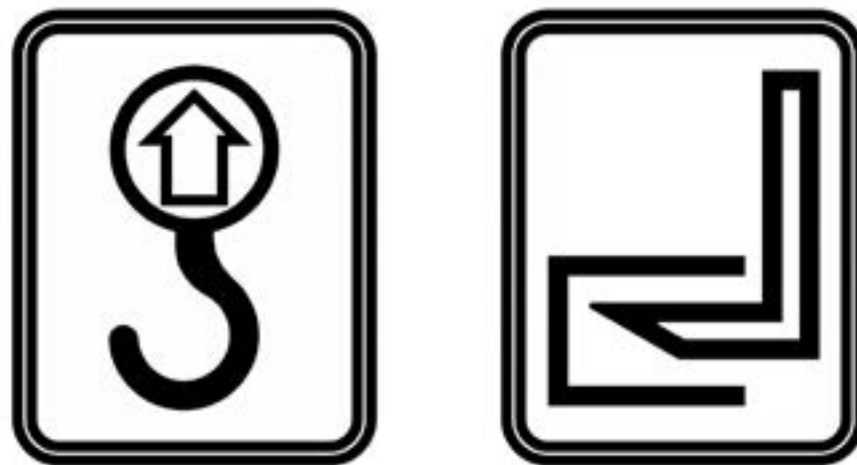
- Place a red light in a visible position and turn it on when the genset is running.
- Place a warning sign indicating the possibility of the machine unexpected starting automatically.
- Place an obligation sign indicating that **“All maintenance operations must be performed with the genset in the LOCKED position”**.
- To perform an emergency stop of the genset, press the **“emergency stop”** button located on the outer sides of the genset or internally or adjacent to the protection and control panel, depending on the genset.



In order to locate the place in which some of the components listed below are installed, go to **Section 3.1 Composition of the generator set. 3.1 | Installation, use and maintenance manual.**

## Safety during receipt, storage and unpacking

- Upon receipt of the generator set check that the material received corresponds to the delivery order, and that the merchandise is in perfect condition.
- When lifting and transporting the genset, lifting devices with sufficient capacity must be used, following the instructions in [Installation Guide | Unloading, handling and transportation](#). All loose or pivoting parts must be securely fastened before lifting the equipment.
- When moving the generator set, and especially during elevation, we recommend using the points indicated specifically for these functions, having previously checked the optimal condition of said lifting points.
- It is strictly forbidden to use other lifting points, located on the engine, alternator or any other components.
- If the generator set is damaged for any reason during transport, storage, and/or assembly, it should not be put into operation without being checked first by our specialized staff.
- If you wish to store the genset until it is needed, it is advisable to use premises which are duly protected from chemical agents that can damage the machine's components.
- Unpacking should be carried out with care, avoiding any damage to the materials during the operation, especially when using levers, saws or other metallic tools.



## Recommendations for storing a HIMOINSA generator set for periods of more than 12 months and subsequent start-up

**When a generator set is required to be stored for a period of more than twelve months, it is necessary to follow specific guidelines to prevent the premature deterioration of the different components.**

**Generator sets should be stored in a dry, covered place away from inclement weather and sudden changes in temperature.**



For procedures involving the engine, check the specific requirements of each engine manufacturer as described in its corresponding Operating and Maintenance manual.

Some important points to keep in mind are listed below:

1. PREPARING THE ENGINE FOR LONG PERIODS OF INACTIVITY
2. OPERATIONS TO BE PERFORMED ON THE GENERATOR
3. STARTING THE ENGINE AFTER A LONG PERIOD OF INACTIVITY



## 1. Preparing the engine for long periods of inactivity

In order to prevent oxidation of internal engine parts and some injection system components, it is necessary to prepare the engine as indicated below whenever there will be a period of inactivity lasting more than twelve months:

1. Warm up the engine and empty the lubricating oil in the crankcase.
2. Fill the engine with protective oil to the dipstick "minimum" level. Start the engine and keep it running for about 5 minutes.
3. Drain the fuel from the injection circuit, the filter and the injection pump pipes.
4. Connect the fuel circuit to a reservoir filled with protective fluid and introduce the pressurised fluid into the circuit. After deactivating the injection system, crank the engine for about 2 minutes. This operation can be carried out by using a cable to polarise terminal 50 of the electric starter with a positive voltage equivalent to the nominal installation voltage.

