



KERNLOCHBOHRER[®]
PROFESSIONAL POWER TOOLS



Operating instructions

Diamond core drill

DKS-162/DC-P DKS-162/DC-H

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Version 0 1. Output 05/2023

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Introduction and description

The core drilling equipment of the DKS-DC series is intended for professional use and may only be operated by instructed persons. Strictly adhere to the instructions in the operating manual to avoid electric shock or fire.

Our company declines all responsibility in the event of violations of the operating instructions that may result in injury or machine damage. In addition, all currently applicable regulations of the Accident Prevention Regulations (UVV) and the Employer's Liability Insurance Association (BG) must be observed.

In conjunction with the appropriate drill bits, the machine is intended for drilling concrete, stone and masonry in wet and dry cutting. The machine has a soft-impact function that makes drilling easier. However, care must be taken to select the appropriate drill bit.

The machine may only be serviced by persons who have the appropriate qualification and certification.

About this guide

These operating instructions are for the model

DKS-162/DC-H

DKS-162/DC-P

Check the machine model against the type plate.



Thanks to the buyer

Thank you for purchasing a core drill of the DKS-DC series from Kernlochbohrer GmbH. Please read the operating instructions carefully and observe the safety instructions. By operating it correctly, you will fully appreciate the outstanding performance of our products. Keep this manual in a safe place for future reference.

If you have any questions about the operation of the core drill, please contact Kernlochbohrer GmbH directly. We are available to answer your questions at any time.

Note:

Kernlochbohrer GmbH reserves the right to change the design and appearance of the products and their operating instructions. Future changes to the operating instructions will be made without prior notice.

Explanation of symbols



Warning of general danger. Failure to observe these safety precautions and instructions may result in electric shock, fire and/or serious injury.

Safety regulations

- ❖ Read all precautions before commissioning and keep the operating instructions. In addition, all currently applicable regulations of the Accident Prevention Regulations (UVV) and the Employer's Liability Insurance Association (BG) must be observed.
- ❖ Please follow the operating instructions carefully, as failure to observe these safety precautions and instructions may cause electric shock, fire and/or serious injury.

1. Keep your work area clean and well lit. Disorder or unlit work areas can lead to accidents.
2. Do not work with the power tool near flammable liquids, gases or dust. Power tools produce sparks that can ignite dust or vapours, causing explosions.
3. Keep children and other people away while using the power tool. If you are distracted, you may lose control of the tool.
4. Be attentive, work with concentration and pay attention to what you are doing. Do not use a power tool when you are tired or under the influence of drugs, alcohol or medicines. A moment of inattention can lead to serious injury.
5. Wear suitable protective equipment and always safety glasses. Wearing suitable protective equipment such as a dust mask, non-slip safety shoes, hard hat or hearing protection reduces the risk of injury.



6. Avoid unintentional starting of the machine. Make sure that the power tool is switched off before connecting it to the power supply. If you have your finger on the switch when carrying the power tool or connect the machine to the power supply when it is switched on, this can lead to accidents.
7. Remove adjusting tools or spanners before switching on the power tool. A tool or spanner that is on a rotary device can cause injury.
8. Avoid unusual postures. Make sure you stand securely and keep your balance at all times. Do not work on a ladder. This will help you control the power tool in unexpected situations.

9. Wear appropriate clothing. Do not wear loose clothing or jewellery. Keep hair, clothing and gloves away from moving parts. Loose clothing, jewellery or long hair can be caught by moving parts.
10. Do not overload the appliance. Use the appropriate power tool for your work. With the appropriate power tool, you will work better and more gently in the specified power range.
11. Do not use a power tool whose switch is damaged. A power tool that cannot be switched on and off is dangerous and must be repaired.
12. Unplug the appliance from the mains before making any adjustments, replacing accessories or putting the appliance aside. This safety measure prevents the power tool from starting unintentionally.
13. Keep unused power tools out of reach of children. Do not allow persons to use the tool who are not familiar with it or have not read these instructions. Power tools are dangerous when used by inexperienced persons.
14. Beachten Sie, dass die Spannung nicht mehr als +/-5% der Nennspannung betragen darf. Höhere Spannungen können zu irreparablen Schäden führen. Beachten Sie, dass beim Betrieb der Maschine über einen Generator keine höheren Spannungsspitzen erzeugt werden.
15. The plug of the power tool must match the socket. Do not change the plug under any circumstances. Do not use adapter plugs with earthed forces. Unmodified plugs and matching sockets reduce the risk of electric shock.
16. Avoid body contact with earthed surfaces or earthed components such as pipes, radiators, areas and refrigerators.
17. Do not expose power tools to rain or wet conditions. Water entering a power tool increases the risk of electric shock.

