

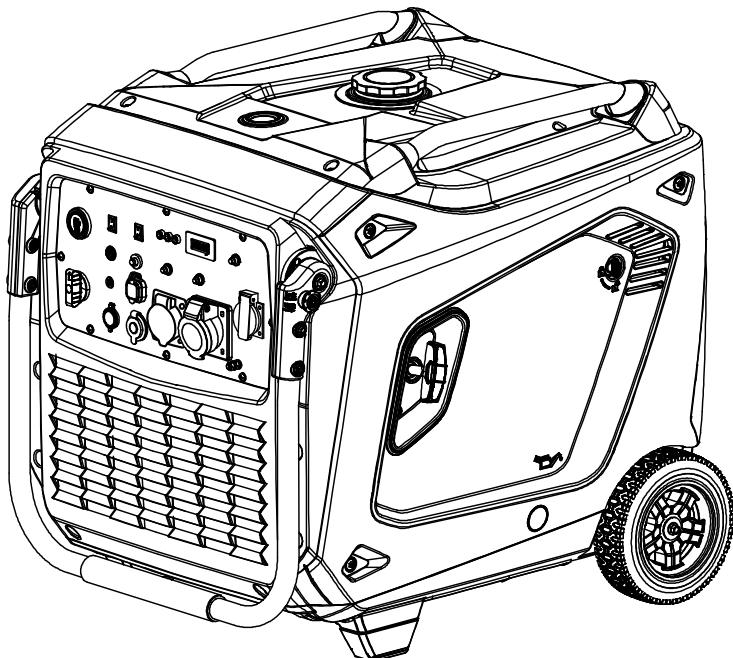
**Please, read this manual  
carefully before use!**

**Owner's Manual**



## **Inverter generator in soundproof housing**

KS 2000i S  
KS 2000iG S  
KS 3000i S  
KS 3000iG S  
KS 4000iE S  
KS 4000iEG S  
KS 6000iE S  
KS 9500iE S ATSR





Thank you for choosing **Könner & Söhnen®** products. This manual provides a brief description of safety requirements, setup procedures, and operating instructions. More information is available in the support section at: [konner-sohnen.com/pages/instructions](http://konner-sohnen.com/pages/instructions)

You can also download the manual by scanning the QR code or by visiting the official importer's website at [www.konner-sohnen.com](http://www.konner-sohnen.com)



*Please, read this manual carefully before use!*

The manufacturer reserves the right to make changes that may not be reflected in this manual, including:

- The manufacturer reserves the right to make changes in the product design, configuration and construction.
- The images and drawings in this manual are for reference only and may differ from the actual components and inscriptions on the products.

Contact information that you are free to use in case of any problems can be found at the end of this manual. All information in this manual is correct to the best of our knowledge at the time of publication. The current list of service centers can be found on the official importer's website at [www.konner-sohnen.com](http://www.konner-sohnen.com)



**ATTENTION – DANGER!**



**Failure to follow the recommendations marked with this sign may lead to serious injury or death of the operator or third parties.**



**IMPORTANT!**



**Useful information while operating the machine.**

## SAFETY INFORMATION

**1**

### WORKING AREA



**ATTENTION – DANGER!**



**When using the generator, attention must be paid to the actual power consumption of the connected electrical devices, including the power factor ( $\cos\phi$ ) and the starting power, which for devices with motors can be several times higher than the rated power and must not exceed the maximum output of the generator.**



**ATTENTION – DANGER!**



**Pay attention to the number of phases of the generator and the electrical system. A three-phase generator is only suitable for three-phase power consumers. Never connect a three-phase generator to a three-phase home network if there are no three-phase power consumers**



**ATTENTION – DANGER!**



**As exhaust gases contain poisonous carbon dioxide ( $\text{CO}_2$ ) and carbon monoxide (CO) gases which are dangerous for life, it is strictly forbidden to install the generator in residential buildings, premises connected to residential buildings by a common ventilation system, other rooms from which exhaust gases may enter living premises.**

- Do not use generator in the rain, snow and high humidity conditions, do not touch the generator with wet hands. It's prohibited to leave it in direct sunlight in summer for a long time. It is recommended to store and use the generator under a canopy or in a well ventilated area.
- Place the generator on a flat, hard surface, away from flammable liquids/gases (at a minimum distance of 1 m). Install the generator at a distance of not less than 1 m from the front control panel and not less than 50 cm on each side, including the upper part of the generator. To reduce vibration during operation and to avoid damage to the surface, where the generator is installed, it is equipped with dampers.
- Please don't use the generator near flammable gases, liquids or dust. When using the generator exhaust system gets very hot. This may cause fire or explosion of these materials.
- Be sure to follow cleanliness and good lighting in the work area. Clutter and poor lighting may cause an injury.
- Do not let the presence of unauthorized persons, children or animals when working with generator. If necessary, make sure to fencing the working area.
- Please use safety shoes and protective gloves when working with generator.

## ELECTRICAL SAFETY


**ATTENTION - DANGER!**


**The device generates electricity. Follow safety precautions to avoid electric shock.**


**IMPORTANT!**


**The generator should be used as an IT or TN system based on the application. Earthing and additional protective measures such as insulation monitoring or protection against accidental contact (residual current device) must be provided based on the application and the system used.**

- The generator produces electricity that may lead to an electric shock while neglecting compliance regulations.
- Konner & Sohnen generators were initially designed as an IT system with basic protection by insulation of hazardous live parts according to DIN VDE 0100-410. The generator housing is insulated from the current-carrying L and N conductors. The generator must be grounded in all cases, except for an IT system with an insulated neutral wire and bonding. A grounded IT system requires the use of an insulation monitoring device. Further details regarding the use of the generator in IT and TN systems can be found on our website or requested from our technical support. Wires with damaged or spoiled insulation should be replaced. You should also replace worn, damaged or rusty contacts.
- All connecting the generator to the network must be made by certified electrician in accordance with all electrical rules and regulations.
- It is not allowed to supply current from the electrical network to the generator when the power supply is restored.
- Do not allow moisture in the generator. The water inside the device increases the risk of an electric shock.
- In the high humidity level conditions generator exploit is prohibited. Keep the generator in a dry place only.
- Avoid direct contact with grounded surfaces (pipes, radiators, etc.).
- Be careful when working with power cables. Immediately replace it in case of damage, as damaged wire increases the risk of electric shock.
- Network connection should only be carried out by a qualified technician
- Connect the generator to the protective ground before operation.
- Do not connect or disconnect a generator to electricity consumers, which are placed in water on a wet or damp soil.
- Do not touch parts of the generator under voltage.
- Connect the generator to those customers only which meet the electrical characteristics and the rated power of the generator.

- Store all electrical equipment dry and clean. Wires with damaged or spoiled insulation should be replaced. You should also replace worn, damaged or rusty contacts.


**IMPORTANT!**


**It is forbidden to connect to the generator devices which can generate current pulses and direct energy towards the generator (voltage stabilizers, devices with electronic brakes, on-grid and hybrid inverters, etc.).**

The generator and power consumers form a closed system, with elements affecting each other. This system is physically different from the public network since it is significantly affected by factors such as unbalanced phase load and non-linear current consumption by power consumers that can cause damage to the generator and power consumers connected to it.


**IMPORTANT!**


**Using device for other purposes deprives the right for free warranty.**

### PERSONAL SAFETY

- Be careful. Do not operate the generator, if you are tired, under the influence of drugs or alcohol. Inattention may cause a serious injury.
- Avoid inadvertent start. Make sure to set the switch to Off when you turn off the generator.


**ATTENTION - DANGER!**


**Non compliance to these requirements may result in generator combustion or explosion, as well as in electric wiring ignition inside the structure.**

- To avoid inhaling exhaust gas, the generator does not have to work in conditions of poor ventilation. Exhaust gas contains poisonous carbon monoxide.
- Make sure no outsider objects are on the generator when it is turned on. Using device for other purposes deprives the right for free warranty. It is not allowed to sit or stand on the generator.
- Always keep a stable position and balance when starting the generator.
- Do not overload the generator, use it only for the purpose.

### PRECAUTIONS WHEN WORKING WITH GASOLINE GENERATOR

- Do not start the generator operation upon presence of electric load. Disconnect the load before you stop the engine.
- Generator installation is to be performed at minimum 1 meter safety distance from flammable objects. All explosive and flammable materials or substances are to be kept away from the generator, for its engine produces heat during operation.
- Do not refuel the running generator.
- It is forbidden to smoke during generator refuelling operations.
- **Use only unleaded gasoline with an octane rating of 90–95 containing no more than 10% ethanol.** The use of kerosene or any other type of fuel is not allowed! Always follow the manufacturer's recommendations regarding the shelf life and storage of fuel. The fuel in the tank comes into contact with air, which can affect its quality. Over time, depending on the quality of the fuel, deposits may accumulate in the float chamber of the carburetor, which must be drained regularly to ensure the carburetor functions properly. If the generator is not used for an extended period of time, we recommend completely draining the gasoline from the carburetor and the tank via the drain screw on the carburetor to prevent the formation of deposits in the fuel system. Failure to follow these recommendations may lead to the damage of the carburetor.
- Observe the fuel tank refilling. Do not allow overfilling.
- It is forbidden to touch the exhaust system during the generator start and in process of its running.
- It is forbidden to run the generator in cases when its exposure to rain, snow and possibility of soakage exist.
- Before running the generator, it is necessary to define the place and means of its emergency stop.