5. Spray -- g (10 g per litre piston displacement) of protective oil on the turbocharger inlet while the engine is cranking, as set out in the previous step.
6. Close all intake, drainage, aeration and exhaust openings with plugs or insulating tape.
7. Drain any residual protective oil in the crankcase.
8. Place signs displaying the message "NO OIL IN ENGINE" on the engine and control panel.
9. Drain the coolant, and place a "NO ANTI-FREEZE IN ENGINE" warning sign
10. Slacken the fan belts in the engine.
11. Dismantle the batteries and store them in a dry place with no sudden changes in temperature; keep them charged.



In case of long periods of inactivity, the described operations will need to be repeated every 12 months, following the sequence described above.

If it is wished to protect the external parts of the engine (for example, the flywheel, pulleys, etc.) they should be sprayed with protective oil, while avoiding the belts, connection cables or electrical equipment.

## 2. Precautions to be taken with the alternator

Keep in a dry place with no sudden changes in temperature.

Rotate through 90 degrees periodically to avoid bearing deformation.

## 3. Starting the engine after a long period of inactivity

1. Drain the residual protective oil from the crankcase.
2. Fill the engine with a specific lubricating oil, as indicated in the MAINTENANCE SUPPLIES table of each engine manufacturer's specific Operating and Maintenance Manual.
3. Drain the protective fluid from the fuel circuit as indicated in the section [PREPARING THE ENGINE FOR LONG PERIODS OF INACTIVITY](#).
4. Remove the plugs and/or the adhesive tape from the engine's intake, drainage, aeration and exhaust vents and restore the usage conditions. Connect the turbocharger intake manifold to the air filter.
5. Connect the fuel circuits to the tank in the generator set and complete the procedures indicated in step 4 of the section [PREPARING THE ENGINE FOR LONG PERIODS OF INACTIVITY](#). During filling, the tank's fuel return pipe must be connected to a container to prevent any residual protective liquid from entering the tank in the generator set.
6. Refill and maintain the engine coolant level as described above. Purge the circuit if necessary.
7. Start the engine and keep it running until the minimum RPM stabilises.
8. Check that the values indicated by the instruments on the control panel(s) are correct and there are no alarms activated.
9. Stop the engine.
10. Remove the NO OIL IN ENGINE signs from the engine and the control panel.





If the procedures described above have not previously been performed and the generator set has been stored for more than 12 months, the following operations must be carried out.

All these operations must be carried out by qualified technical personnel.

## Operations to be performed on the alternator

1. Turn the alternator to check for rubbing or seizure.
2. Check the insulation of the windings. Where insulation is low, carry out drying operations as described in the corresponding Operation and Maintenance Manual.
3. Check and, if necessary, tighten the generator's couplings and internal connections.
4. Start the generator set and verify that all nominal values are within the operating limits. In cases where it runs incorrectly, take the appropriate measures.
5. Check all control, security and alarm systems work correctly.

## Operations to be performed on the engine

1. Drain the engine oil and replace it with oil as indicated in each engine manufacturer's specific Operating and Maintenance Manual.
2. Drain the antifreeze from the radiator and engine.
3. Remove all injectors and check their operating pressures.
4. Drain all fuel from the tank and check the cleanliness of the tank. Clean if necessary.
5. Introduce around 10 grams of engine oil through the injector holes.
6. Crank the engine in order to clean and lubricate the walls of the cylinders.
7. If the engine cranks freely, install the injectors.
8. Refill antifreeze and oil to specified levels.
9. Replace the oil, fuel and air filters.
10. Replace the accessory belt.
11. Refuel and purge the injection system.
12. Start the engine. (Before starting the engine, check that the power generator is in the NO GENERATION state: disconnect the AVR to do this).
13. Let the engine run for at least 30 minutes. In cases where it runs incorrectly, take the appropriate measures.
14. After running for approximately 50 h, replace oil and filter.