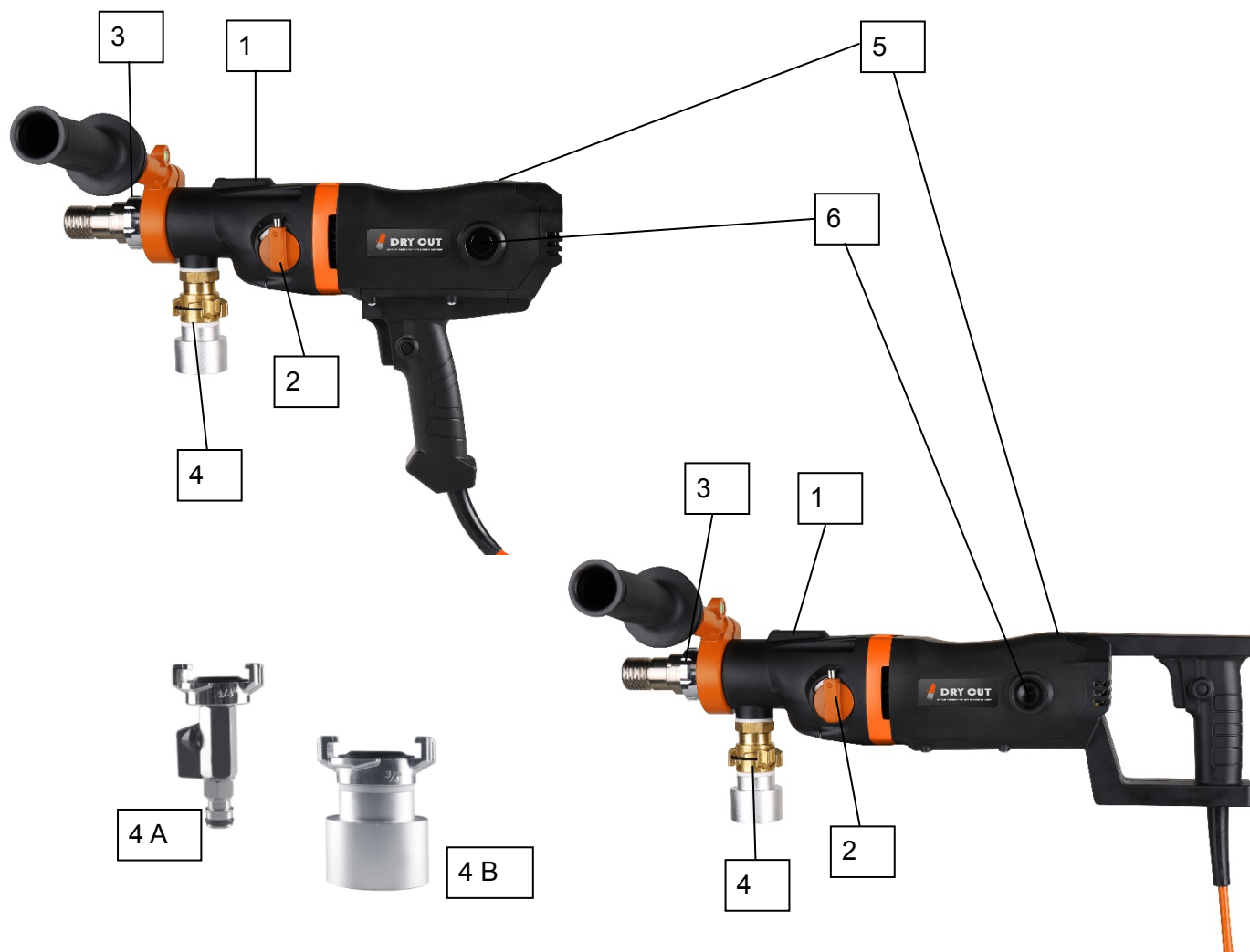
18. Never use the cord to carry or pull the power tool or to unplug it from the wall socket. Keep it away from heat, oil, sharp edges or moving parts. Damaged, crushed or twisted cables increase the risk of electric shock.
19. When using a power tool outdoors, only use an extension cord that is suitable for outdoor use. Using a cord that is suitable for outdoor use reduces the risk of electric shock. When using with an extension cord, also make sure that the extension cord has the same cross-section as the cord on the machine.
20. The use of products such as cutters, grinders, drills that work sand or other materials can generate dust and fumes that may contain hazardous chemicals. Check the type of material you are going to work on and use a suitable respirator.
21. Non-approved spare parts and any modification are prohibited on our products.
22. If the operation of a power tool in a humid environment is unavoidable, use a ground fault circuit interrupter. The use of a ground fault circuit interrupter reduces the risk of electric shock.
23. If a hoover and extractor are required, ensure that they are connected and used correctly. The use of a hoover can reduce dust-related hazards.

