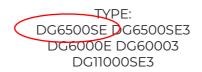
# **VALKENPOWER**



# **Diesel generator**









# Safety instructions

- A generator produces electricity by burning fuel. If careless, this process can cause damage, injury and death. Use common sense when operating the generator.
- · Only use the generator correctly for its intended purpose.
- · Do not use the generator if it has defects.
- If malfunctions occur, turn off the generator immediately and have the generator repaired by a qualified person. Pay attention! Never repair the generator yourself.
- Preferably run the generator in the open air, if that is not possible ensure sufficient ventilation at the workplace. Pay attention! The exhaust gases emitted by the generator contain carbon monoxide. Do not put the generator back inside until it has been switched off and has cooled down sufficiently.
- Keep at least one meter of free space around the generator. Keep (highly) flammable substances and explosives away from the generator.
- Only work in dry conditions and make sure that the generator does not get wet, even when the generator is not in operation. Never touch a working generator with wet hands, moisture can cause a short circuit.
- · A running generator must be horizontal and stable.
- · Turn off the generator when filling the fuel tank.
- · Smoking and fire are prohibited while refueling the fuel tank.
- · Check the diesel hose before use.
- · Make sure there is an overvoltage and hertz protection on the generator.
- Do not allow the fuel tank to overflow, if any fuel is spilled it must be carefully removed before using the generator again.
- Keep children, pets and unauthorized persons away from the running generator.
- · Make sure that the generator is sufficiently grounded.
- During or shortly after use, do not touch the muffler or other overheated parts of the generator and keep away from moving parts.
- · Do not move the generator while it is in operation.
- Do not connect any equipment until the generator has started. Starting with connected equipment can lead to damage.
- When using the generator to charge a battery, protect eyes, skin and clothing from battery acid. If contact with any part of the body occurs, rinse with plenty of water and seek medical attention.
- Batteries produce hydrogen gas, which is explosive. Do not smoke or allow flames or sparks near the battery, especially during charging. Always charge a battery in a well-ventilated area.
- Never allow the generator to be operated by anyone who has not been properly instructed in its operation and safety precautions.



#### **Warnings**

- Most motors require more power at start-up than stated on their nameplate; keep that in mind when connecting!
- · Never exceed the amperage indicated on the socket.
- Never simply connect the generator to a household network, this can cause serious damage to the generator and household equipment. Connection to a household network requires special legal provisions (reversing switch) so that the two power suppliers cannot come into contact with each other. Reversing switches may only be installed by a qualified electrician!

# Use

#### Oil filling instructions

Attention! Do not run the engine with an oil level that is too low, this can seriously damage the engine and is not covered by the warranty.

- 1. Open the oil filler cap and check the oil level.
- 2. If there is not enough oil in the crankcase, the oil must be topped up with 15W40 oil up to the bottom edge of the filler opening.
- 3. Screw the oil filler cap back onto the filler opening.

#### Oil alert system

The oil alert system shuts down the engine so that the oil level drops below the safe limit. To prevent the engine from shutting down unexpectedly, it is recommended to check the engine oil level before starting the engine.

## Oil change

The used oil must be drained while the engine is still warm. Warm oil has a lower viscosity and therefore flows out of the engine faster.

- 1. Place an oil container under the oil drain plug to collect the used oil. Remove the oil filler cap, oil drain plug and washer. Drain the oil into the oil pan and make sure the crankcase is empty.
- 2. Tighten the oil drain plug securely with a new washer.
- 3. Fill the oil up to the bottom edge of the oil filler opening. Pay attention! When filling, the motor must be horizontal.
- 4. Tighten the oil filler cap securely onto the oil filler neck.

Wash your hands with soap and water after coming into contact with used oil.

## Diesel filling instructions.

PAY ATTENTION! Diesel is very flammable and explosive under some circumstances. Therefore, always switch off the engine when refueling. Provide adequate ventilation, do not smoke and make sure there are no fires or sparks in the vicinity. Do not fill the tank beyond the indicated maximum level and close the tank after topping up. Wipe up spilled fuel. Avoid skin contact or inhalation of fuel. Keep the fuel out of the reach of children! Fill the tank with



diesel to the maximum level before each use, never use mixed lubrication or contaminated fuel and do not allow water or dirt to enter the fuel tank. This can cause serious damage to the engine.