**ATTENTION - DANGER!****Fuel contaminates the land and groundwater. Do not allow the leaking gasoline from the tank!**

## PRECAUTIONS WHEN WORKING WITH HYBRID GENERATOR

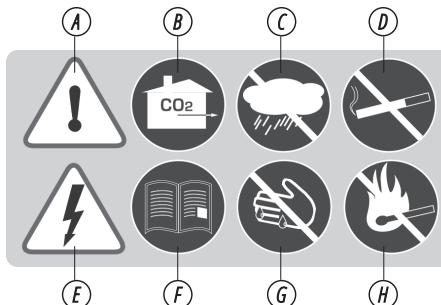
**IMPORTANT!****For dual fuel models, only propane-butane mixture for cars (LPG) can be used as gas! It is forbidden to use any other gas!**

Do not start the generator operation upon presence of electric load! Disconnect the load before you stop the engine.

- You are allowed to connect all the power consuming supplies only after generator got warmed up. If you start generator with appliances being connected the engine may work unstable due to the fuel remains in the carburetor.
- Disconnect the load before you stop the engine, disconnect all the connected devices first, then close the gas valve, then turn off the engine. After that set the starter switch to OFF position and turn off the gas supply valve.
- Before usage make sure, that all the hoses are connected properly.
- In case of gas leakage, stop the gas flow from the source to generator and switch off all the electric appliances connected as soon as possible.
- For stopping gas powered engine: disconnect all the connected devices first, then close the gas valve, then turn off the engine. After that set the starter switch to OFF position and turn off the gas supply valve.

**ATTENTION - DANGER!****Do not allow sparks near gas powered generator during its work****ATTENTION - DANGER!****The gas cylinder valve must not be closed when the generator is not running. The generator must not be operated on gas in basements.****ATTENTION - DANGER!****Pay attention! Usage of gasoline together with liquefied gas is forbidden! When you operate using gasoline, you must stop LPG supply. When you operate generator using LPG - you must stop gasoline supply.**

#### SYMBOLS DESCRIPTION WHEN WORKING WITH GENERATOR



- A.** Be careful when using the device! Follow safety rules listed in manual.
- B.** Use the generator only in areas that are well ventilated, or on open areas. The exhaust gases contain CO<sub>2</sub>, which are dangerous to life.
- C.** Do not use or store the device in high humidity.
- D.** Do not smoke when using the generator!
- E.** The device generates electricity. Follow safety precautions to avoid electric shock.
- F.** Carefully read the manual before using the device.
- G.** Do not touch the generator with wet or dirty hands.
- H.** Follow fire safety rules, do not use open flames near the generator.
- I.** Please don't touch! The muffler heats up when running the generator.



**Use only unleaded gasoline with an octane rating of 90–95 containing no more than 10% ethanol.**



Indicates the noise level. For different models this indicator is different. All characteristics are given in the "Specifications".

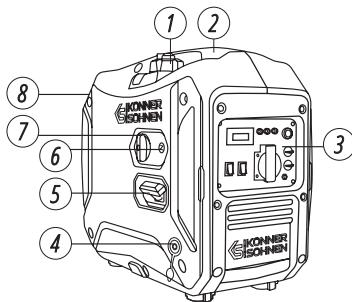


Information on the required level of oil in the crankcase



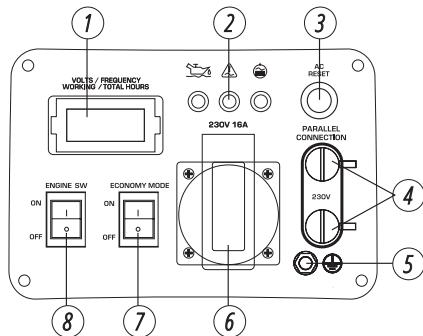
Air filter cleaning is to be performed each 50 hours of the generator operation (every 10 hours in unusually dusty conditions).

## MODELS KS 2000i S, KS 2000iG S, KS 3000i S, KS 3000iG S



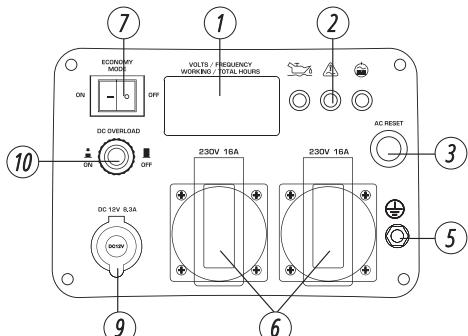
1. Fuel tank cap air vent
2. Carrying handles
3. Control panel
4. LPG input
5. Manual starter
6. Air choke (for models KS 2000iG S)
7. Gasoline fuel switch for models KS 2000iG S, KS 3000iG S. Multifunction engine switch for models KS 2000i S, KS 3000i S.
8. Maintenance cover (on the other side of the generator)

## CONTROL PANEL FOR MODELS KS 2000i S, KS 2000iG S



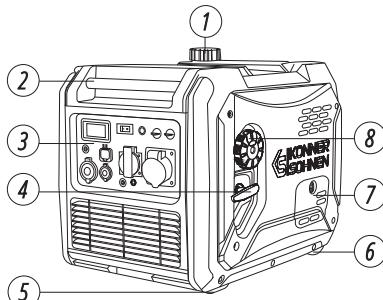
1. LED display
2. Oil level indicator, overload indicator, voltage indicator
3. Reset button
4. Generator parallel socket
5. Earthing bolt
6. AC outlet Schuko 230V (AC outlets 2×Schuko 230V for models KS 3000i S, KS 3000iG S)
7. Economy mode switch
8. Engine switch OFF/ON for model KS 2000iG S. For models KS 2000i S, KS 3000i S the multifunction engine switch is located on the generator housing (see "General View", pt. 7).
9. 12V/8.3A DC outlet
10. 12V DC fuse

## CONTROL PANEL FOR MODELS KS 3000i S, KS 3000iG S



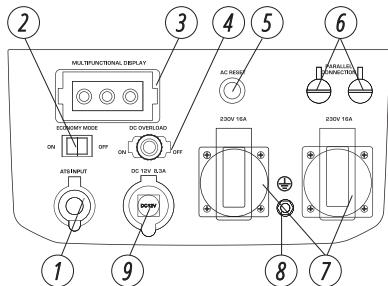
1. Fuel tank cap air vent
2. Carrying handles
3. Control panel
4. LPG input
5. Manual starter
6. Air choke (for models KS 2000iG S)
7. Economy mode switch
8. Engine switch OFF/ON for model KS 2000iG S. For models KS 2000i S, KS 3000i S the multifunction engine switch is located on the generator housing (see "General View", pt. 7).
9. 12V/8.3A DC outlet
10. 12V DC fuse

## MODELS KS 4000iE S, KS 4000iEG S, KS 6000iE S



1. Fuel tank cap
2. Carrying handles
3. Control panel
4. Manual starter
5. Antivibration supports
6. Transport wheels
7. Maintenance cover
8. Engine switch (multifunction engine switch for model KS 4000iEG S)

### CONTROL PANEL FOR MODEL KS 4000iE S

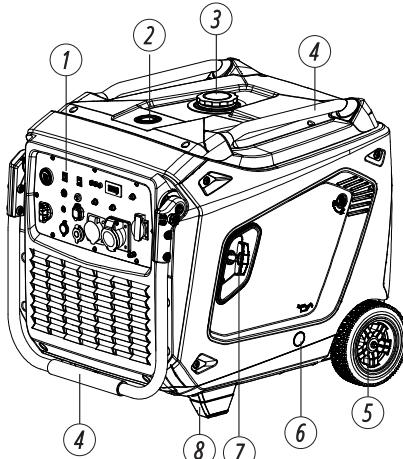


1. ATS input
2. ECONOMY MODE switch
3. Multifunctional LED display (LED display for model KS 4000iEG S)
4. 12V DC fuse
5. Reset button
6. Generator parallel socket

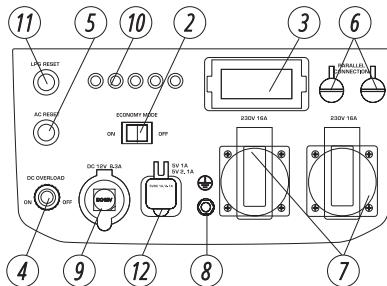
### CONTROL PANEL FOR MODEL KS 6000iE S

1. 12V DC fuse
2. Multifunctional LED display
3. USB-Outputs 2×5V USB
4. AC outlet Schuko 230V
5. ECONOMY MODE switch
6. Reset button
7. Generator parallel socket
8. AC outlet CEE 230V 32A
9. Earthing bolt
10. 16V AC fuse
11. ATS input
12. 12V/8.3A DC outlet