Technical data

Model	DKS-162/DC-H	DKS-162-/DC-P
Art No.	6199	6198
Power	2200W	2200W
Voltage	230V	230V
Current	10A	10A
Weight	6,5kg	6,5kg
Frequency	50-60HZ	50-60HZ
Max. drilling diameter without stand:	162mm (1st Gear) 76mm (1st Gear)	162mm (1st Gear) 76mm (2st Gear)
Max. drilling diameter with stand:	202mm (1st Gear) 102mm (2st Gear)	202mm (1st Gear) 102mm (2st Gear)
Speed	640/1420 1/min	640/1420 1/min
Impact frequency	15360 BPM / 34080 BPM	15360 BPM / 34080 BPM
Spindle thread	1-1/4" UNC & G1/2"	1-1/4" UNC & G1/2"
Compatible stands	KBS-252/M-PRO	KBS-252/M-PRO
Packing dimension	635x460x215mm	635x460x215mm

Product description

DKS-162/DC-H and DKS-162/DC-P



1. Dragonfly
2. Switch for gears 1 / 2 with locking device
3. Adjustment ring Soft strike function
4. Quick-change system for (A) water connection / (B) Hoover
5. LED red and yellow light
6. Carbon brushes

Use and care

Only use diamond core bits that are in a sharp and undamaged condition. Properly maintained diamond core bits with sharp cutting segments do not get bent so quickly and are easier to guide.

Use the power tool, accessories and drill bits etc. in accordance with these operating instructions, taking into account the working conditions and the work to be done. Using the power tool for operations other than its intended use could lead to a dangerous situation.

Have your power tool repaired only by qualified personnel and only with original spare parts.



Precautions

1. ALWAYS wear hearing protection! When using drill motors, the loud drilling noise in the working area can cause hearing damage.
2. When drilling, keep a sufficient distance from the core drill and do not touch any rotating parts. Protect the danger zone and keep children and other persons away from it. Falling and splashing parts can cause injuries.
3. This diamond core drill is intended for professional use only and may only be operated by trained personnel. Appropriate use of the core drill includes drilling rock, reinforced concrete and masonry.
4. The drill motor must be checked regularly (approx. every 6 months) by a certified electrician according to VDE.
5. When used for overhead drilling, a functional water collection ring must be used. Make sure that no water can get into the motor.
6. Switch off the core drill immediately if it stops for any reason. After you have determined and eliminated the cause and carried out a visual inspection of the drill and core bit, the core drill can be restarted.

Preparation

Before each start, subject the core drill to a brief visual inspection. Also check that the network voltage corresponds to the voltage indicated on the tool's type plate.

The adapters supplied can be exchanged and, in the case of dry drilling, enable suction with a Hoover or serve as a water supply. For wet drilling, a water collection ring is strongly recommended.

Attachment and assembly of drill motor and stand

Make sure that the core drill is not attached to the drill stand before mounting the drill stand and that the core drill is not connected to the power supply.

The core drills DKS-162/DC-H and DKS-162/DC-P can be operated in manual mode or also with a core drill stand. When mounting, a \varnothing 60mm clamp holder must be used



If you use our vacuum base plate VGP-420/PRO to fix the core drill rig, make sure that the vacuum is at least -0.8bar and also make sure that the seal is not worn or damaged.

Use an impact anchor together with a plate wing nut and a cord threaded rod (optional fastening set) to fasten the drill stand to the substrate. The plate wing nut should be placed in the centre of the drill stand. After fixing, adjust the 4 levelling screws on the drill stand to achieve a good levelling position. You can do this with the help of the spirit level on the drill stand.



Use and change of drill bits

A diamond core bit is a cylinder that is fitted with brazed or laser-welded segments. There are 2 types of diamond core bits, wet drill bits and dry drill bits. These usually have a 1 1/4UNC or an M16 female thread connection. Our DKS-DC series core drills can perform both wet and dry drilling. The drive spindle has a 1 1/4UNC external and a G1/2 internal thread connection.