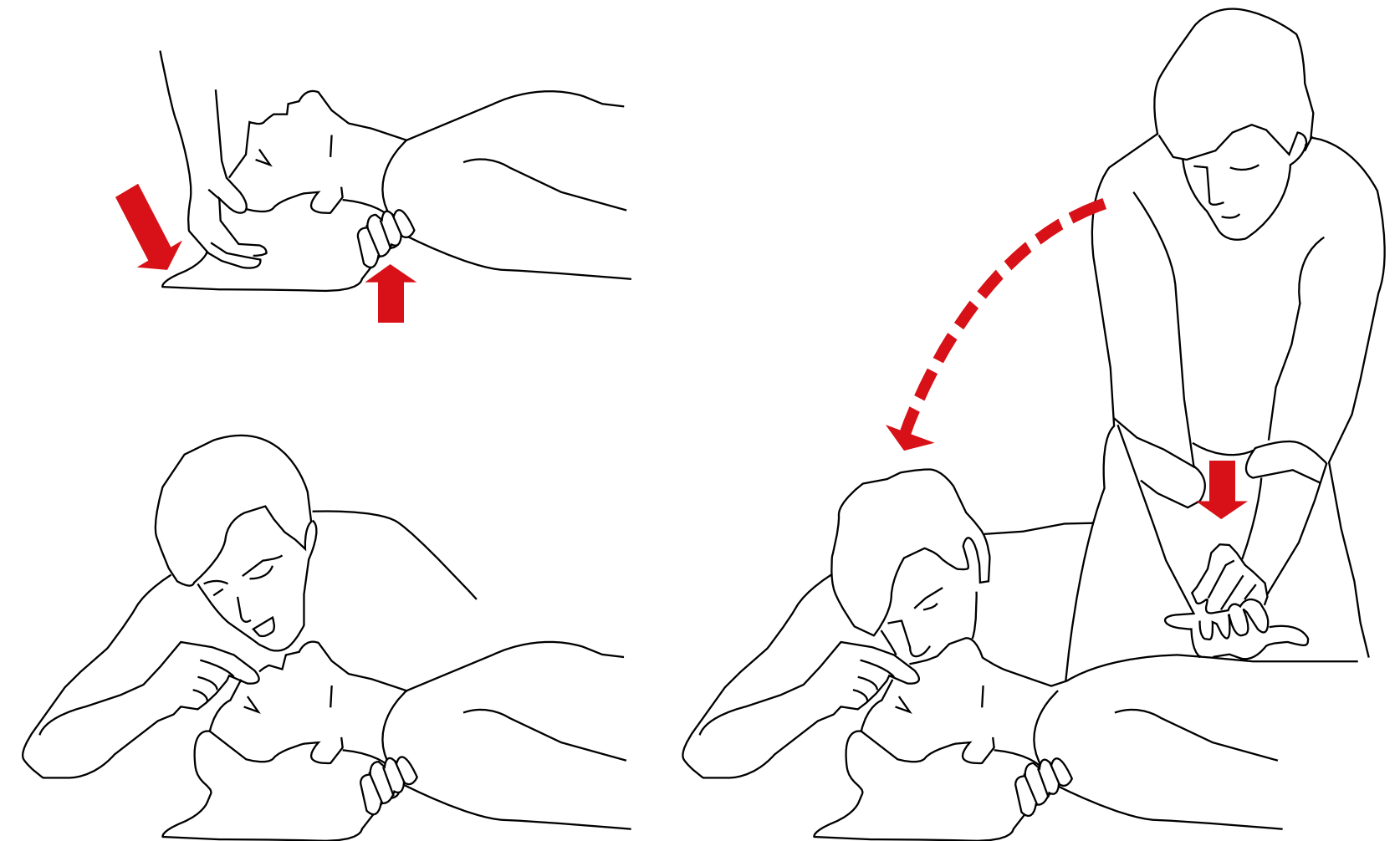
## Safety during installation and commissioning

- Installing the Generator Set and its accessories must be performed by qualified personnel. In the event of any difficulty during installation, consult HIMOINSA's Technical Department.
- It is important to know the emergency procedures related to the installation to be carried out, as well as positioning a fire extinguisher near the generator set. Consult the fire department for more information related to fire prevention.
- Always wear a protective helmet, safety shoes and gloves, protective goggles and dry, tight clothes.
- Do not modify the original protection devices, located on all the exposed rotary parts, hot surfaces, air intakes, belts and live parts.
- Do not leave disassembled parts, tools or any other accessories on the engine, nearby or in premises of the generator set.
- Never leave flammable liquids or rags soaked with flammable liquids near the genset, near electrical appliances or electrical installation parts (including lamps).
- Take all possible precautions to avoid risk of electrocution; connect to earth some of the points provided on the generator set and its accessories, ensuring this earthing is carried out in compliance with the relevant legislation. For more information, go to [Installation Guide | Earthing](#).
- Place a sign stating "IT IS PROHIBITED TO PERFORM OPERATIONS" on all insulation devices that isolate parts of the installation on which work must be carried out.
- Install the necessary safety protection devices on the parts that complete the installation.
- Insulate all the connections and disconnected wires. Do not leave the generator set's power terminals uncovered.
- Check and make sure the electrical connections for power and the auxiliary services are properly executed.
- Make sure that the power cables are installed in compliance with the requirements of all corresponding regulations, as the use of unsuitable cables may result in serious damage to both the equipment and people due to the hazardous electrical conditions.
- Check that the cyclic direction of the phases matches that of the network.
- Locate the position of the emergency stop buttons, the fast interceptor fuel valves, switches and any other possible emergency systems on the installation.
- Check the perfect operation of the genset's stop devices. In particular the following devices (if provided as standard): stop due to overspeeding, low oil pressure, high engine water temperature and the emergency stop button installed by the user, in general outside the premises.
- Ensure that all exhaust fumes are expelled correctly into the atmosphere and from a safe position away from doors, windows and air inlets.