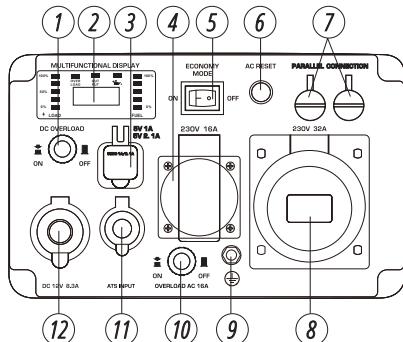
### MODEL KS 9500iE S ATSR



### CONTROL PANEL FOR MODEL KS 4000iEG S



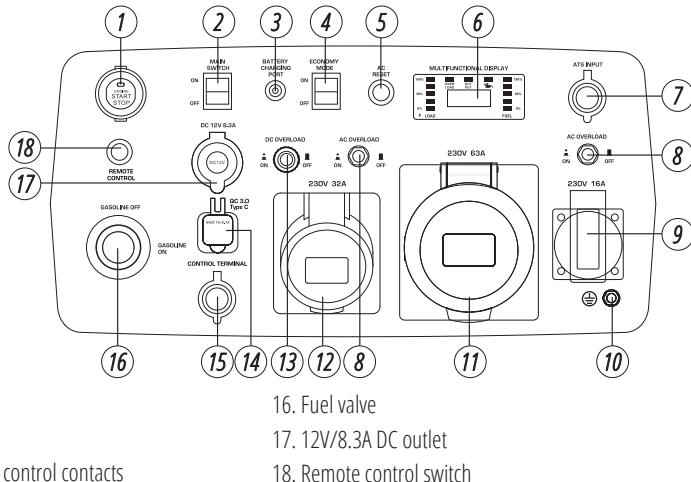
7. AC outlets 2×Schuko 230V
8. Earthing bolt
9. 12V/8.3A DC outlet
10. Oil level indicator, overload indicator, voltage indicator (+ 2 fuel type indicators for model KS 4000iEG S)
11. Fuel switch
12. USB-Outputs 2×5V USB



1. Control panel
2. Fuel level indicator
3. Fuel tank cap
4. Carrying handles
5. Transport wheels
6. Maintenance cover (for motor oil change)
7. Manual starter
8. Antivibration supports

**CONTROL PANEL FOR MODEL KS 9500iE S ATSR**

1. START/STOP Button
2. Main switch
3. Battery charging socket
4. ECONOMY MODE switch
5. Reset button
6. Multifunctional LED display
7. ATS input
8. 16V AC fuse
9. AC outlet Schuko 230V
10. Earthing bolt
11. AC outlet CEE 230V 63 A
12. AC outlet CEE 230V 32A
13. 12V DC fuse
14. USB-Outputs 2x5V USB
15. Connection for external PF control contacts



16. Fuel valve
17. 12V/8.3A DC outlet
18. Remote control switch


**IMPORTANT!**


The manufacturer reserves the right to make changes and/or improvements to the design, components, and technical attributes without notice or obligation. The pictures in this manual are schematic and may not match the parameters of original product.

**4**
**COMPONENTS OF SET**

1. Generator
2. Packaging
3. Operating instructions
4. Key candle
5. Screw-driver PH2 6,0 mm
6. Case for accessories



In addition to the components shown in the figure of a gasoline generator, a generator with a hybrid system (LPG/ gasoline) is equipped with a hose for supplying LPG to the generator.

1. *Built-in reducer.*
2. *Gas cylinder connection hose (1.5 m).*

Connect the LPG hose to the LPG input



for models KS 2000iG S, KS 3000iG S



for model KS 4000iEG S

Model	KS 2000i S	KS 2000iG S
<b>Voltage</b>	230 V	
<b>Maximum power</b>	2,0 kW	2,0* kW
<b>Nominal power</b>	1,8 kW	1,8* kW
<b>Frequency</b>	50 Hz	
<b>Current (max.)</b>	8,7 A	8,7 A
<b>Outlets</b>	1×Schuko 230V 16A	
<b>Engine start</b>	manual	manual
<b>Fuel tank volume</b>	5 l	5 l
<b>Working time at 50% load (gasoline fuel)**</b>	6 h 15 min	6 h 15 min
<b>LED display</b>	voltage, frequency, working hours	
<b>Noise level Lpa (7m)/Lwa</b>	62/90 dB	62/90 dB
<b>Output 12V</b>	–	–
<b>USB + Type C</b>	USB QC3.0 + Type C	–
<b>Engine model</b>	KS 100i	KS 100i
<b>Engine volume</b>	79.8 cm <sup>3</sup>	79.8 cm <sup>3</sup>
<b>Engine type</b>	gasoline, 4 stroke cycle engine	LPG/gasoline 4 stroke cycle engine
<b>Engine power</b>	2,5 hp	2,5 hp
<b>Generator parallel socket</b>	+	+
<b>Crankcase volume</b>	0,35 l	0,35 l
<b>Power factor</b>	cos φ 1 (230V)	cos φ 1 (230V)
<b>ATS input</b>	–	–
<b>Dimensions (L×W×H)</b>	570×350×565 mm	715×350×565 mm
<b>Lithium battery</b>	–	–
<b>Net weight</b>	19 kg	19 kg
<b>Protection class</b>	IP23M	
<b>Nominal voltage tolerance – max. 5%</b>		

\*LPG operation reduces generator power by 10%.

\*\*Fuel consumption depends on many factors, such as load, fuel quality, season, altitude, technical condition of the generator.

To ensure reliability and increase the engine service life, peak powers may be slightly limited by circuit breakers.

The optimal operating conditions are ambient temperature of 17-25°C, barometric pressure of 0.1 MPa (760 mm Hg), and relative humidity of 50-60%. Under these environmental conditions, the generator can provide maximum performance in terms of the declared specifications.

In the event of deviations from these environmental indicators, the generator performance may vary.

Please note that continuous loads exceeding 80% of the generator's rated power are not recommended in order to extend its service life.

Model	KS 3000i S	KS 3000iG S
<b>Voltage</b>	230 V	
<b>Maximum power</b>	3,3 kW	3,3* kW
<b>Nominal power</b>	3,0 kW	3,0* kW
<b>Frequency</b>	50 Hz	
<b>Current (max.)</b>	14,3 A	17,4 A
<b>Outlets</b>	2×Schuko 230V 16A	
<b>Engine start</b>	manual	manual
<b>Fuel tank volume</b>	5 l	5 l
<b>Working time at 50% load (gasoline fuel)**</b>	4 h	4 h
<b>LED display</b>	voltage, frequency, working hours	
<b>Noise level Lpa (7m)/Lwa</b>	68/95 dB	68/95 dB
<b>Output 12V</b>	12V/8,3A	12V/8,3A
<b>USB + Type C</b>	–	–
<b>Engine model</b>	KS 160i	KS 240i
<b>Engine volume</b>	KS 240i	KS 240i
<b>Engine type</b>	gasoline, 4 stroke cycle engine	LPG/gasoline 4 stroke cycle engine
<b>Engine power</b>	5 hp	5 hp
<b>Generator parallel socket</b>	–	–
<b>Crankcase volume</b>	0,4 l	0,4 l
<b>Power factor</b>	cos φ 1 (230V)	cos φ 1 (230V)
<b>ATS input</b>	–	–
<b>Dimensions (L×W×H)</b>	570×350×565 mm	715×350×565 mm
<b>Lithium battery</b>	–	–
<b>Net weight</b>	22,5 kg	41 kg
<b>Protection class</b>	IP23M	
<b>Nominal voltage tolerance – max. 5%</b>		

\*LPG operation reduces generator power by 10%.

\*\*Fuel consumption depends on many factors, such as load, fuel quality, season, altitude, technical condition of the generator.

To ensure reliability and increase the engine service life, peak powers may be slightly limited by circuit breakers.

The optimal operating conditions are ambient temperature of 17-25°C, barometric pressure of 0.1 MPa (760 mm Hg), and relative humidity of 50-60%. Under these environmental conditions, the generator can provide maximum performance in terms of the declared specifications.

In the event of deviations from these environmental indicators, the generator performance may vary.

Please note that continuous loads exceeding 80% of the generator's rated power are not recommended in order to extend its service life.

Model	KS 4000iE S	KS 4000iEG S
<b>Voltage</b>	230 V	
<b>Maximum power</b>	4,4 kW	4,0* kW
<b>Nominal power</b>	4,0 kW	3,5* kW
<b>Frequency</b>	50 Hz	
<b>Current (max.)</b>	19,1 A	17,4 A
<b>Outlets</b>	2×Schuko 230V 16A	
<b>Engine start</b>	manual/electric	manual/electric
<b>Fuel tank volume</b>	13 l	13 l
<b>Working time at 50% load (gasoline fuel)**</b>	7 h 15 min	7 h 15 min
<b>LED display</b>	multifunctional***	
<b>Noise level Lpa (7m)/Lwa</b>	66/97 dB	66/97 dB
<b>Output 12V</b>	12V/8,3A	12V/8,3A
<b>USB + Type C</b>	USB QC 3.0 + Type C	
<b>Engine model</b>	KS 240i	KS 240i
<b>Engine volume</b>	223 cm <sup>3</sup>	223 cm <sup>3</sup>
<b>Engine type</b>	gasoline, 4 stroke cycle engine	LPG/gasoline 4 stroke cycle engine
<b>Engine power</b>	7,5 hp	7,5 hp
<b>Generator parallel socket</b>	+	+
<b>Crankcase volume</b>	0,6 l	0,6 l
<b>Power factor</b>	cos φ 1 (230V)	cos φ 1 (230V)
<b>ATS input</b>	+	-
<b>Dimensions (L×W×H)</b>	675×500×575 mm	675×500×575 mm
<b>Lithium battery</b>	1,6 Ah	1,6 Ah
<b>Net weight</b>	38 kg	41 kg
<b>Protection class</b>	IP23M	
<b>Nominal voltage tolerance – max. 5%</b>		

\*LPG operation reduces generator power by 10%.