For easier removal of the drill bit, you can apply waterproof grease to the spindle thread of the machine.

Make sure that you have disconnected the mains plug from the mains before changing drill bits or removing them.

The core drill and the drill bit are relatively heavy. For this reason, always wear protective gloves to prevent injuries to your hand from the sharp tool.

To change the drill bit, use a 32mm spanner on the drill spindle and a 41mm spanner on the drill bit at the same time.

Adapters are available as accessories for drills with different internal threads.

After mounting the drill on the machine, let it run briefly and check the radial run-out of the drill bit.



Cooling of drill and machine

The gearbox of the drill motor has splash lubrication for cooling.

The diamond segments of the wet drill bit are cooled with water.

The electric motor is air-cooled.

Electrical connection

To reduce the risk of electric shock and to protect the operator, the DKS-162/DC-H and DKS-162/DC-P core drill must only be operated via a Portable Residual Current Device, or PRCD personal circuit breaker.

After connecting to the power supply, first press the "RESET" button on the PRCD circuit breaker to energise the circuit to the core drill. In the event of a voltage drop, the PRCD circuit breaker switches off and must be switched on again as soon as the power supply is restored. The fault current at which the PRCD circuit breaker switches off is 10mA.



Never place or put the PRCD circuit breaker in water. Before starting work, check for proper operation by pressing the TEST button on the PRCD circuit breaker. Never operate the core drill directly from the mains power source without a PRCD circuit breaker.

Water supply connection

To connect the water supply, attach the quick coupling to a water hose. Use clean water. Using water that is contaminated will accelerate the process of wearing out the water seal.

The maximum water pressure must not exceed 3 bar.

The water serves as a coolant to prevent the drill from heating up excessively during drilling.

Dust and particles that form during drilling can clog the water supply system. If necessary, this must be checked and cleaned.

Never let water get into the motor. It could cause an electric shock.

There is a small inspection hole on the core drill at the water supply collar. If water leaks through this hole, it indicates that the water seals are worn. Replace them immediately.

Speed selection

The DKS-162/DC-H and the DKS-162/DC-P is equipped with a mechanical 2-speed oil bath gearbox.

Select the speed according to the drill diameter (type plate).

Speed selection or gear change may only be carried out when the core drill is switched off. Turn the gear selector either clockwise or counterclockwise to the desired position until it is engaged. If necessary, turn the drill spindle slightly with a spanner to facilitate the speed change. In this case, disconnect the machine from the mains beforehand.



The maximum diameter and speeds indicated on the nameplate are based on an average concrete hardness. The speed varies depending on the hardness of the material. For reinforced concrete, please select a low gear to reduce the speed.

Drilling

Always switch on the machine without a load.

After switching on, next open the water line valve.

When water flows out of the centre of the drill, you can carefully start drilling.

Should you operate the core drill without a drill stand, start the notch by not approaching the drill diameter with the full cutting face of the drill. Once a V-notch cut is drilled on the drill face, line up the drill at a right angle while increasing the feed pressure.

Increase the feed pressure as soon as the depth of cut reaches approx. 10mm.

Always keep an eye on the condition of the drill motor. If you notice that it starts to smoke slightly or if you notice the smell of an electric motor, relieve the core drill by withdrawing it from the core hole. Then continue drilling slowly and carefully. This will prevent the carbon brushes from burning out due to a prolonged overload of the electric motor.

When you have almost reached the end of the through hole, please reduce the feed pressure at this point until the drill bit exits at the other side.

There is vertical drilling and angle drilling. When drilling at an angle, use the angle adjustment function of the drill stand.

If you have selected too high a speed when drilling or if you are working with too high a feed pressure, this can cause the drill bit to jam.

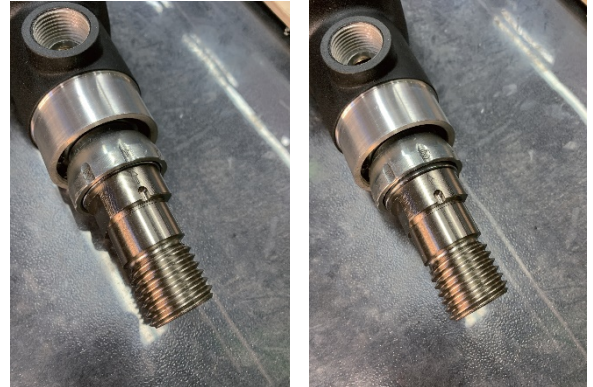
If, during the drilling process, you notice that the feed speed decreases at the same force and the water coming out of the drill hole is clear and has some metal splinters, you have hit rebar. Reduce the pressure on the drill bit to cut through this easily. You can increase the pressure again when you have cut through the reinforcing iron.