- Change the exhaust system caps, in the event of receiving a gense with flat caps, and install tilting caps. For more information, go to [Installation Guide | Exhaust System](#)
  - Check that the pipes and silencers are installed properly, that they have expansion joints and are protected against accidental impacts.
  - Inspect for leaks in the fuel and oil pipes.
  - In the event your genset is supplied with an engine coolant heater, connect it to the network via the incorporated plug, as this will allow faster cold starts to be performed.
  - Locate sources of danger, for example leakage of fuel, lubricating oil, acid solutions, condensate drip, high pressures and other hazards.
  - Before putting the machine into operation, make sure the generator set is provided with the right amount of lubricating oil, coolant and fuel.
  - Identify the position of fire extinguishers and other safety and emergency devices and learn how to operate them.
  - Check the genset is clean, as well as ensuring the surrounding area and escape routes are clean and unobstructed. Check for blockages in the openings as well as the inlet and outlet conduits.
  - genset, go to Section 7.3 Derating for operating environmental conditions to consider the possible correction factors to be applied.
- Check if there are staff working on other equipment in the area and if such work is dangerous and affects the operation of the installation.
  - In the case of installations under environmental or operating conditions which are different to those for which the genset was designed, which can be found in the data sheet or on the identification plate of the genset, go to Section 6.3 Derating for operating environmental conditions to consider the possible correction factors to be applied.

## Safety during operation

- Do not allow access to the operating area of the generator set by persons who are unfamiliar with the safety conditions, children or animals.
- The person in charge of generator set operations and functioning must remain alert and ready to respond to and interpret a situation appropriately, and never work while physically or mentally fatigued or under the influence of medication, drugs or alcohol.
- It is advisable to have a minimum of two people present during operations that may pose a health risk, especially due to electrical hazards.
- Do not touch the generator set, especially cables, copper terminals and alternator connections, while the genset is running, as they are live. In the case of an electrical discharge, the first thing to do is stop the genset. If this is not possible, try to free the victim from the source of electrical energy using a non-conductive element. If the victim is partially or totally unconscious, perform cardiopulmonary resuscitation (CPR) and seek medical attention immediately.



- Do not touch moving parts until the generator set has completely stopped.
- Check the fuel level in the tank, always ensuring it is at the necessary level for the use which will be given to the generator set.
- Never connect loads which are above the power range of the generator set.
- The lines of the anticipated loads to which the generated power will be supplied will always be connected to the genset before commissioning.
- Do not operate the genset if the air filter is not installed.
- Do not supply power to the battery charger if the batteries are not properly connected; the electronic devices could be damaged irreparably. Never disconnect the batteries while the engine is running.
- Stop the generator set immediately if any kind of abnormal operation is detected, such as excessive vibration, leaks, smoke or loss of output power.
- Keep doors of the canopy closed, in the case of soundproof gensets, when they do not need to be open, since the cooling system is designed for the genset to operate with all doors closed.
- The exhaust fumes produced by the generator set are dangerous to health; inhalation can be very harmful due to the concentration of carbon monoxide. Check that all exhaust fumes are discharged correctly and that the genset is properly ventilated.
- Maintain adequate ventilation to ensure your generator set functions properly. A lack of proper ventilation could cause injury or damage to property due to excessive heat in the engine.
- During operation, the genset reaches high temperatures in some parts of the engine, in ducts and the exhaust, avoid touching them until they are cold.
- During operation of the generator set, wear ear protectors to prevent hearing damage.
- Labels related to safety must be kept clean and in the places predetermined by the manufacturer.
- The fuels and lubricants are flammable, toxic, explosive and corrosive. We recommend keeping them in their original containers, never in glass containers, and storing them in protected places. If you smell fuel, do not start the genset or stop the genset if it is in operation.