\*\*Fuel consumption depends on many factors, such as load, fuel quality, season, altitude, technical condition of the generator.

\*\*\*Multifunctional LED-display: load, fuel level, voltage, frequency, working hours; overload indicator, voltage indicator, oil level indicator.

To ensure reliability and increase the engine service life, peak powers may be slightly limited by circuit breakers.

The optimal operating conditions are ambient temperature of 17-25°C, barometric pressure of 0.1 MPa (760 mm Hg), and relative humidity of 50-60%. Under these environmental conditions, the generator can provide maximum performance in terms of the declared specifications.

In the event of deviations from these environmental indicators, the generator performance may vary.

Please note that continuous loads exceeding 80% of the generator's rated power are not recommended in order to extend its service life.

Model	KS 6000iE S	KS 9500iE S ATSR
<b>Voltage</b>	230 V	
<b>Maximum power</b>	5,5 kW	9,5 kW
<b>Nominal power</b>	5,0 kW	9,0 kW
<b>Frequency</b>	50 Hz	
<b>Current (max.)</b>	23,9 A	41,3 A
<b>Outlets</b>	1×Schuko 230V 16A, 1×CEE 230V 32A	1×Schuko 230V 16A, 1×CEE 230V 32A, 1×CEE 230V 63A
<b>Engine start</b>	manual/electric	manual/electric/ remote
<b>Fuel tank volume</b>	14,5 l	30 l
<b>Working time at 50% load (gasoline fuel)**</b>	7 h	10 h 15 min
<b>LED display</b>	multifunctional***	
<b>Noise level Lpa (7m)/Lwa</b>	70/97 dB	70/97 dB
<b>Output 12V</b>	12V/8,3A	12V/8,3A
<b>USB + Type C</b>	USB QC3.0 + Type C	USB QC3.0 + Type C
<b>Engine model</b>	KS 240i	KS 480i
<b>Engine volume</b>	223 cm <sup>3</sup>	438 cm <sup>3</sup>
<b>Engine type</b>	gasoline, 4 stroke cycle engine	gasoline, 4 stroke cycle engine
<b>Engine power</b>	7,5 hp	14,2 hp
<b>Generator parallel socket</b>	+	-
<b>Crankcase volume</b>	0,65 l	1,2 l
<b>Power factor</b>	cos φ 1 (230V)	cos φ 1 (230V)
<b>ATS input</b>	+	+
<b>Dimensions (L×W×H)</b>	715×525×640 mm	905×715×815 mm
<b>Lithium battery</b>	1,6 Ah	3 Ah
<b>Net weight</b>	43 kg	85 kg
<b>Protection class</b>	IP23M	
<b>Nominal voltage tolerance – max. 5%</b>		

\*LPG operation reduces generator power by 10%.

\*\*Fuel consumption depends on many factors, such as load, fuel quality, season, altitude, technical condition of the generator.

\*\*\*Multifunctional LED-display: load, fuel level, voltage, frequency, working hours; overload indicator, voltage indicator, oil level indicator.

To ensure reliability and increase the engine service life, peak powers may be slightly limited by circuit breakers.

The optimal operating conditions are ambient temperature of 17-25°C, barometric pressure of 0.1 MPa (760 mm Hg), and relative humidity of 50-60%. Under these environmental conditions, the generator can provide maximum performance in terms of the declared specifications.

In the event of deviations from these environmental indicators, the generator performance may vary.

Please note that continuous loads exceeding 80% of the generator's rated power are not recommended in order to extend its service life.

It is recommended to ground the generator before operating it for the first time. Before starting the device, remember that the total power of the connected power consumers should not exceed the nominal power of the generator.



IMPORTANT!



Inverter generators produce 230 V at 50 Hz and must not be used as a replacement for the main power grid when powering devices designed to feed energy into the electrical grid (such as grid-tied inverters, hybrid inverters, microinverters, etc.). These devices may detect the 230 V 50 Hz output from the inverter generator as the main power supply and can damage the generator through backfeeding.



IMPORTANT!



Make sure that the control panel, the blinds and the underside of the inverter are well cooled and protected against the ingress of small solids, dirt, and water. Improper operation of the cooler can cause damage to the motor, inverter or alternator.

## GENERATOR OPERATION

### OIL LEVEL INDICATOR

When the oil level falls below the level required for operation, the oil level indicator lights up, and then the engine stops automatically. The engine will not start until oil is added.

### AC INDICATOR

When the generator is running and producing electricity, the AC indicator light is on.

### DC FUSE

The DC protector automatically switches to "OFF" when the current of the operating electrical device is higher than the rated current. To use this equipment again, turn on the DC fuse again by pressing the "ON" button.



IMPORTANT!



If the DC fuse turns off, reduce the load of the connected electrical device. If the DC protector turns off again, stop operation and contact your nearest Konner & Söhnen service center.

### OVERLOAD INDICATOR

The overload indicator lights up when the connected generator is overloaded, the inverter control unit overheats or the AC output voltage rises.

If the overload indicator goes on, the engine will continue to operate, but the generator will no longer produce electricity. In this case, you must perform the following steps:

1. Turn off all connected electrical appliances and stop the engine.
2. Reduce the total power of the connected devices until the nominal power of the generator is reached.
3. Check if the vent grid is clogged. Remove excess dirt or debris, if any.
4. After checking, start the engine.



IMPORTANT!



The overload indicator may light up within several seconds after start-up or when connecting electrical devices requiring a high starting current, such as a compressor or voltage indicator. However, this is not a malfunction.

## FUEL TANK CAP AIR VENT (FOR MODIFICATIONS OF MODELS KS 2000i, KS 3000i)

The fuel cap is equipped with a vent for air supply to the fuel tank. When the engine is running, the vent must be in the "ON" position (OPEN). This will allow fuel to enter the carburetor for engine operation. After the generator stops, allow it to cool down and close the air vent on the fuel cap. When the generator is not in use, close the vent to the "OFF" position.

### EARTHING BOLT

The generators described in this manual are designed as mobile power sources in an IT system with insulated live wires and are operated without grounding. The grounding screw and PE contacts in the sockets serve to equalize the potential. Please observe protective measures when operating multiple power consumers in the IT system.

Grounding is required when using the generator to build a TN system with a grounded neutral conductor.

## CHECK BEFORE GETTING STARTED

8

### CHECKING THE FUEL LEVEL

1. Unscrew the fuel cap and check the fuel level in the tank.
2. Fill the fuel tank to the fuel filter level.
3. Tighten the fuel cap securely.
4. For silent models of inverter generator, open the air intake vent on the fuel cap.

**Recommended fuel:** unleaded gasoline with an octane rating of 90–95 containing no more than 10% ethanol.

**Fuel tank volume:** see specifications table.



**IMPORTANT!**



**Wipe up spilled fuel immediately with a clean, dry, soft cloth, as the fuel may harm painted surfaces or plastic parts.**



**IMPORTANT!**



**Be sure to observe the expiration date of the gasoline. If the generator is not going to be used for an extended period, always drain the gasoline from the carburetor and, if necessary, from the fuel tank. Deposits in the fuel system can lead to engine malfunctions.**

### CHECKING THE OIL LEVEL

The generator is transported free of motor oil. Do not start the engine until it is filled with sufficient amount of motor oil.

1. Open the service cover (fig.1).
2. Unscrew the oil dipstick ((fig. 2.1 in KS 4000 series model and fig. 2.2 in KS 6000 series model) and wipe it out with a clean cloth.
3. Fill the crankcase with engine oil. The recommended amount of oil for each model is indicated in the specification chart.
4. Insert the dipstick without screwing it in.
5. Check the oil level by a mark on the oil dipstick.
6. Add oil if its level is below the mark on the oil dipstick.
7. Screw on the dipstick.

Recommended motor oil: SAE 10W30, SAE 10W40.

Recommended motor oil grade: API Service SG type or higher.

Motor oil quantity: see specifications table.



Fig. 1

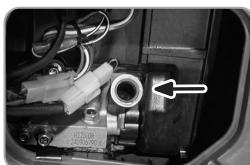


Fig. 2.1



Fig. 2.2

## GETTING STARTED

9

Before starting the engine, make sure that the rated power of power consumers matches with the power of generator. Do not exceed the nominal power of the generator. Do not connect any devices before you start the engine!



**IMPORTANT!**



**Do not change the controller settings in terms of the amount of fuel governor (this adjustment was made at the factory). Otherwise, this may result in changes in the engine operation or its failure.**



**ATTENTION – DANGER!**



When drawing power between the rated and maximum power levels, the generator must not run for longer than 5 seconds. This is common, for example, when starting the electric motor. The required starting power of the motor must not exceed the maximum starting power of the generator.



**ATTENTION – DANGER!**



Emergency generators should not run continuously (e.g. by adding fuel to the tank or connecting a large fuel tank) or longer than recommended: 4-6 hours for LPG/gasoline or gasoline generators (depending on load).

This material is for informational purposes only and does not constitute a manual for installing the equipment or connecting it to the mains, but we strongly recommend that you read the instructions below. Equipment connection must always be carried out by a certified electrician responsible for the installation and electrical connection of the equipment according to local laws and regulations. The manufacturer assumes no liability for improper connection of the equipment or for any material or physical damage that may result from improper installation, connection or operation of the equipment.

