



Gasoline generator

KSB 1200C

KSB 2200A

KSB 2200C

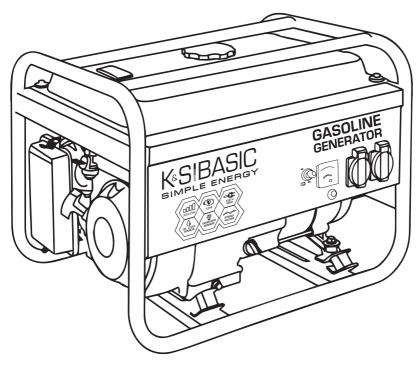
KSB 2800A

KSB 2800C

KSB 3500C

KSB 6500C

KSB 6500CE



INTRODUCTION



Thank you for your purchase of **K&S Basic®** products. This manual contains a brief description of safety, use and debugging. More information can be found on the official manufacturer's website in the support section:

konner-sohnen.com/manuals

You can also go to the support section and download the full version of the manual by scanning the QR code, or on the website of the official importer of K&S Basic® products: www.konner-sohnen.com



We care about the environment, therefore, we consider it expedient to savepaper and leave in print a short description of the most important sections.



Be sure to read the full version of the manual before getting started!



Manufacturer reserves the right to make alterations into the generators, which may not be reflected in this manual. Pictures and photos of the product may vary from its actual appearance. At the end of this manual, You may find contact information which you are free to use in case of any issues occurrence.

All data, specified in this operation manual is the most up to date for the moment of its publishing. The current list of service centers you can find at the website of official importer: **www.konner-sohnen.com**



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 symbols and description of inscriptions can be found in the full electronic version.

SAFETY INFORMATION

Do not use the generator in rooms with poor ventilation or in conditions of excessive humidity. Do not place the generator in water or on moist soil. Do not expose the generator to rain, snow, as well as to direct sunlight for a long time. 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. Keep unauthorized persons, children, and animals away from work area. Wear safety shoes and gloves.



When installing the generator, pay attention to the capacity of electrical appliances and their starting current, which may be several times higher than the rated current. The generator cannot run in overload conditions when starting consumers with an inrush current higher than the generator's maximum output.



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



As exhaust gases contain poisonous carbon dioxide (CO₃) 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.



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. All connecting the generator to the network must be made by certified electrician in accordance with all electrical rules and regulations. Connect the generator to the protective ground before operation. Wires with damaged or spoiled insulation should be replaced. You should also replace worn, damaged or rusty contacts.





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.



ATTENTION – DANGER! /



Be careful. Do not operate the generator, if you are tired, under the influence of drugs or alcohol. Inattention may cause a serious injury.



IMPORTANT!



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

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. **Only unleaded gasoline is recommended for the generator.** It is forbidden to use kerosene or other fuel types. Before running the generator, it is necessary to define the place and means of its emergency stop. Do not refuel the running generator.



ATTENTION – DANGER!



Fuel contaminates the land and groundwater. Do not allow the leaking gasoline from the tank!

Model	KSB 1200C	KSB 2200A	KSB 2200C	KSB 2800A			
Voltage, V	230						
Maximum power, kW	1,0	2,2	2,2	2,8			
Rated power, kW	0,9	2,0	2,0	2,5			
Frequency, Hz	50						
Current max, A	4,35	9,57	9,57	12,17			
Outlets	1*16A	2*16A	2*16A	2*16A			
Fuel tank capacity, L	6	12	12	12			
Voltmeter	+						
Noise level Lpa(7m)/Lwa, dB	70/95	70/95	70/95	71/96			
Output 12 V, A	12/8,3						
Engine model	KSB 90	KSB 220	KSB 220	KSB 220			
Engine type	Gasoline powered four-stroke						
Power output (hp)	2,9	7	7	7			
Crankcase capacity, cm ³	0,37	0,6	0,6	0,6			
Engine capacity, cm ³	80	210	210	210			
Voltage regulator	AVR						
Engine start	manual						
Power factor, cosφ	1						
Dimensions (LxWxH), mm	470x365x380	605x440x435	605x440x435	605x440x435			
Net weight, kg	26	33,2	33,2	36,2			
Protection class	IP23M						
Max. altitude above sea level, m	1000						
Relative humidity	<95%						
Rated voltage tolerance – max. 5%							

To ensure the reliability of the generator and increase its lifespan, the peak capacities may be slightly limited by circuit breakers.

The optimum 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 such ambient conditions, the generator can guarantee maximum performance in terms of the stated specifications. In case of deviations from the above ambient values, the performance of the generator can be different.

Please note that in order to preserve the lifespan of the generator, continuous loads should not exceed 80% of the rated power.