## Safety during maintenance

- Any checks and/or maintenance on the generator set should always be performed by qualified personnel.
- Maintenance operations must be carried out with the engine stopped. When stopping the genset after a period of operation allow it to cool, taking care not to burn yourself as some components may be extremely hot when the genset has recently stopped.
- Before operating on any components of the electrical system, disconnect the batteries.
- All the doors on soundproofed gensets are protected against electric shock by means of equipotential conductors, which must not be removed under any circumstances. In the event they have to be removed for cleaning purposes or the replacement of doors, do not forget to install the same conductors.
- Before opening the electrical panel, authorized personnel should take the following precautions:
  - Stop the generator set if it is in operation, and put the electrical panel into the locked position.
  - Disconnect any batteries from the generator set.
  - Disconnect the mains input to the panel.
- Periodically check both the tightening and isolation of the connections.
- With regards the various operations and/or maintenance procedures not specifically listed in the user manual, the manufacturer must be notified for approval.
- Do not make modifications to the product without the express knowledge and authorization of our Technical Department.
- Respect the characteristics recommended by the manufacturer with regards oil changes and fuel use. Do not use oils or fuels other than those specified by the manufacturer.
- Spare parts must correspond to the requirements defined by the manufacturer. Use only original spare parts. For spare parts only contact authorized spare parts distributors or workshops which are part of the HIMOINSA assistance network. To correctly identify the spare parts required, always specify the data indicated on the genset's identification plate, the type of engine and/or alternator and their respective serial numbers.
- Periodically check the status of the different components of the generator set, in particular anti-vibration devices, and the source of any vibrations and/or increases in noise levels.
- Periodically check for leakages of water, oil, fuel, and/or battery acid.
- Do not adjust the engine or other components of the generator set to obtain performance characteristics which differ to those envisaged by the manufacturer.
- Do not work on the fuel tank or the fuel supply conduits when the engine is hot or running.

- Wear protective gloves and goggles:
  - When using compressed air.
  - During the supply of inhibitors or antifreeze products.
  - During the replacement or supply of lubricating oil (hot engine oil may cause burns when being emptied, allow the oil to cool below 60°C).
- Wear a helmet when working in areas with suspended loads or equipment at head height.
- Always wear safety shoes and tight clothing.
- When working on live parts, always check that your hands and feet are dry. We recommend using insulating platforms to carry out the work.
- Change your clothes immediately if they get wet.
- Keep smeared rags in containers which are flameproof or suitable for this purpose.
- Do not leave rags on the engine.
- When starting an engine after repairs have been carried out, take precautions to stop the air intake if there is an excess in revolutions during the start up.
- Always keep the engine clean, removing oil, fuel and/or coolant stains. Do not use a high-pressure washer to clean the engine and the equipment, as some of the components may be damaged.

- Never start the engine with the speed control lever disengaged.
- Do not perform work alone which requires the presence of several people, especially when work must be performed on moving parts such as: switches, disconnectors, fuses and/or other live devices.

- 1. ENGINE COOLING CIRCUIT**
- 2. LUBRICATION CIRCUIT**
- 3. FUEL CIRCUIT**
- 4. LIQUID COLLECTION TRAYS**
- 5. EXHAUST CIRCUIT**
- 6. ELECTRIC START SYSTEM**
- 7. SYNCHRONOUS GENERATOR**
- 8. CONTROL PANEL**
- 9. BATTERIES**

## 1. Engine cooling circuit

- Never add coolant to a hot engine; first let the engine cool.
- Periodically check the coolant level and, if necessary, top up to the correct level using only liquid recommended in the engine's use and maintenance manual.
- Remove the radiator cap slowly. Typically the cooling circuits are under pressure, therefore hot liquid could be released violently if the pressure is discharged very quickly.
- In the event you want to remove the radiator fluid, there is an extraction valve available which has been designed for this use.
- Never use sea water or other corrosive or electrolytic products as a coolant.
- Periodically check the tension and state of wear of the pump/fan belts.