### COMMISSIONING

1. Fill the crankcase with engine oil. The recommended amount of oil for each model is indicated in the specification chart.
2. Check oil level with an oil dipstick. It should be between the MIN and MAX marks on the oil dipstick.
3. Check fuel level.
4. Check the air filter for correct installation.

**IN THE FIRST 20 OPERATING HOURS OF THE GENERATOR, THE FOLLOWING REQUIREMENTS SHOULD BE MET:**

1. During commissioning, do not connect power consumers, the power of which exceeds 50% of the nominal (operating) power of the device.

2. After the first 20 operating hours, be sure to change the oil. It is better to drain oil while the engine is still hot after operation to ensure quick and complete oil draining.

3. Check and clean the air filter, fuel filter and spark plug.



**IMPORTANT!**

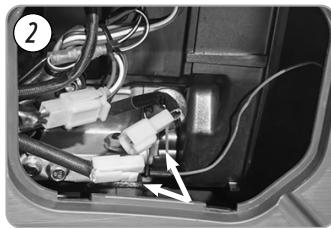


**Before starting the generator, connect the ground wire to the ground terminal.**

The generator is shipped with terminals disconnected to prevent battery self-discharge during storage. To connect the battery of the KS 4000iE S generator, proceed as follows:



1. Open the service cover.

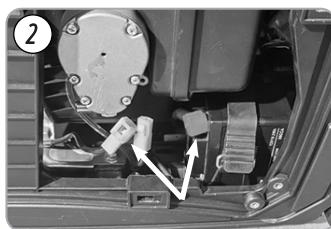


2. Connect the negative terminal of the battery by connecting the negative cable.

The generator is shipped with terminals disconnected to prevent battery self-discharge during storage. To connect the battery of the KS 6000iE S generator, proceed as follows:



1. Open the right side cover.



2. Connect the negative terminal of the battery by connecting the negative cable.

## ENGINE START



**IMPORTANT!**



**Useful tip:** If the engine stalls shortly after starting or does not start at all, we recommend draining deposits from the carburetor and checking the oil level. The generator is equipped with a low oil level indicator, and the engine will stop if the engine oil level is too low.



**IMPORTANT!**



Deposits from the carburetor's float chamber should be drained regularly. If the generator is not going to be used for an extended period, close the fuel tap and drain the gasoline from the carburetor to prevent possible deposits from forming inside the carburetor.

## FOR THE KS 4000iE S, KS 6000iE S MODELS

1. Check the oil level.
2. Check the fuel level.
3. Turn the Multifunctional engine switch to the "START" position (for model KS 4000iE S, KS 6000iE S to the "RUN" position).
4. Open the vent on the fuel cap to the "ON" position (for model KS 6000iE S).

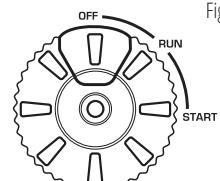


Fig. 3

5.1 For manual start (models KS 4000iE S, KS 6000iE S), pull the manual starter until a slight resistance is felt, then pull it toward you relatively sharply. Slowly turn the manual starter by hand, do not release it abruptly.

5.2 For electric start, press the red button on the multifunctional engine switch (fig. 3)

6. After starting the engine, turn the Multifunctional engine switch to the "RUN" position (fig. 3).

### FOR THE KS 2000i S, KS 3000i S MODELS

1. Check the oil level.

2. Check the fuel level.

3. Open the vent on the fuel cap to the "ON" position (fig. 4).

4. Turn the air choke control knob to the "START" position (fig. 5).

5. Pull the manual starter until a slight resistance is felt, then pull it toward you relatively sharply. Slowly turn the manual starter by hand, do not release it abruptly.

6. Turn the air choke control knob to the "RUN" position (fig. 5).

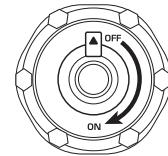


Fig. 4

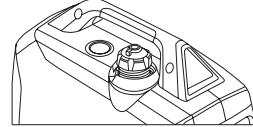
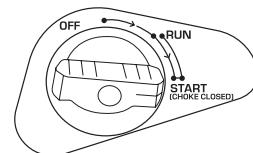


Fig. 5



**IMPORTANT!**



**Useful tip: to ensure long-term operation of the generator engine, it is important to observe the following tips:**

**- Before connecting the load, allow the engine to run for 1-2 minutes to warm it up.**

**- When disconnecting the load after lengthy operation, do not turn off the generator. Allow the generator to run idle for 1-2 minutes so that it cools down.**

### FOR THE KS 9500i S ATSR MODEL:



**WARNING!**



Generators with the electric starter come with a lithium battery, which must be connected during initial use and recharged depending on the charge level through the battery charging port using a supplied adapter to an SAE connector. To charge the battery, we recommend using a charger with reverse polarity protection and SAE contacts, such as the KS-B2A with an output voltage of up to 14V in LFP mode.

1. Check the oil level.

2. Check the fuel level.

3. Disconnect all electrical consumers from the generator, if they are connected.

4. Turn the fuel tap to „ON.“

5. Turn the MAIN SWITCH to „ON.“

6. Turn off ECONOMY MODE if it is enabled.

7.1 Starting with the pull starter:

Pull the recoil until you feel slight resistance. Pull the recoil quickly to its full length. Slowly release the recoil. Repeat this process until the engine has started.

7.2 Starting with the START/STOP button:

Press the START/STOP button for approximately 1-2 seconds to start the generator. The starting process begins.

7.3 Starting via remote control:

Press the REMOTE CONTROL button on the generator to activate remote control function.

Press the ON button on the remote control for approximately 1-2 seconds to start the generator.

7.4 Starting via CONTROL TERMINAL:

The generator can be started (by closing) and stopped (by opening) using external potential-free contacts.



**WARNING!**



**It is prohibited to apply voltage to CONTROL TERMINAL contacts. External control contacts must be potential-free.**

If a start with the electric starter fails, we recommend waiting 10 seconds before attempting the next start to prevent the electric starter from overheating. If the battery no longer has enough power to start, it must be charged via the BATTERY CHARGING PORT using a suitable charger with an output voltage of up to 14-14.5V (e.g., KS-B2A). An adapter with SAE connector is included. It is essential to ensure correct polarity.



**WARNING!**



**Regularly check the charge level of the lithium starter battery and recharge it if necessary. The control electronics consume power as soon as the MAIN SWITCH is switched on.**

The internally installed starter battery is recharged while the generator is running. To fully charge the battery, the generator must run for 1-2 hours. Therefore, we recommend charging the battery with an external charger if the generator is running infrequently.

If the remote start fails after more than 3 attempts, press the "OFF" button on the remote control to stop further attempts, then switch to manual starting or resolve any issues before trying the remote start again. Failing to do so may result in damage to the starter motor and battery.

If the generator is not going to be used within 48 hours, turn off the start switch to prevent potential battery issues or abnormal starting, and turn off the fuel supply to avoid fuel and oil leakage.

### INSTRUCTIONS FOR OPERATION OF THE STARTER BATTERY

- The battery charge should be maintained above 60% to help prolong its service life.
- When starting the generator, avoid starting it multiple times in a row to prevent damage to the battery or circuitry. If the generator fails to start after 5 consecutive attempts, stop and inspect it or take it to a qualified service center for inspection and maintenance.
- If the generator is not in use for an extended period, fully charge the battery before disconnecting the negative terminal and storing the unit in a dry, cool place. Battery self-discharge is affected by ambient temperature and humidity. High temperature and humidity will accelerate the battery self-discharge. The battery should be charged and recharged monthly to keep the charge level above 60%, preventing irreversible capacity loss caused by self-discharge.
- If the battery cannot be charged or the generator fails to start, check whether the battery is discharged or damaged. If the battery is damaged or has low capacity, replace it. The generator can still be started manually even if the battery is depleted or damaged.



**ATTENTION – DANGER!**



**Do not connect two or more devices at a time. The start-up of many devices requires high power. Devices should be connected one at a time according to their power rating. Do not connect any power consumers within the first 2 minutes after the generator has been started.**

### RUNNING GENERATOR ON LPG (KS 2000iG S, KS 3000iG S, KS 4000iEG S)

1. Check the oil level.
2. The inverter generators KS 4000iEG S use smart fuel switching system. In order to use LPG as fuel you need to connect a hose to the corresponding connector and open the valve on the gas cylinder. The solenoid valve will automatically shut off the gasoline supply from the gasoline tank.



Fig. 6

3. Connect the LPG hose to the LPG input (connect hose end **A** to the to the generator's LPG connection and tighten it firmly by hand).
4. Connect the hose end with the reducer to the gas cylinder (connect hose end **B** to the gas cylinder, as shown in Fig. 6).
5. Open the gas valve on the cylinder, making sure that no gas is leaking.
6. For the KS 2000iG S, KS 3000iG S models, press the button on the zero pressure regulator (screwed together with the pressure reducer) for 2-3 seconds to fill the hose with gas.
7. Turn the engine multifunction switch to a position between RUN and START so that the choke is half-open.
8. For manual start, pull the manual starter until a slight resistance is felt, then pull it toward you relatively sharply. Slowly turn the manual starter by hand, do not release it abruptly. For electric start, press the red button on the multifunctional engine switch (fig. 3).
9. After starting the engine, turn the Multifunctional engine switch to the "RUN" position (fig. 3).
10. When using for the first time, fill the gas line with gas by turning the key (pressing start button) to the "OFF" position and slowly pull the starter handle to the full cord length 2 to 3 times.