Before starting the generator, please do the following:

- 1. Carry out a safety check:
- · Is the generator undamaged?
- · Is the generator stable and horizontal?
- · Is the generator at least one meter away from walls or other obstacles?
- · Is the generator outside or in a well-ventilated area?
- · Can't get the generator wet or damp?
- Are there no fire, sparks, highly flammable or explosive substances in the vicinity of the generator?
- · Is the generator properly grounded?
- · Is there no equipment connected to the generator?
- Does the person operating the generator know how to turn it off and how all the facilities work?
- 2. Check the oil level
- Remove thecap with the dipstick and wipe it clean. Check the oil level by inserting the dipstick into the filler hole without screwing. If the oil level is below the minimum level at the end of the dipstick, add oil to the filling edge of the tank. Use clean, first quality 15W40 oil.
- Starting and running the generator without sufficient oil can cause serious damage to the engine! Some generators are equipped with an oil alert system that automatically stops the engine if the oil level drops below the safe limit, however it is advisable to check the oil level regularly to prevent unexpected failure.
- 3. Check the fuel level
- If there is not enough fuel in the tank, top it up to max. the indicated level. Use diesel. The diesel supplied by Dutch and Belgian petrol stations is suitable. Do not use mixed lubrication or contaminated fuel. Prevent dirt, dust or water from entering the fuel tank. After refilling, carefully close the tank with the tank cap. Diesel is extremely flammable and can even be explosive. Therefore, always switch off the engine when refueling. Provide adequate ventilation, do not smoke and do not allow fire or sparks to come near. These measures also apply to the fuel storage location!
- Do not fill the fuel tank beyond the specified maximum level. Close the tank properly after topping up. Do not spill the fuel: Vaporized fuel can ignite! If fuel is accidentally spilled, clean it up carefully before starting the generator.
- Avoid repeated or prolonged skin contact or inhalation of fuel. Keep the fuel out of the reach of children.
- 4. Check the air filter
- Check that the air filter is clean and in good condition. To do this, remove
  the cover and remove the air filter. Clean or replace the air filter. Do not
  use any cleaning agents when cleaning. Never run the generator without
  an air filter, as dust and dirt can then enter the engine unhindered



- through the carburettor.
- 5. Check the generator set
- Make sure the main switch is turned OFF and that no equipment is connected to the generator. The generator must be grounded to prevent electric shock.
- During operation, the main switch must always be left switched ON (ON).
- Make sure no equipment is connected to the generator when it is started, the sudden load while the engine is starting can be very dangerous.
- 6. The first working hours
- The first 20 hours are the running-in hours of the engine. The operator should follow the following procedure:
- Allow the engine to warm up for five minutes after initial start-up. Run it at low speed with no load until it warms up.
- Avoid heavy loads during the break-in period. The advice is to run the engine at 3000 rpm and a maximum load of 50%. Replace the oil on time.
- Change the engine oil after 20 hours of operation (or one month), while the engine is warm. The old oil must be completely drained. Subsequently, the oil should be replaced every 100 operating hours (or three months).

# **Start**

Attention! Do not connect any tools or equipment to the generator before starting.

#### Manual start

- 1. Open the fuel tap (located at the bottom of the fuel tank)
- 2. Move the engine speed controlto the RUN position
- 3. leverPull out the recoil starter handle.
- Pull it out until you feel resistance; then let it run back to the starting position.
- Push the decompression lever down; it returns automatically when the pull cord is pulled out.
- Now pull the pull cord all the way out with a firm jerk with both hands.
   Repeat this operation until the engine starts.
- 4. Never let the pull rope shoot back, but gently guide it back by hand.
- 5. If the engine is difficult to start in cold weather, remove the screw plug from the cylinder head and add 2cc of engine oil. Furthermore, make sure that the plug is always on the cylinder head, to prevent, for example, rain or dirt from entering the engine body. This can cause premature wear and other serious problems.