## 2. Lubrication circuit

- The crankcase should always have a minimum level of oil, which must be commensurate to the operation to be performed by the genset. It is recommended to periodically check this level using the engine dipstick marked with the corresponding identification sticker.
- If the oil is extracted for maintenance purposes, when it is replaced, fill the oil tray following the instructions in the engine use and maintenance manual, meeting the quality requirements of the combustion engine.
- Do not smoke or light fires while supplying the oil.



### 3. Fuel circuit

- The fuels used are highly flammable substances and can cause fires and explosions. Use extreme caution in the vicinity of the genset, the fuel installation and during fuel replacement, remembering that it is strictly forbidden to smoke, start fires and cause sparks. Pay attention not to spill fuel on the generator set.
- Always use the recommended fuels. Fuel of inferior quality or with a composition differing to that specified may damage the engine, affecting performance and service life.
- Avoid filling the fuel tank while the engine is running.
- When filling the tank make sure no dirt or moisture enters the fuel system.
- Do not smoke or light fires during refuelling or replacement of fuel, and pay attention not to spill fuel on the generator set.

### 4. Liquid collection trays

- Possible spillage of fluids within the genset (fuel, oil, coolant or water) are caught in the collection vessels at the base of the container.
- It is advisable to regularly make sure there is no fluid in the collection vessels. If necessary, drain the vessels using the corresponding drainage holes, in the corners of the genset.
- Never empty the liquid collection vessels onto the ground; do so into a suitable vessel.

## 5. Exhaust circuit

- Visually check the exhaust circuit, if any gas leakage is detected, conduct repairs immediately, because inhalation is very harmful to health, as well as being a potential source of fire.
- Warning: very hot surfaces. Installation parts which are pre-assembled at the factory are protected from accidental impacts. The installer must insulate and/or protect accessory parts, the gas evacuation piping at the premises, the silencer supplied separately, etc.
- Drain the exhaust piping through the condensate discharge points, in the event they are incorporated.

## 6. Electric start system

- To prevent the engine's automatic start system from activating while working is being carried out on the engine, use the disconnecter installed for this purpose, if included, or disconnect the negative cable (-) before working on the engine.
- Keep connections tight and make sure the cable insulation is satisfactory.
- To prevent the danger of arcing, we recommend always connecting the positive terminal to the battery first, then the negative terminal (usually earth).

## 7. Synchronous generator

- Do not carry out interventions with the genset in operation. Before intervening, put the genset into the LOCK position.
- Ensure the air inlets ventilating the generator are kept clean and, with some models, lubricate the bearings. In particular, check that the tightness and position of the electrical connections are correct.

## 8. Control panel

- Before working on the control panel, disconnect the power supply and the battery/batteries, putting the genset into the LOCK position.
- The electrical control panels, like all electrical equipment, have moisture and dust. Check the correct operation of the anti-condensation heaters, where provided, and clean the air inlets used for ventilation.
- Periodically check that the pins securing the electrical connections are well tightened.

## 9. Batteries

- The batteries incorporated in the generator set are maintenance free.
- Periodically check the connections of the battery terminals to ensure they are clean, tight and protected from the weather.
- Never invert the positive and negative terminals of the batteries when connecting them. An inversion may result in serious damage to the electrical equipment. Follow the wiring diagram supplied by the manufacturer.
- To disconnect the batteries use the disconnecter, in the event it is included, as it is installed for this purpose or disconnect the negative cable (-).
- Use extreme caution when replacing the batteries. Always wear protective clothing, gloves and goggles as the electrolyte inside the batteries is diluted sulphuric acid which is harmful if it comes into contact with skin or eyes. In the event it comes into contact with skin, remove all contaminated clothing and wash the affected areas with soap and water. In the event it comes into contact with eyes, rinse with water for 15 minutes and seek immediate medical assistance.
- In some countries the batteries are considered hazardous waste. Use appropriate containers or contact any organisations responsible for the collection of this waste.

## Environmental safety

- Do not start the genset in confined areas without installing an exhaust pipe which vents fumes outside. Exhaust gases are harmful and can be lethal.
- Observe the rules and regulations concerning acoustic installations.
- Never run the engine without an air filter or without an exhaust.
- Replace the engine's exhaust and/or silencer if the noise level emitted is higher than that permitted by corresponding legislation.
- Maintenance (oil changes, cleaning the fuel tank, cleaning the radiator, washes, battery changes, etc.), storage and waste disposal must be carried out according to the regulations in the country of use.