**For the KS 2000iG S model:** Close the choke halfway (pull it out halfway) if the generator has not yet warmed up. Set the GASOLINE FUEL SWITCH to the "OFF" position, set the engine start to the "ON" position, grasp the starter handle and slowly pull it until resistance is felt. Pull the starter cord to the full length with a sharp movement. The generator will start. If this is not the case, repeat this action. Slowly turn the manual starter by hand, do not release it abruptly. Open the air choke by pushing the air choke handle.



**IMPORTANT!**

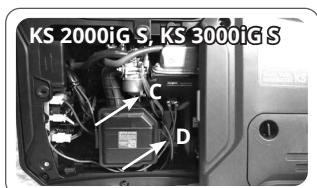


**Disconnect the load from the generator before changing fuel. The ECONOMY MODE switch must be in the "OFF" position.**

**For model KS 2000iG S:** It is recommended to stop the generator before switching from gasoline to LPG! Gasoline remains in the carburetor make it difficult to start the engine on LPG. Let the generator run out of gasoline until it stops. To do this, close the fuel valve with the generator running and wait until the generator stops completely. Then start the generator on LPG. You can also drain the remaining gasoline from the carburetor before starting the generator on LPG.

To drain gasoline from the carburetor, turn off the fuel valve and wait until the generator has cooled down sufficiently. For open frame models, place a drip pan under the carburetor and loosen the drain screw on the carburetor (Fig. 7). Make sure that no fuel leaks onto the generator. Tighten up the screw again. Start the generator on LPG according to the instructions mentioned above

Fig. 7



For all modifications of models KS 2000i, KS 3000i loosen the 4 screws on the side panel. Loosen drain screw **C** on the carburetor and let the remaining fuel drain through pipe **D** into the dedicated drip pan. Avoid gasoline leaks. Tighten up the screw. Install back the generator housing cover. Start the generator on LPG.

### TO START LPG/GASOLINE GENERATOR IN GASOLINE MODE (KS 2000iG S, KS 3000iG S, KS 4000iEG S)

1. Close the gas valve on the cylinder.
2. Open the vent on the fuel cap to the "ON"
3. Set the fuel switch to "ON" and close the air choke on the control panel (modeliams KS 2000iG S, KS 3000iG S).
4. Start the engine by hand or electric start.
5. Open the air choke (modeliams KS 2000iG S, KS 3000iG S).


**IMPORTANT!**


Place the container with gas only vertically, according to the instruction manual for gas cylinders. The horizontal placement of gas cylinders leads to hybrid generator gearbox failure.

Fuel can be changed without stopping the generator. When switching from gasoline to LPG operation, the generator may be unstable during the first 2-3 minutes and the low voltage protection may trip. If the red indicator (overload indicator) lights up in 2-3 minutes after running the generator on LPG when it is running stable, press the AC Reset BUTTON on a panel of generator to restore voltage supply

**If during usage of gasoline, need to switch to LPG supply, directly connect the LPG pipe, turn on the LPG supply, and press the LPG RESET on the control panel to switch to LPG.**

**If during usage of LPG, need to switch to gasoline, you only need to disconnect the LPG supply, generator will automatically switch to gasoline operation, without other operations**

For models with electric start, check if the battery is charged. If necessary, recharge the battery with a dedicated charger for lithium-ion batteries or start the generator with a manual start and allow it to run idle while it is recharging.

## FUNCTIONAL DESCRIPTION OF INVERTER GENERATORS

10

**It is forbidden to start the generator with the ECONOMY MODE ON. ECONOMY MODE should be turned on only after starting the generator and only with a low load. Failure to comply with this requirement may result in generator failure and void warranty repair.**

### ECONOMY MODE FUNCTION

1. Start the engine.
2. Set the ECONOMY MODE switch to "ON".
3. Plug the device into an AC outlet.
4. Make sure the AC indicator light is on.
5. Turn on the electrical device.


**IMPORTANT!**


**The ECONOMY MODE switch must be set to "OFF" to increase engine speed to nominal. When connecting multiple power consumers to the generator, be sure to first connect the one with the highest starting current, and the device with the lowest starting current should be connected last.**

### "ON" MODE

When the ECONOMY MODE switch is in the "ON" position, the control unit monitors the engine speed, reducing it commensurate with the connected load. If the engine speed is not enough to generate electricity to provide the load, the control unit will automatically increase the engine speed.

As a result, fuel consumption is optimized and noise levels are reduced.

### "OFF" MODE

The ECONOMY MODE switch must be set back to "OFF" when using electrical devices requiring a high starting current, such as a compressor or submersible pump.


**IMPORTANT!**


**The ECONOMY MODE switch must be set back to "OFF" when using electrical devices requiring a high starting current, such as a compressor or submersible pump.**

## PARALLEL FUNCTION

The total output power of the generators can be increased by connecting two inverter generators together using the Parallel Unit KS PU1 from Könnér & Söhnen. Parallel connection of two generators ensures total rated output power of these generators. When the generators are connected in parallel, the power loss is 0.2 kW of the total rated power that can be obtained (suitable for all models of inverter generators from Könnér & Söhnen).

### DISCONNECT ALL DEVICES BEFORE STOPPING THE GENERATOR!

Do not stop the generator with the devices turned on. This may disable the generator or devices connected to it!

### TO STOP THE ENGINE, PROCEED AS FOLLOWS (EXCEPT MODELS KS 2000i S, KS 2000iG S, KS 3000i S, KS 3000iG S):

1. Turn off all devices.
2. Allow the generator to run idle for approx. 1-2 minutes.
3. Turn the Multifunctional engine switch to the "OFF" position (Fig. 9).
4. Close the gas valve
5. Unplug the devices.
6. After the generator stops, allow it to cool down and close the air vent on the fuel cap (set to "OFF", as shown in Fig. 8, when switching off gasoline operation).

### MODELS KS 2000i S, KS 2000iG S, KS 3000i S, KS 3000iG S

1. Turn off all devices.
2. Allow the generator to run idle for approx. 1-2 minutes.
3. Set the engine switch to the "OFF" position.
4. Turn the Multifunctional engine switch to the "OFF" position (Fig. 9), for dual fuel models - move the fuel switch to the "OFF" position/ close LPG supply valve.
5. Allow the generator to cool down.
6. Unplug the devices.
7. After the generator stops, allow it to cool down and close the air vent on the fuel cap (set to "OFF", as shown in Fig. 8, for models KS 2000i S, KS 2000iG S, KS 3000i S, KS 3000iG S - when switching off gasoline operation).

### MODEL KS 9500iE S ATSR

1. Turn off all devices.
2. Turn the Eco mode switch to the "OFF" position.
3. Turn off the AC circuit breaker.
4. Gently press the quick start/stop button.
5. Set the power switch button to the "OFF" position.
6. Turn the fuel switch to the "OFF" position.
7. Let the generator cool down.
8. Disconnect appliances from the outlets.

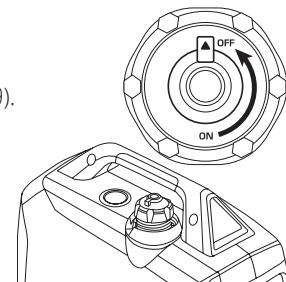


Fig. 8

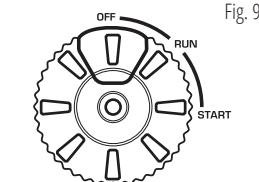


Fig. 9

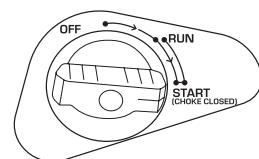


Fig. 10



WARNING!



If you need to stop the generator in an emergency, put the generator switch in the „OFF“ position.


**IMPORTANT!**


Inverter generators from KÖNNER & SÖHNEN are equipped with lithium batteries with an operating voltage similar to conventional lead-acid batteries.

When the generator is running, the battery is charged automatically. If it is necessary to charge the battery with an external device, we recommend using the KS-B2A charger or the charger for charging lead-acid motorcycle batteries with the output voltage up to 14-14.5V and the charging current up to 2A.

### CHARGING AN EXTERNAL 12 V BATTERY

1. Start the engine.
2. Connect the red wire to the positive (+) terminal of the battery.
3. Connect the black wire to the negative (-) terminal of the battery.
4. Connect the wire to a 12V/8A DC socket on the control panel of the generator.
5. To start charging the battery, set ECONOMY MODE to "OFF".
6. Turn the 12 V DC fuse to the "ON" position.


**IMPORTANT!**


- Make sure the ECONOMY MODE mode is off while the battery is being charged.
- Be sure to connect the charger's red wire to the plus (+) terminal of the battery and the black wire to the minus (-) terminal of the battery. Do not swap the terminals.
- Connect the charger to the battery terminals securely so that they are not disconnected due to motor vibrations or other actions.
- The 12 V socket can only be used as a backup source for recharging batteries and shall not be deemed as a full-featured battery charger.
- The DC protector turns off automatically if the current is higher than the rated current while the battery is being charged. To restore battery charging, turn on the DC fuse by pressing the "ON" button.

If the DC overload protection trips, stop charging the battery because the charging current is too high. Do not charge batteries if their current consumption is more than 5-8 A (depending on the generator model).


**ATTENTION - DANGER!**


The 12V connection on the generator is designed only as an emergency power source for 12V batteries and must not be used as a 12V power source for sensitive 12V power consumers.