If wooden beams, thick asphalt or bitumen are cut, this will increase the current. In this case, reduce the feed to continue drilling.

If you need to drill deeper than the effective length of your drill allows, an optional extension can be used.

Soft strike function

You can use the DKS-162/DC-H and DKS-162/DC-P with soft impact function or in normal drilling mode. To make this selection, you must adjust the ring on the spindle. To select soft impact mode, first press the mode selection ring in the direction of the arrow on the spindle until the spring is compressed.



Then turn the ring to the  symbol for soft impact mode, the  symbol stands for normal drilling mode. The soft impact function is preferred when the machine is used for dry drilling.

Mechanical overload protection

This machine is equipped with a mechanical slip clutch to protect the operator and the machine from excessive torque forces. If the drill suddenly jams in the hole, the safety clutch disengages and the drill spindle stops.

Make sure that the load on the clutch is not more than max. 3-4 seconds. Unload the machine immediately. Otherwise the safety clutch may be destroyed by the high wear. Do not continue drilling if the slipping clutch has been triggered, reduce the feed immediately and wait until the drill bit has reached the desired speed again.



Caution!

A worn clutch must be replaced immediately by a specialist at an authorised workshop. Working with a worn slipping clutch can lead to serious injuries.

Electronic overload protection

There are 2 LED indicators on both our hand-held drill motors and our pedestal-mounted drill motor. Should the core drill be in an overload condition, the red LED will illuminate to indicate to the operator that maximum power has been reached. Immediately reduce the feed rate until the red LED goes out.



If the core drill is in overload condition for a long time, the machine switches off for self-protection and the red LED remains lit. Disconnect the machine from the power supply. Carry out a visual inspection of the machine.

Surge protection

The drill motor can absorb short-term voltage peaks of up to max. 260V. Higher voltages can cause irreparable damage. Please note that if the machine is operated via a generator, they do not exceed the maximum specified value.

If the overvoltage protection trips during operation of the core drill DKS-162/DC-H and DKS-162/DC-P, please check the power supply unit and replace it if necessary.

Overheating - Thermal protection

If the temperature of the drill motor becomes too high, the built-in thermal protection switch in the machine responds. At the same time, the yellow LED lights up and the motor switches off. If this happens, do not restart the motor immediately. Always let the motor cool down first for approx. 2-3 min.

Carbon brush warning system

As soon as the carbon brushes have reached the end of their service life, the core drill stops automatically to protect the motor from further damage.

The carbon brush warning system consists of 2 LED lights with one red and one yellow LED. If both the red and yellow lights are on at the same time, you should check the carbon brushes and replace them if necessary. Remember, always replace them in pairs.

Daily maintenance of the power tool



Caution!

All repair and maintenance work must always be carried out with the mains plug disconnected.

1. Check that all bolts and nuts are well tightened.
2. Check that the water seals are intact.
3. Check if the gearbox is tight or if oil is leaking out.
4. Check that the PRCD circuit breaker is working properly.
5. Always keep all accessories and the machine clean and dry.
6. Pay attention to the carbon brushes. If they have reached the end of their service life and/or both LED lights are on, replace them immediately. To replace them, first remove the cover of the carbon brush holder and pull the carbon brush out of the holder. Then insert a new one and close the cover again. Repeat the process with the other carbon brush on the opposite side of the core drill.
7. Check the condition of the gearbox oil after the gearbox has reached approx. 300 working hours. Should the gearbox oil be heavily contaminated, have the Getriebeöl sofort durch einen autorisierten Kundendienst auswechseln.
8. After finishing the work, remove the drill bit and then clean the entire machine. Do not forget to lubricate the spindle thread. Keep the power tool out of reach of children and in a dry environment.
9. Measure the insulation resistance. Use a 500V ohmmeter to measure the insulation resistance between L1 (phase), N (neutral) and the housing. The value must not be less than 7 MΩ.

Maintenance and inspection plan

Regular inspection according to the maintenance and inspection schedule is urgently required. Shorten the intervals between maintenance if you use the product very frequently.