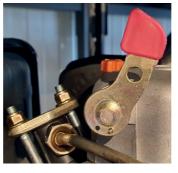
#### Electric start

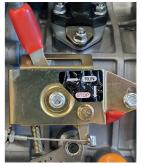
- 1. Open the fuel tap (located at the bottom of the fuel tank)
- 2. Move the engine speed control lever to the RUN position
- 3. Turn the ignition key clockwise to the START position. Release the key as soon as the engine starts. If the engine does not start after 10 seconds, wait 15 seconds before trying again. Running the starter motor for too



- long consumes a lot of battery power and can burn the starter motor.
- Leave the key in the ON position while the engine is running.
- Check the battery acid level monthly. Top up with distilled water to the max. limit when the acid has dropped to the minimum. If the battery acid level is too low, the engine may refuse to start because there is not enough energy. If the level is too high, the liquid will attack the surrounding parts. So keep the battery acid level between the upper and lower limits.







Diesel tap

Decompression lever

Speed lever







Oil filler cap

Oil drain plug

Ignition

## Operating the generator

- 1. run the engine without loadthree minutes.
- 2. forFor generators with an oil alarm: Check that this light (on the panel) is not lit. The oil alarm light comes on when the oil pressure is too low or when there is a shortage of oil. At the same time, the motor will stop. If you start it up again without adding oil, it will shut off immediately. So check the oil level and top up if necessary. Do not loosen the bolts of the engines speed or fuel injection; that affects the operation!
- 3. During the three no-load minutes, check:
- · There is no abnormal noise or vibration.
- $\cdot$   $\;$  The engine does not spark or runs rough.



- · The color of the exhaust gases: black or too white is not good.
- In the event of the above phenomena, switch off the generator and eliminate the cause of the error, or contact your supplier.
- 4. If you want to take 230V or 400V, set the main switch to 'ON'. For 12V, keep it turned OFF.
- 5. With a three-phase generator
- During operation, you should keep an eye on the balance between the three phases. Stop the engine for a check if the tolerance exceeds 20%. Make sure that the tolerance between the three phases remains less than 20%!
- The load of each phase must be below the rated power and the current draw must be below the rated current draw. U,V,W,N (or A,B,C,D) phase connection must be done clockwise (clockwise) or left to right.
- When connecting three-phase asynchronous motors, start the heavy motors first and then the lighter ones. In case of overload, the thermal protector will cut off the current output. Reduce the load and wait a few minutes before resuming operation.

# Loading

WARNING: Never start simultaneously two or more connected machines, but start them one by one.

## AC (alternating current 230/400V) connection

- 1. Make sure that the generator is running at the correct speed. Otherwise, the AVR (automatic voltage regulation) will enforce the required regulation. Running in this manner for too long may cause the AVR to burn out.
- 2. Keep an eye on the voltmeter on the panel after turning on the main switch/thermal protection. The voltmeter should be 230V (± 5%) at 50 Hz. indicate for the single phase generators, or 400V (± 5%) for three phase generators. Then you can charge.
- 3. When switching a dual voltage generator to 12V, the thermal protector should be set to the 'OFF' position. Otherwise, the generator and electrical equipment will burn out/damage. Correctly connect the electrical equipment to the generator. For peak current draw, connect the heaviest equipment first, then the lighter. If the connection fails, the generator will slow down or stop suddenly. You must then immediately unload the generator and switch it off via the main switch.

## DC (DC 12V) connector

- 1. The DC connectors are for charging 12V batteries only.
- 2. Set the main switch/thermal protection to 'OFF' during charging. A switch can be mounted on the 12V connections so that the voltage supply can be interrupted.
- 3. For automatic batteries with leads, make sure to disconnect the negative battery lead during charging.



4. Electrical equipment (especially those with a motor) requires an increased peak current during start. The table below shows what power to consider when connecting to the generator.socket

Туре	Wattage		Examples			
	Start	Use	Device	Start	Use	
light bulbs Heating	xl	xl	Light bulb 100 Watt	100 Watt	100 Watt	
Fluorescent lamps	x2	x1,5	Fluorescent tube 40 Watt	80 Watt	60 Watt	
Equipment with motor	x3 until 5	x2	Fridge 150 Watt	450 until 750 Watt	300 Watt	

#### **WARNING:**

- Connect the positive and negative poles of the battery to the corresponding DCone at a time. Swapping is a fire hazard!
- Do not connect the battery terminals together, this will damage the battery.
- Do not connect the poles of the generator, this will damage the generator. Before use, check that the poles are clear of the frame.
- When a heavy battery is charged, a lot of current is used; this may blow the respective fuse.
- Never use DC12V and AC230V at the same time. Disconnect the battery first, turn the thermal switch back on and check the voltage output. You can then use the 230V connection.
- Batteries produce explosive gas. Always keep sparks, flames, cigarettes, etc. away from a battery. To prevent sparks, always connect the cables to the battery first and then to the generator. When disconnecting, disconnect the generator first.
- · Charge the battery in a well-ventilated place.
- Before charging, remove the caps from each battery cell.
- $\cdot$   $\,$  Stop charging when the charging temperature rises above 45°C.