This manual compliance! You can find a list of service center addresses on the website of exclusive importer: [www.konner-sohnen.com](http://www.konner-sohnen.com)

### TECHNICAL MAINTENANCE WORKS

Unit	Action	At each start	First month or 20 operating hours	Every 3 months or 50 operating hours	Every 6 months or 100 operating hours	Every year or 300 operating hours
Motor oil	Level check	✓				
	Replacement		✓	✓		
Air filter	Check /Cleaning	✓	✓	✓		
	Replacement				✓	
Spark plug	Cleaning		✓	✓		
	Replacement				✓	
Fuel tank	Level check	✓				
	Cleaning					✓
Fuel filter	Check (clean out)		✓	✓		

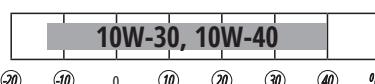
- If the generator often operates at high temperature or high load, the oil should be replaced every 25 operating hours.
- If the engine often runs in dusty or other harsh conditions, clean the air filter every 10 operating hours.
- If you missed the maintenance time, perform it as soon as possible to save the generator engine.


**IMPORTANT!**


**The manufacturer shall not be liable for any damage caused by failure to perform maintenance work.**

### RECOMMENDED OILS

Use oils designed for four-stroke cycle vehicle engines SAE10W-30, SAE10W-40. Motor oils with other viscosity levels, may be used only if the average air temperature in your region does not exceed the limits of the temperature range, specified in the table.



Upon oil level decrease it is necessary to add the required quantity in order to provide the correct generator operation. It is necessary to check the oil levels according to technical maintenance schedule. Further details can be found in the full version of the manual on our website.

**TO DRAIN ENGINE OIL, PERFORM THE FOLLOWING ACTIONS:**

1. Please drain the oil while the engine is warm. This provides a quick and complete oil drain.
2. Wear protective gloves to avoid getting oil on the skin.
3. Remove the cover of generator (fig. 11).
4. Place a drain oil holding tank under the engine.
5. Turn the drain cap, located in the engine under the oil-depth gage cap, by means of spanner (fig. 12).
6. Wait till the oil drains.
7. Replace the drain cap and tighten it well.
8. Close the maintenance cover (fig. 11).



Fig. 11

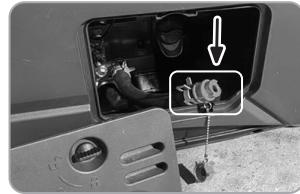


Fig. 12

**AIR FILTER TECHNICAL MAINTENANCE**
**13**

Air filter cleaning is to be performed each 50 hours of the generator operation (every 10 hours in unusually dusty conditions).

**CLEANING THE FILTER:**

1. Open the clips on the upper cap of the air filter.
2. Remove the sponge filtering element.
3. Remove all dirt deposits inside the hollow case of the air filter.
4. Thoroughly wash the filtering element in warm soapy water.
5. Dry the sponge filter.
6. Dry filtering element is to be moistened by motor oil and excess oil is to be squeezed out.

**SPARK PLUGS TECHNICAL MAINTENANCE**
**14**

Spark plug has to be intact, without soot deposits and to have a correct gap.

**SPARK PLUG VERIFICATION:**

1. Remove the cap from the spark plug.
2. Remove the spark plug by means of a corresponding spanner.
3. Examine the spark plug. If it is shattered – it is necessary to replace it. Recommended replacement spark plugs – F7TC.
4. Measure the gap. It has to be within range 0.7-0.8 mm.
5. In case of repeated use, the spark plug has to be cleaned by means of a metal brush. After that – set the correct gap.

The engine and damper will get very hot after the generator has been started. Do not touch the engine or damper with any part of your body or clothing during inspection or repair until they have cooled down.

Remove the screws and then pull the protective cover towards you. Loosen the bolts and remove the cover, screen and flame arrester of the damper. Descale the screen and flame arrester of the damper with a wire brush. Inspect the screen and flame arrester of the damper. Replace them if they are damaged. Replace the flame arrester. Replace the screen and cover of the damper. Replace the cover and tighten the screws.



**IMPORTANT!**



**Match the protrusion of the flame arrester to the hole  
in the pipe damper.**



**IMPORTANT!**



**Never use gasoline while smoking or in the immediate  
vicinity of an open flame.**

1. Remove the fuel tank cap and fuel filter.
2. Clean the filter with gasoline.
3. Wipe the filter and replace it.
4. Replace the fuel tank cap.

Make sure that the fuel tank cap is tight.

The generator battery is not subject to service. Low temperatures may lower the capacity of the lithium-ion battery and may cause an unstable generator start. Battery warranted – three months from the date of purchase of the generator.



**IMPORTANT!**



**The generator must be stored and transported with a  
closed vent at all times!**

Storage room has to be dry and free from dust deposits. Storage room also has to be locked away from children and animals. It is recommended to store and use the generator at temperature of -20°C to +40°C. Avoid direct sunlight, rain on the generator. When using and storing hybrid generator, gas tank should be kept indoors at temperatures below +10°C. If the temperature is lower, gas will evaporate.



**IMPORTANT!**



**Warning! Generator is to remain ready for operation at  
all times. Therefore in case of device malfunctions, they  
are to be repaired before dismounting the generator for  
storage.**



**IMPORTANT!**



**Before long-term storage of the generator during the  
engine work close the fuel valve and let the engine to  
elaborate gasoline from carburetor. Wait until engine  
stops itself.**

**BEFORE LONG-TERM GENERATOR IDLE TIME – PERFORM THE FOLLOWING ACTIONS:**

- Generator and engine external parts (especially the cooling radiators) are to be thoroughly cleaned.
- Carburetor float chamber screw has to be removed and the chamber – drained.
- Remove the spark plug.
- Oil drain screw is to be removed and the oil – drained.
- Pour one teaspoon of motor oil to the cylinder (5-10 ml). After that – pull the starter cord for a few times, to let the oil equally distribute on the cylinder walls.
- Install the spark plug.
- Pull the starter handle until you feel the resistance. to let the piston relocate to the upper pressure tact point.
- Smoothly release the starter handle.
- Remove the battery terminals. Grease the battery terminals and connecting terminals with grease to protect against oxidation.

**GENERATOR TRANSPORTATION****19****IMPORTANT!**

**We recommend filling the fuel tank only 70% to avoid fuel spillage during generator operation and transportation.**

For easy generator transportation use packaging, which generator was sold in. Secure the box with the generator so that it does not tip over during transportation. Before moving the generator drain the fuel and disconnect the terminals of the battery.

To move the generator from one place to another lift it by holding the frame. Be careful - the generators are heavy (40 to 90 kg). At least two men are needed to move the generator. Be careful, do not expose your feet under the frame of the generator.

**BATTERY AND GENERATOR DISPOSAL****20**

To prevent environment damage generator and battery should be separated from ordinary waste. Please recycle them in the safest way, passing it to special place for disposal.

Typical failures	Possible reason	Solution
<b>Engine does not starting</b>	Engine starting switch set to OFF position	Set the engine starting switch to ON
	Fuel valve set to off position	Turn the valve to ON position
	Air flap is opened	Shut the air flap
	No fuel	Add fuel
	Low-quality or dirty fuel is in engine	Change the fuel
	Sparkling plug smoked or corrupted distance between contacts is not nominal	Clean or replace the plug; Set proper distance between contacts
<b>Low engine power / heavy starting</b>	Dirt in fuel tank	Clean the fuel tank
	Dirt in the air filter	Clean the air filter
	Water in a fuel tank/ carburetor; carburetor is jammed	Empty the fuel tank, carburetor
	Distance between contacts of a sparkling plug is not nominal	Set proper distance between contacts
<b>Engine overheated</b>	Cooling fins are dirty	Clean the cooling fins
	Air filter is dirty	Clean the air filter
<b>No voltage while working engine</b>	Circuit breaker is active	Turn on the circuit breaker
	Connected cables are corrupted	Check the cables; if using extension cord, change it
	Plugged device failure	Try to connect other devices
<b>Connected devices are not working while generator is running</b>	Generator is overloaded	Unplug some devices to reduce load
	Short circuit occurred in one of the devices connected	Unplug that device to restore the stability of a system
	Air filter is dirty	Clean the air filter
	Repetitions of an engine are lower than nominal	Contact the service center

Device	Average power usage, W
Iron	500-1100
Air hair dryer	450-1200
Coffee machine	800-1500
Electric cooking stove	800-1800
Toaster	600-1500
Air heater	1000-2000
Vacuum cleaner	400-1000
Radio	50-250
BBQ Grill electric device	1200-2300
Oven	1000-2000
Refrigerator	100-150
TV set	100-400
Hammer drill	600-1400
Drill	400-800
Freezer	100-400
Grinding machine	300-1100
Circular saw	750-1600
Angle grinder	650-2200
Electro jigsaw	250-700
Electro planer	400-1000
Compressor	750-3000
Water pump	750-3900
Electric sawing machine	1800-4000
Electric lawn	750-3000
Electric powered engines	550-5000
Electric fan	750-1700
High pressure machine	2000-4000
Air conditioner	1000-5000

The international manufacturer warranty is 1 year or 1000 hours (whichever comes first). The warranty period starts from the date of purchase. In cases when warranty period is longer than 1 year according to local legislation please contact your local dealer. The Seller which sells the product is responsible for granting the warranty. Please contact the Seller for warranty. Within the warranty period, if the product fails because of defects in the production process, it will be exchanged on the same product or repaired.