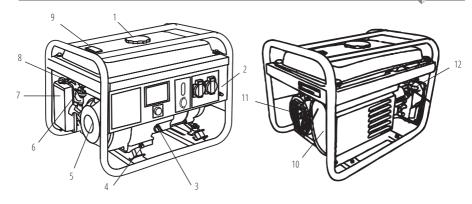
Model	KSB 2800C	KSB 3500C	KSB 6500C	KSB 6500CE			
Voltage, V	230						
Maximum power, kW	2,8	3,0	5,5	5,5			
Rated power, kW	2,5	2,8	5,0	5,0			
Frequency, Hz	50						
Current max, A	12,17	13,04	23,91	23,91			
Outlets	2*16A	2*16A	1*16A, 1*32A	1*16A, 1*32A			
Fuel tank capacity, L	12	15	25	25			
Voltmeter / LED display	Voltmeter	LED display (voltage frequency working hours)	Voltmeter	LED display (voltage frequency working hours)			
Noise level Lpa(7m)/Lwa, dB	71/96	71/96	72/97	72/97			
Output 12 V, A	12/8,3						
Engine model	KSB 220	KSB 230	KSB 440	KSB 440			
Engine type	Gasoline powered four-stroke						
Power output (hp)	7	7	15	15			
Crankcase capacity, cm³	0,6	0,6	1,1	1,1			
Engine capacity, cm³	210	208	420	420			
Voltage regulator	AVR						
Engine start	manual	manual	manual	manual / electric			
Power factor, cosφ	1						
Dimensions (LxWxH), mm	605x440x435	605x445x450	690x525x550	690x525x550			
Net weight, kg	36,6	39,2	66,6	70			
Protection class	IP23M						
Max. altitude above sea level, m	1000						
Relative humidity	<95%						
Rated voltage tolerance – max. 5%							

To ensure the reliability of the generator and increase its lifespan, the peak capacities may be slightly limited by circuit breakers.

The optimum 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 such ambient conditions, the generator can guarantee maximum performance in terms of the stated specifications. In case of deviations from the above ambient values, the performance of the generator can be different.

Please note that in order to preserve the lifespan of the generator, continuous loads should not exceed 80% of the rated power.

GENERAL VIEW AND COMPOSITION OF THE GASOLINE POWERED GENERATOR



- 1. Fuel cap
- 2. Control panel
- 3. Oil dipstick
- 4. Oil drain cap

5. Hand starter

8. Air choke lever

- 6. Fuel valve
- 7. Air filter

- 9. Fuel level indicator
- 10. Damper
- 11. Alternator
- 12. Spark plug

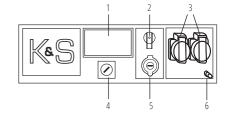


IMPORTANT



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

- 1. Voltmeter or LED display (for models KSB 3500C and KSB 6500CE)
- 2. Safety switch
- 3. Outlets
- 4. Engine start button (ON/OFF) or key for electric start (for model KSB 6500CE)
- 5. 12V/8A DC outlet
- 6. Ground connector



COMMISSIONING

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- 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.

To commission the generator, follow the maintenance recommendations for the first month or twenty hours of operation (whichever comes first) contained in the "Maintenance" section.

For commissioning models with elektrostart please charge the battery. Please use additional battery charger (not included) to charge the battery or let the generator work at least one hour at 50% load at the first start.

CHECK THE FUEL LEVEL

- 1. Wear protective gloves to avoid getting gasoline on your skin.
- 2. Unscrew the fuel cap and check the fuel level in the tank.
- 3. Fill the fuel tank to the fuel filter level.
- 4. Tighten the fuel cap securely.





Only unleaded gasoline is recommended for the generator. The use of leaded gasoline will cause severe damage to internal engine

Recommended fuel: Unleaded gasoline. **Fuel tank volume**: see specifications table.



- 1. Wear protective gloves to avoid getting oil on your skin.
- 2. Unscrew the oil dipstick and wipe it out with a clean cloth.
- 3. Insert the dipstick without screwing it in.
- 4. Check the oil level by a mark on the oil dipstick.
- 5. Add oil if its level is below the mark on the oil dipstick.
- 6. Tighten the oil dipstick.

Recommended engine oil: SAE 10W-30, SAE 10W-40.

Recommended engine oil grade: API Service SE type or higher.

Motor oil quantity: see specifications table.



IMPORTANT!



If the generator has not been used for a long time, recharge the battery with a charger (not included).

ENGINE START

Before starting the engine make sure that the total power of tools or power consumers corresponds to the rated power of the generator. Do not exceed the rated power of the generator. **Do not connect any devices** before the engine start! In the power supply mode, the generator should operate no longer than 30 minutes in the range from rated to maximum power.

Before connecting any devices to the generator, make sure that they are in good condition. If the device that was connected suddenly stopped or failed, immediately disconnect the power using a safety switch, disconnect the device and check it out.