### Information sheet on the environment and waste disposal in accordance with EN 82079-1:

Only suitably qualified personnel may carry out generator set-related waste disposal work. By suitably qualified personnel, we mean staff who, thanks to their training and experience in the maintenance and repair of stationary diesel engines, are familiar with the health and environmental risks associated with the equipment and parts that are used in gensets.

Contaminated materials such as starting batteries, used oil, coolants, fuel, detergents, filters and contaminated cloths should be disposed of professionally. Please consult your local waste disposal authority as to the appropriate recycling points.

Before starting work, a qualified electrician must check the electrical safety. Five safety regulations must be observed:

1. Turn the unit off. (Disconnect the voltage)
2. Make sure it cannot be reconnected.
3. Check that there is no voltage.
4. Ground and short-circuit. (Installations from 1000 volts and above)
5. Cover or separate any adjacent live parts.

The safety data sheets of all equipment must be consulted and observed.

The following health and environmental risks may result from not disposing of waste properly:






- Burns
- Chemical injuries
- Intoxication
- Contusions
- Soil pollution
- Water pollution
- Air pollution











We recommend that you disassemble the generator without dismantling it.





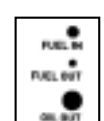


## Safety and information stickers

The generator set has several safety and information stickers affixed to it in order to attract the attention of the operator or technician regarding potential dangers and with explanations on how to act safely.

A brief explanation of the location and information about each one is given below:

Drawing	Location	Information
	Located near the connections between the alternator and the engine. Where there are timing belts or transmission shafts	Warn of danger if a foreign object interferes with the genset's timing belts or any moving elements connected to them
	Located on parts of the genset that heat up during operation	Indicate which areas not to touch while the genset is running or shortly after it has stopped
	Located on the coolant filler cap	Warn that caution must be taken when opening the cap; the liquid is hot and can be discharged under pressure causing burns
	Located on the lifting points and next to the lifting hook	Indicates the point from which the genset must be lifted in order to move it
	Located next to the fuel tank cap. Depending on the model, it will be on the canopy or on the fuel tank	Indicates the location of the fuel tank and the filler cap

Drawing	Location	Information
	Located next to the fuel tank cap. Depending on the model, it will be on the canopy or next to the engine	Indicates that the tank must not be topped up while the genset is in operation
	On either side of the bedplate skids	Indicates the recommended area for transporting the genset by forklift truck
	Located next to the oil dipstick and oil filler cap	Reports the location of the oil dipstick
	Located in the engine	Indicates that it is compulsory to read the instruction manuals before any kind of operation
	Next to the branch circuits of the earth protection devices	These are the points where the genset is protected from possible electrical discharges
	Next to the circuit breakers protecting the genset	Output terminals for connecting the load, corresponding to each of the phases and neutral
	Located on the outer sides of the genset, inside or adjacent to the protection and control panel	Indicates the position of the emergency stop button that allows the equipment to be simultaneously stopped
	Located in the protection and control panel	Warn of danger due to the presence of voltage
	Always located next to the motorised circuit breaker	Reports that it is prohibited to manipulate the genset with the switch connected
	Located on the external part of soundproofed gensets, next to the protection and control panel	Informs and warns about the noise emitted by the soundproofed genset, indicating the specific acoustic power value for each of the generator sets

Drawing	Location	Information
	Located on the external part of standard static gensets, on an easily visible part of the alternator	Informs and warns about the noise emitted by the standard static genset, recommending the use of helmets and indicating the specific acoustic power value for each of the generator sets
	Positioned on the protection and control panel, above the motorised circuit breaker	Warning and reminder about replacing the exhaust system covers before starting the genset
	Located in the protection and control panel	Reports that it is necessary to check that there is a sufficient level of fuel in the tank before each start
	Located inside the container doors, next to the locking pins	Reports that, when the doors have been opened, to close them it is necessary to loosen the locking pin
	Located above the fuel and oil connecting valves on the side of the protection and control panel container	Notes the function performed by each of the fuel and oil quick connecting valves
	Located on the exhaust silencers	Informs and warn that the container doors must be kept closed while the genset is in operation
	Positioned on the bracket where the three-way valve is located.	Make known and warn that when starting up the genset, the external tank must be correctly connected and the three-way valve lever must NOT be in the central position.



Change any stickers which are missing or illegible.  
It is possible that some of the stickers indicated are not necessary for your generator set model, and are not included with the generator set.