Maintenance points (regular inspection required)	Each time before use	In the first month or after 25 working hours	In the third month or after 50 working hours	Every year or after 300 working hours
Leakage of the gearbox seals	√	√	√	√
Leakage of the water seals	√	√	√	√
Mains cable Visual inspection	√	√	√	√
PRCD circuit breaker	√	√	√	√
Concentricity of the drilling spindle	√	√	√	√
Abrasion on the drill spindle	-	-	√	√
Mains switch Function test	√	√	√	√
Drilling spindle lubrication	√	√	√	√
Check the water valve for free movement	√	√	√	√
Nuts and bolts	√	√	√	√
Carbon brushes	-	-	-	√
Gear oil	-	-	-	√
General cleaning	-	√	√	√

Troubleshooting

If a defect occurs during operation of the core drill, contact a nearby service station or Kernlochbohrer GmbH immediately. Never disassemble the power tool yourself.

Electrical components such as the rotor stator, circuit board, mains cable, plug or PRCD circuit breaker etc. may only be checked and repaired by a certified electrician in accordance with VDE.

Malfunction	Possible cause	Troubleshooting
Drill motor does not work	<p>Mains power supply interrupted or plug not inserted correctly.</p> <p>PRCD is not reset or loose contact on PRCD.</p> <p>Mains cable or switch damaged.</p> <p>Rotor stator damaged.</p> <p>Loose contact on carbon brush or brushes are worn.</p>	<p>Plug in another electrical appliance and check the function or check the plug connection.</p> <p>Press the RESET button on the PRCD or replace it.</p> <p>Have it checked and, if necessary, replaced by a qualified electrician.</p> <p>Have them checked and, if necessary, replaced by a qualified electrician.</p> <p>Check if the length of the brush is shorter than 6 mm, replace if necessary.</p>
Leakage at the water seals	Worn water seals	Replace water seals

<p>Drill stuck or jammed</p>	<p>The gears are not engaged properly.</p> <p>Slipping clutch worn out.</p> <p>High steel content in concrete or very hard material.</p> <p>Gearbox damaged.</p>	<p>Selector lever is not engaged when turned. Turn it to the desired position until it engages.</p> <p>Have the clutch friction discs replaced.</p> <p>After switching off the machine, adjust the position of the drill bit slightly with a spanner and tap the pipe carefully and gently with a mallet handle until the stuck drill core loosens. Slowly pull out the core bit and restart the drill.</p> <p>Have the gearbox replaced by a specialist.</p>
<p>Drilling speed is much too slow</p>	<p>End of drill life or segments are not in good condition or broken out.</p> <p>Too much water flow causes the segments to cut inefficiently.</p> <p>Drill is blunt.</p> <p>High proportion of steel in the concrete or hard drilling material</p> <p>Drilling angle has shifted.</p>	<p>Check the drill and the segments and replace them if necessary.</p> <p>Turn down the water valve and reduce the water pressure to reduce the water flow.</p> <p>Re-sharpen the segments.</p> <p>Reduce the pressure on the drill to cut through the steel. Increase it again when it has cut through.</p> <p>Re-align the drill angle so that the drill is perpendicular to the cutting surface.</p>
<p>Drilling spindle wobbles</p>	<p>Drilling spindle is worn out</p>	<p>Check whether the spindle is worn and replace it if necessary</p>
<p>Flying sparks at the collector</p>	<p>There is a short circuit or an interruption at the rotor coils.</p> <p>Loss of effectiveness or loose contact on the carbon brush spring.</p> <p>The commutator is worn out.</p>	<p>Have the rotor checked and replaced if necessary.</p> <p>Clean the spring or adjust its pressure or replace the carbon brushes if necessary.</p> <p>Replace the rotor with a new one.</p>

Environmental protection

Raw material recovery instead of waste disposal!

To avoid transport damage, the unit must be delivered in sturdy packaging. Packaging as well as the unit and accessories are made of recyclable materials.

The plastic parts of the unit are labelled according to the material. This enables environmentally friendly, sorted disposal via the collection facilities offered.

For EU countries only

Do not dispose of power tools in household waste! According to the European Directive 2012/19/EU on waste electrical and electronic equipment and its implementation in national law, used power tools must be collected separately and recycled in an environmentally sound manner.

Noise/Vibration

The noise of this power tool is measured according to DIN 45 635, part 21. The sound pressure level at the workplace may exceed 85dB (A); in this case, sound protection measures for the operator are required.

Wear hearing protection!