ATTENTION – DANGER!



Standby 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 gasoline generators (depending on

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.

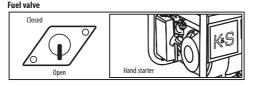


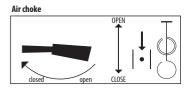
WARNING - DANGER!



Do not connect two or more devices simultaneously. The start-up of many devices requires high power. Devices should be connected in turn according to their power rating. Do not connect any power consumers within the first 3 minutes after the generator start.







- 1. Move the fuel valve to the "OPEN" position.
- 2. Set the air choke to the closed position.
- 3. For elektrostart generators turn the key in the «START» position and hold in that position for several seconds before starting the engine.
- 4. To start the generator manually, grasp the starter handle and slowly pull it until resistance is felt. Pull the starter cord to the full length with a sharp movement.
- 5. Set the air choke to the "OPEN" position.

STOPPING THE ENGINE



WARNING - DANGER!



DISCONNECT ALL THE DEVICES BEFORE STOPPING THE GENERATOR! Do not stop the generator, if there are connected devices.

This may lead generator down!

- 1. Disconnect all power consumers from the generator, set the safety switch to the OFF position.
- 2. Allow the generator to operate at idle for 3 minutes so that the alternator cools down.
- 3. In case of manual start, set the engine switch to OFF.
- 4. In case of electric start, set the key to OFF.
- 5. Move the fuel valve to the "CLOSE" position.

MAINTENANCE

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Works, specified in "Technical maintenance" section, are to be regularily performed. If the the generator user has no possibility to perform regular maintenance independently, it is necessary to address the official service center to registrate an order for such works performance.

You can find a list of service center addresses in your warranty card.



MPORTANTI



In case of any damages, occurred due to non-performance of regular maintenance works, the manufacturer bears no responsibility for such damages.

SUCH DAMAGES ARE ALSO:

- Damages occurred as a result of using non original spare parts.
- Corrosion damages and other results of improper equipment storage.
- Damages occures as a result of maintanance performance by inexperienced and unauthorized specialists.

IMPORTANT!



MANUAL COMPLIANCE

Technical maintanance, operation and K&S Basic™ generator storage are to be performed according to this manual recommendations. Manufacturer bears no responsibility for damages and losses, caused by incompliance to safety requirements and technical maintanance rules.

FIRST OF ALL THIS APPLIES TO:

- Use of lubricants, gasoline and motor oils, forbidden by the manufacturer.
- Device technical alterations.
- Equipment operations against its intended use.
- Indirect damages, caused by operating faulty equipment.

TECHNICAL MAINTENANCE WORKS

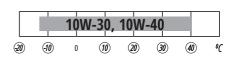
Node	Service type	Before starting	First month or after 20 working hours	Each 3 months or after 50 working hrs	Each 6 months or after 100 working hrs	Each year or after 300 working hrs
Motor oil	Checking level	\checkmark				
	Changing		3	3		
Air filter	Checking/ Cleaning	\checkmark	③	Ø		
	Changing					S
Sparking plug	Cleaning		②	Ø		
	Changing				⊘	
Fuel tank	Checking level	Ø				
	Cleaning					⊘
Fuel filter	Cleaning				⋖	

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

RECOMMENDED OILS

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Motor oil has a serious impact on performance characteristics and is a major attribute, defining its service life. Use oils designed for four-stroke cycle vehicle engines, since such oils contain cleaning additives, which comply or even exceed SE standards according to API classification (or equivalent).



In general, the engine is recommended to run with motor oils of SAE10W-30, SAE10W-40 viscosity level. 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. Oil viscosity according to SAE standards or service category, are specified on the API capacity sticker.

REPLACING OR ADDING MOTOR OIL:

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 maintanance schedule.





ATTENTION - DANGER!

!!

Avoid draining the engine oil immediately after stopping the engine. The oil is hot and should be handled with care to avoid burns.

TO DRAIN OIL, PROCEED AS FOLLOWS:

- 1. Place the generator on a flat surface and warm up the engine for several minutes. Stop the engine and turn the fuel tank cap to the "OFF" position.
- 2. Loosen the screws and remove the motor cover.
- 3. Place an oil drain tray under the engine.
- 4. Unscrew the oil drain cap with a hexagon key.
- 5. Wait for the oil to drain. Tilt the generator for a better result.
- 6. Add motor oil to a high level.
- 7. Wipe the oil drain cap with a clean, dry cloth and wipe off any oil spills, if any. Make sure that no dirt, dust, etc. are caught in the crankcase.
- 8. Replace the oil filler cap.

9. Replace the vent cover and tighten the screws.



Do not tilt the generator while adding oil to the engine. This can lead to overfilling and damage to the engine.