# **Stopping the Generator**

- · Disconnect all equipment from the generator.
- · Turn off the main switch/thermal protection.
- Move the speed control lever to the 'RUN' position and let the generator run no load for approximately 3 minutes.
- Push the stop lever down For
- electric starting types, turn the key to the 'OFF' position.
- · Close the fuel tap (position 'S').
- $\cdot$   $\;$  Pull the pull cord until you feel resistance. In this position, the inlet and



outlet valves are closed. Leave the drawstring in this position. It protects the engine from rust.

- WARNING:
- If the engine continues to run when the lever is in the 'STOP' position, close the fuel valve ('CLOSE') or loosen the high pressure fuel line nut on the pump to force the engine to stop.
- · Never stop the engine with the decompression lever
- Do not stop the engine under load. First, disconnect all loads from the generator.

# **Maintenance**

CAUTION! Good maintenance extends the life of the generator, keeps track of the running hours of the generator so that you know when maintenance needs to be performed.

#### Oil change

See chapter Use/Oil change

#### Maintain air filter

CAUTION! Never run the engine with the air filter removed as this can cause serious damage to the engine.

Clean the air filter every 6 months or 500 running hours. The muted generators have a cover on the side that says AIR CLEANER, which you must remove. You now look at the air filter cover, loosen the wing nut and remove the cover, if this does not go, loosen the nut holding the air filter and remove both parts at the same time. Remove the foam cover and then blow the air filter clean from the inside with compressed air. Now put the cover back on and reassemble the air filter and cover. If the air filter is really dirty, you should replace it.

### **CleaningFuel Filter**

the The fuel filter should be cleaned regularly to obtain maximum engine performance. Clean it every 6 months or 500 hours of operation and replace it every year or after 1000 hours of operation. Drain the fuel from the tank. Unscrew the small screws of the fuel tap and remove the filter from the filler opening. Wash the filter with diesel. Open the bottom plate retaining nut and remove the precipitated carbon, this should be done every 100 hours of operation.

## Checkingbattery

the The electric starting units use a 12 V battery. It loses power due to regular charging and discharging. Check the battery monthly for damage and the level of battery acid; fill in with distilled water. If damage is found, the battery must be replaced.



# Standard periodic maintenance protocol

	Per use	Monthly (20 hours)	3 months (100 hours)	6 months (500 hours)	Yearly (1000 hours)	
Check and top up engine oil	V					
Check for oil leakage	V					
Check closures	V			V (cylinder head bolts*)		
Change Motor oil		V (1st time)	V			
Cleaning engine oil filter				V (possibly replaced)		
Replace air filter		When used in dusty environment, perform naintenance more often!				
Cleaning fuel filter				V	V (replace)	
Check fuel injection pump				V*		
Check nozzle				V*		
Check fuel line				V (possibly replace*)		
Adjust valve openings		V (1st time*)		V *		
Grinding out valves					V*	
Replace Piston Ring					V*	
Check battery charging	Monthly					
Check carbon brushes & slip ring				V*		
heck the insulation resistance After more than 10 days of non-use						
* This maintenance work requires specific tools and technical skills, please contact your dealer.						

<sup>\*</sup>This maintenance work requires specific tools and technical skills, please contact your dealer.