Hand/arm vibration is typically lower than 2.5m/s². Measured values determined according to EN 61 029.

The indicated vibration level represents the actual applications of the power tool. However, if the power tool is used for other applications, with deviating application tools or insufficient maintenance, the vibration level may deviate. This can significantly increase the vibration load over the entire working period.

For an accurate estimation of the vibration load, the times when the machine is switched off or running but not actually in use should also be taken into account. This can significantly reduce the vibration load over the entire working period.

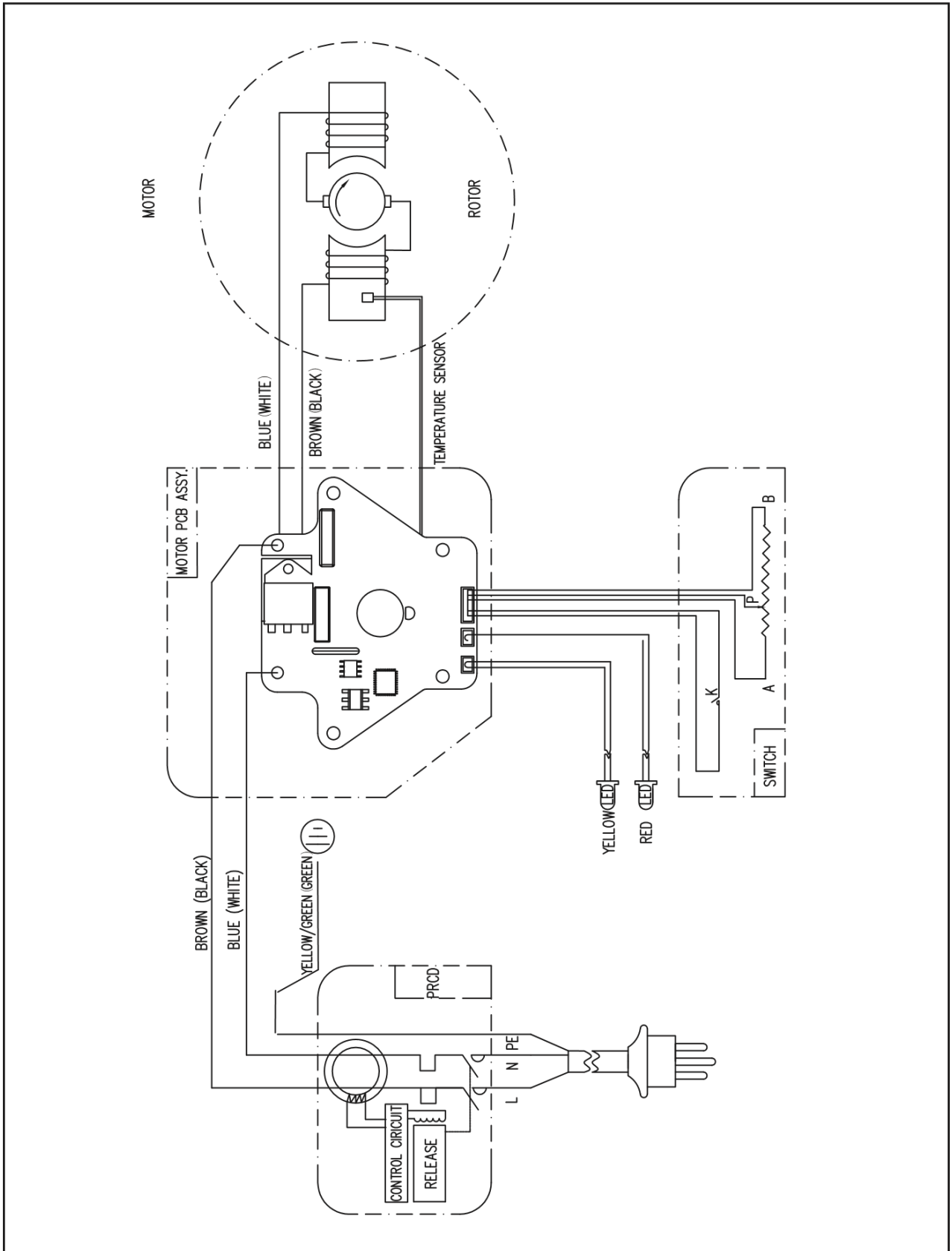
Establish additional safety measures to protect the operator from the effects of vibration, such as: Maintenance of power tool and insert tools, keeping hands warm, organisation of work procedures.