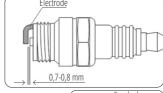
SPARK PLUG TECHNICAL MAINTENANCE

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Spark plug is an importaint element providing the correct engine operation. It has to be intact, without soot deposits and to have a correct gap.

SPARK PLUG INSPECTION:

- 1. Remove the cap from the spark plug.
- 2. Remove the spark plug by means of a corresponding spanner.
- 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. Place the spark plug in its place by means of a spark plug spanner.
- 6. Replace the spark plug cap.





AIR FILTER TECHNICAL MAINTENANCE



It is necessary to check the air filter from time to time and clean any contaminations. Regular air filter maintenance is necessary to maintain sufficient carburetor air inflow.

CLEANING THE FILTER:

- 1. Open the air filter cover.
- 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 water.
- 5. Dry the sponge filter.
- 6. Dry filtering element is to be moistened by machine oil and excess oil is to be squeezed out.

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Potential faults and troubleshooting methods, as well as average device capacities can be found in thefull version of the manual.

GENERATOR STORAGE

The generator must be stored in a dry, well-ventilated area that is free from dust. Keep away from children and



IMPORTANT!



Generator should always remain ready for operation. Therefore in case of device malfunctions, they are to be repaired before dismounting the generator for storage.

GENERATOR LONG-TERM STORAGE

If the generator will not be used for a long time, it is recommended to:

- Drain the fuel into the tank.
- Drain the motor oil.

- Pull the manual starter until a slight resistance is felt so that the inlet and drain valves get closed.
- Clean the generator from dirt and dust.

When starting the generator after long-term storage, proceed as above in the reverse order.

GENERATOR TRANSPORTATION

For easy generator transportation use packaging, which generator was sold in. Secure the box with the generator to avoid tipping it on the side of the carriage. Before moving the generator drain the fuel and disconnect the terminals of the battery (if this model has a battery).

To move the generator from one place to another lift it by holding the frame (if generator has construction with open frame). If generator has an silent cover, use transportation handles. Be careful, do not expose your feet under the generator.

GENERATOR AND BATTERY UTILISATION

To prevent damage to the environment separate generator and battery from ordinary waste and recycle them in the safest way passing a special place for disposal.

WARRANTY SERVICE TERMS

The international manufacturer warranty is 1 year. 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.

All faults caused by the manufacturer during the warranty period will be eliminated free of charge. Warranty repair is carried out only if you have a fully completed warranty card, the Buyer's signature of acceptance of the warranty terms, as well as a document supporting the purchase (cash receipt, sales slip or invoice). In the absence thereof, as well as in the event of errors or corrections not authenticated by the seller's seal or illegible inscriptions in the warranty card or tear-off coupon, no warranty repair is carried out, no objections to quality are accepted and the warranty card is withdrawn by the service center as invalid. The device is accepted for repair clean and full.



EC Declaration of Conformity Nr. 141

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

Gasoline generators "K&S BASIC" Product:

KSB 1200C, KSB 2200A, KSB 2200C, KSB 2800A, Type / Model:

KSB 2800C, KSB 3500C, KSB 6500C, KSB 6500CE.

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/EC Electromagnetic compatibility Directive (EMC)

2000/14/EC Noise Directive

(EU) 2016/1628 Non-Road mobile machinery emissions

Applied Standards: EN ISO 8528-13:2016

EN 60204-1:2006/A1:2009

EN 55012:2007+A1 EN 61000-6-1:2007

EN ISO 3744:2010; ISO 8528-10:1998

2000/14/EC_2005/88/EC Annex VI:
For Model KSB 1200C, KSB 2200A, KSB 2200C Noise measured Lwa= 93 dB (A), guaranteed Lwa= 95 dB (A). For Model KSB 2800A, KSB 2800C, KSB 3500C Noise measured Lwa= 94 dB (A), guaranteed Lwa= 96 dB (A). For Model KSB 6500C, KSB 6500CE Noise measured Lwa= 95 dB (A), guaranteed Lwa= 97 dB (A).

Technical service responsible for carrying out the test is TÜV SÜD Industrie Service GmbH, Westendstrasse 199, 80686 Munich, Germany. Notified body number: 0036

Certificate of compliance is issued to the Directive 2014/30/EU relating to electromagnetic compatibility and to the Directive 2006/42/EU relating to machinery. Technical service responsible for carrying out the test is TÜV SÜD Product Service GmbH, Ridlerstraße 65, 80339 Munich, Germany. Notified body number: 0123

Gasoline engine KSB 220, KSB 440 corresponds to European Emission Standard Euro 5 (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 Luxemburg GmbH. Date of issue 09/10/2018



Issued Date: Place of issue: **General Director:** 2022-09-10 Duesseldorf Fomin P.

DIMAX International GmbH Steuer-Nr.: 103 5722 2493

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

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