The warranty card should be kept throughout the warranty period. In case of warranty card loss, a second one will not be provided. The customer must provide the warranty card and buyer's check during request for repair or exchange. Otherwise, the warranty service will not be provided. The warranty card, attached to the product during sale, should be correctly and fully completed by the retailer and customer, signed and stamped. In other cases, warranty is not considered as valid.

Provide clean product to the service center. Parts, that must be replaced, are the property of the service center.

**WARRANTY DOES NOT COVER:**

- If the user has failed to comply with the instructions in this manual.
- If the product features damaged or missing identification stickers or labels, serial numbers, etc.
- If product malfunction was due to improper transportation, storage and maintenance.
- In case of mechanical damages (cracks, chips, impact and fall marks, deformation of housing, power cord, plug or any other components), including those resulting from the freezing of water (ice formation), provided there are foreign objects inside the unit.
- If the product has been improperly installed and connected to the mains supply or misused.
- If the claimed malfunction cannot be diagnosed or demonstrated.
- If proper operation of the product can be restored following cleaning from dust and dirt, appropriate adjustment, maintenance, oil change, etc.
- If the product is used for business related purposes.
- If faults are detected, which have been caused by product overload. Signs of overload are molten or discolored parts as a result of high temperatures, damaged cylinder or piston surfaces, degraded piston rings or connecting rod bushes.
- The warranty does not cover the failure of the product automatic voltage regulator due to careless handling or mishandling.
- If faults are detected, which have been caused by instability of the user's power grid.
- If there are faults caused by contamination or fouling such as contamination of the fuel, oil or cooling system.
- If electrical cables or plugs show signs of mechanical or thermal damage.
- In the event of foreign liquids and objects, metal chips, etc. inside the product.
- If the malfunction is caused by the use of non-original spare parts and materials, oils, etc.
- If there are two or more faulty units that are not interconnected.
- If the damage was caused by natural factors such as dirt, dust, humidity, high or low temperature, natural disasters.
- In case of simultaneous failure of the rotor and stator.
- For wear parts and accessories (spark plugs, nozzles, pulleys, filter and safety elements, batteries, detachables, belts rubber seals, clutch springs, axles, hand starters, grease, mountings, working surfaces, hoses, chains, and tires).
- To preventive maintenance (cleaning, greasing, washing), installation and adjustment.
- If the product was tampered with, independently repaired or modified.
- In case of malfunctions resulting from normal wear and tear as a result of long-term use (end of life).
- If product operation was not stopped and continued after detecting a malfunction.
- Batteries supplied with equipment are covered by a warranty of three months.
- When using low-grade or inappropriate fuel.



# EC Declaration of Conformity

Nr. 254

The following products have been tested by us with the listed standards and found in compliance with the European Community Machinery Directive 2006/42/EC, Electromagnetic compatibility Directive (EMC) 2014/30/EC, Noise Directive 2000/14/EC.

Manufacturer: DIMAX INTERNATIONAL GmbH  
Address: Flinger Broich 203, 40235 Duesseldorf, Germany  
Product: Inverter generators "Könner & Söhnen"  
Type / Model: KS 2000i S, KS 2000iG S, KS 3000i S, KS 3000iG S,  
KS 4000iE S, KS 4000iEG S, KS 6000iE S, KS 9500iE S ATSR

The statement is based on a single evaluation of above mentioned products. It does not imply an assessment of the whole production and does not permit the use of the test lab. logo. The manufacturer should ensure that all product in series production are in conformity with the product sample detailed in this report. The applicant should hold the whole technical report at disposal of the competent all the right.

Applied EC Directives: 2006/42/EC Machinery Directive  
2014/30/EU Electromagnetic compatibility Directive (EMC)  
2000/14/EC Noise Directive( amended in 2005/88/EC)  
(EU) 2016/1628 Non-Road mobile machinery emissions  
(EU)2017/654 amended by (EU) 2018/989  
(EU)2017/655 amended by (EU) 2018/987  
(EU)2017/656 amended by (EU) 2018/988

Applied Standards: EN ISO 8528-13:2016  
EN 55012:2007+A1  
EN 61000-6-1:2007  
00/14/EC  
55/88/EC  
EN ISO 3744:1995

Gasoline engines KS 100i, KS 160i, KS 240i, KS 260i correspond to European Emission Standard Stage V. This is confirmed by EU TYPE - APPROVAL CERTIFICATE issued by department of transport of Luxembourg. Technical service responsible for carrying out the test - TÜV Rheinland Luxembourg GmbH. Date of issue 30/10/2018

## 2000/14/EC\_2005/88/EC Annex VI

For models KS 2000i S, KS 2000iG S Noise measured Lwa = 90 dB (A)

For models KS 3000i S, KS 3000iG S Noise measured Lwa = 95 dB (A)

For model KS 4000iE S, KS 4000iEG S, KS 6000iE S, KS 9500iE S ATSR Noise measured Lwa = 97 dB (A)

Notification body , responsible for 2006/42/EC Machinery Directive, 2014/30/EU Electromagnetic compatibility Directive (EMC) and 2000/14/EC Noise Directive certificate issuing is TÜV Rheinland LGA Products GmbH , Tillystraße 2, 90431 Nürnberg, Country: Germany, Phone: +49 (0) 9116555225, Fax: +49 (0) 9116555226, Email: service@de.tuv.com, Website: www.tuv.com/safety  
Notified Body number: 0197



22

**Issued Date:**  
**Place of issue:**  
**Director:**

2025-11-11  
Duesseldorf  
Fomin P.

*P. Fomin*

**DIMAX**

International GmbH  
Flinger Broich 203 40235 Düsseldorf  
USt-ID DE296177274  
koenner-soehnen.com

We DIMAX INTERNATIONAL GmbH hereby declare that specified above conforms covering European Parliament and Council Directives, 2006/42/EC of 17 May 2006 Machinery Directive, Electromagnetic compatibility Directive (EMC) 2014/30/EC of 26 February 2014, Noise Directive 2000/14/EC of 8 May 2000. The CE mark above can be used under the responsibility of manufacturer. After completion of an EC declaration of Conformity and compliance with all relevant EC directives.

## CONTACTS

### Deutschland:

Hergestellt unter Lizenz und Kontrolle der  
DIMAX International GmbH.

Importeur und Vertreter in Deutschland:  
DIMAX International GmbH, Flinger Broich 203,  
40235 Düsseldorf, Deutschland. Produziert in VRC.  
[amazon@dimaxgroup.com](mailto:amazon@dimaxgroup.com)  
[www.konner-sohnen.com](http://www.konner-sohnen.com)

---

### European Union:

Manufactured under license and control of DIMAX  
International GmbH, Flinger Broich 203, 40235  
Düsseldorf, Germany.

Importer and representative in Netherlands DIMAX  
International Poland Ltd, Południowa 8 st,  
05-830 Stara Wieś, Poland. Assembled in PRC.  
[amazon@dimaxgroup.com](mailto:amazon@dimaxgroup.com)  
[www.konner-sohnen.com](http://www.konner-sohnen.com)

---

### The United Kingdom:

Innovation Trade Ltd., 63/66 Hatton Garden Fifth Floor,  
Suite 23, London, EC1N 8LE, [info.uk@dimaxgroup.de](mailto:info.uk@dimaxgroup.de)

#### Technical support

[support.uk@dimaxgroup.de](mailto:support.uk@dimaxgroup.de)  
[www.konner-sohnen.uk](http://www.konner-sohnen.uk)

---

### France:

Fabriqué sous licence et contrôle de DIMAX  
International GmbH, Flinger Broich 203, 40235  
Düsseldorf, Allemagne.

Importateur et représentant en France et en Belgique  
DIMAX International Poland Ltd, Południowa 8 st,  
05-830 Stara Wieś, Pologne. Assemblé en RPC.

[amazon@dimaxgroup.com](mailto:amazon@dimaxgroup.com)  
[www.konner-sohnen.fr](http://www.konner-sohnen.fr)

---

### España:

Fabricado bajo licencia y control de DIMAX  
International GmbH, Flinger Broich 203, 40235  
Düsseldorf, Alemania.

Importador y representante en España de DIMAX  
International Poland Ltd, Południowa 8 st,  
05-830 Stara Wieś, Polonia.  
Ensamblado en la República Popular China.  
[amazon@dimaxgroup.com](mailto:amazon@dimaxgroup.com)  
[www.konner-sohnen.es](http://www.konner-sohnen.es)

---

### Polska:

Wyprodukowano na licencji i pod kontrolą DIMAX  
International GmbH, Flinger Broich 203,  
40235 Düsseldorf, Niemcy.

Importer i przedstawiciel w Polsce:  
DIMAX International Poland Sp.z o.o. ul. Południowa 8,  
05-830 Stara Wieś, Polska. Zmontowany w CRL.  
[amazon@dimaxgroup.com](mailto:amazon@dimaxgroup.com)  
[www.konner-sohnen.pl](http://www.konner-sohnen.pl)

---

### Україна:

Виготовлено за ліцензією та під контролем  
DIMAX International GmbH, Flinger Broich 203,  
40235 Дюссельдорф, Німеччина.

Імпортер та представник в Україні:  
ТОВ "ТЕХНО ТРЕЙД КС" вул. Електротехнічна 47,  
02225, м. Київ, Україна. Змонтовано в КНР  
[www.konner-sohnen.com.ua](http://www.konner-sohnen.com.ua)