# **Specifications**

#### **DG6500SE**

frequency = 50Hz rated AC voltage = 230V DC output = 12V/8.3A rated output = 5.0 kW max. output = 5.5 kW rated current = 21.7A dB (7m) = 75,2 fuel tank capacity = 16L cylinder capacity = 418cc isonorm = 9001 electric starter

#### Standard features:

voltmeter oil warning light oil alert system

#### **DG6000E**

frequency = 50Hz rated AC voltage = 230V DC output = 12V/8.3A rated output = 5.0 kW max. output = 5.5 kW rated current = 21.7A dB (7m) = 85 fuel tank capacity = 12.5L cylinder capacity = 418cc isonorm = 9001 electric starter

#### Standard features:

voltmeter oil warning light oil alert system

#### DG6500SE3

frequency = 50Hz rated AC voltage = 400V DC output = 12V/8.3A max. output = 5.0kW rated output = 4.6kW rated current = 7.2A fuel tank capacity = 16L cylinder capacity = 418cc isonorm = 9001 electric starter

#### Standard features:

voltmeter oil warning light oil alert system

#### DG60003

frequency = 50Hz rated AC voltage = 400V DC output = 12V/8.3A rated output = 5.0kW max. output = 5.5kW rated current = 7.2A fuel tank capacity = 12.5L cylinder capacity = 418cc isonorm = 9001 electric starter

#### Standard features:

voltmeter oil warning light oil alert system



#### DG11000SE3

frequency = 50Hz
rated AC voltage = 230V / 400V
DC output = 12V / 8.3A
rated output (400V) = 7.5 kW
max. output (400V) = 8.0 kW
rated output (230V) = 6.5kW
max. output (230V) = 7.5 kW
rated current (400V) = 11A
rated current (230V) = 32A
speed = 3000rpm
sound level (@1m) = 87 dB
fuel tank capacity = 30L
consumption = 3,44L/hour at maximum power
isonorm = 9001

#### **Standard features:**

volt meter hertz meter oil warning light electric starter



# Warranty

- 1. The warranty takes effect on the date indicated on the purchase note and has a validity of 12 months.
- 2. The warranty is not transferable without a written declaration of consent from your supplier.
- 3. No claim to warranty can be made without a purchase note.
- 4. Warranty only applies if the product is used in accordance with the accompanying instructions and only for the purpose for which it was designed.
- 5. No changes to the product may be made.
- 6. The warranty does not apply in case of injudicious use.
- 7. Any shipping costs are not covered by the warranty provision.
- 8. Repairs should only be carried out by your supplier. Any repair(s) carried out by third parties will (will) void the claim for warranty.
- Repairs during the warranty period will not extend its validity. However, a three-month repair warranty will be issued should the regular warranty period expire.
- 10. Any maintenance work to be carried out, described in the instructions for use, should be carried out in good time.
- 11. For warranty, you can only go to the point of sale where you purchased the item.

# EG-verklaring van overeenstemming - Declaration of conformity - EG- Konformitätserklärung - Declaration de conformite - Dichiarazion di conformita- Declaracion de conformidad

Wij, Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland, verklaren geheel onder eigen verantwoordelijkheid dat het product

We, Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland, declare under our sole responsability that the product

Wir, Valkenpower BV Industrieweg 4, 6051 AE Maasbracht, Niederlande, erklären in alleiniger Verantwortung, dass das Produkt

Nous, Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland, déclarons sous notre seule responsabilité que le produit

Noi, Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland, dichiariamo sotto la nostra responsabilià che il prodotto

La empresa, Valkenpower BV, Industrieweg 4, 6051 AE Maasbracht, Nederland, declaramos bajo nuestra exclusiva responsabilidad que el producto

Type Model Type Type Tipo Tipo	Beschrijving Description Beschreibung Description Descrizione Descripción	Merk Brand Marke Marque Marca Marca
DG6500SE DG6500SE3 DG6000E DG60003 DG11000SE3	Diesel generator	Valkenpower

Waarop deze verklaring betrekking heeft, in overeenstemming zijn met de volgende normen:

To which this declaration relates is in conformity with the following document: Auf welches sich diese Erklärung bezieht, den folgenden Normen entspricht: Auguel se réfère cette déclaration est conforme à le document suivant:

A cui si riferisce dichiarazione, corrisponde ai suguenti documenti:

Al que se refiere la presente declaración, corresponde a los siguientes documentos:

De machinerichtlijn: 2006/42/EG

Following the provisions of Directive: 2006/42/EG

Die Maschinenrichtlinie:

2006/42/EG

Conformément aux dispositions de la Directive:

2006/42/EG

Comformemente alla direttiva: 2006/42/EG

Conforme con la norma:

2006/42/EG

Nederland, Maasbracht, 01-11-2021

Directeur Valkenpower

B.A.H Valkenburg