Warranty

In accordance with our general terms and conditions of delivery, a warranty period of 12 months applies for material defects in business transactions with companies (proof by invoice or delivery note). Damage caused by natural wear and tear, overloading or improper handling shall remain excluded from this. Damage caused by material or manufacturer defects shall be remedied free of charge by repair or replacement. Complaints can only be accepted if the unit is sent to the supplier unassembled. Wear parts, such as rotor stator, circuit board, bearings, water seals, oil seals, etc. are not covered.

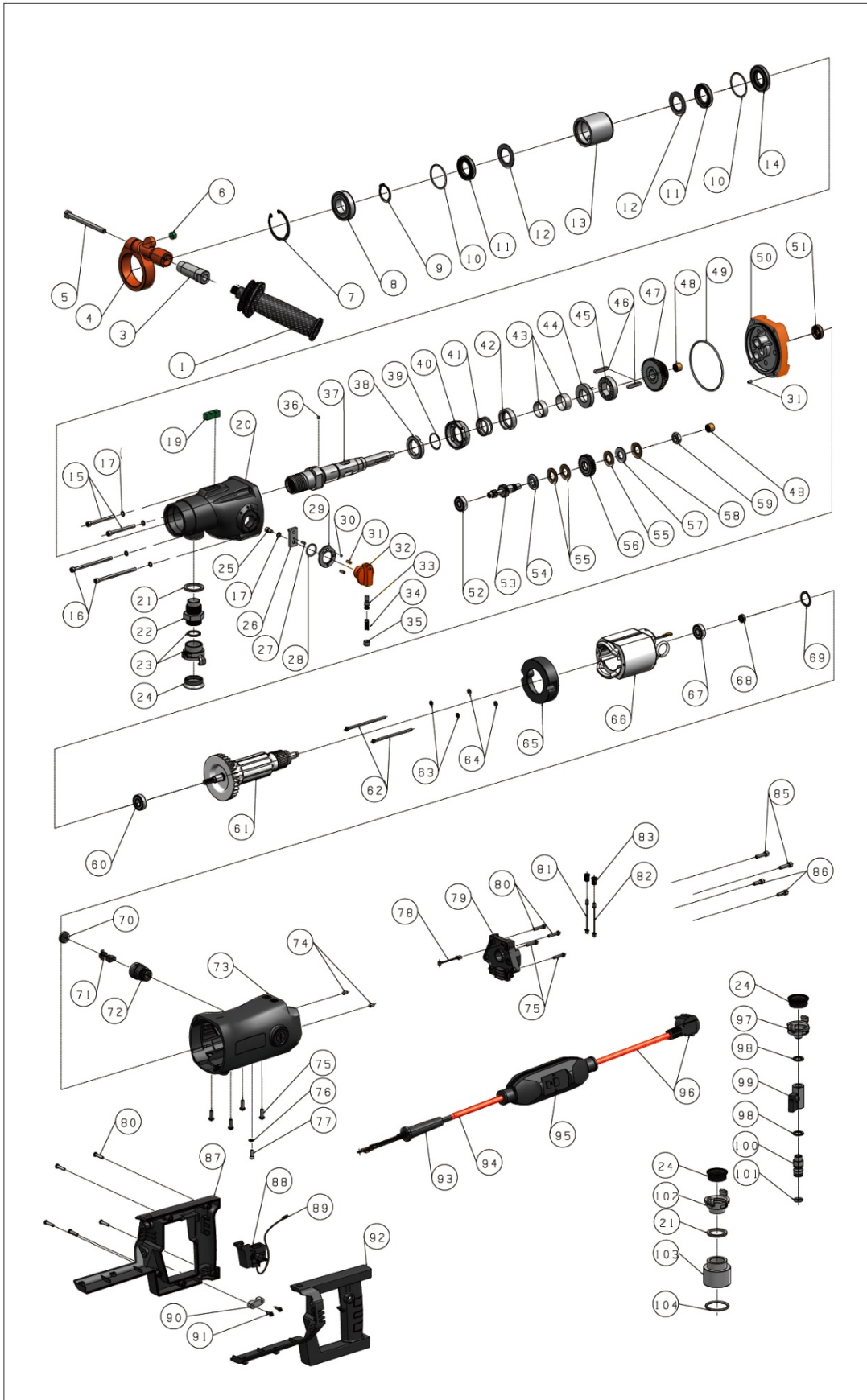
Wiring diagram

DKS-162/DC-H and DKS-162/DC-P



Exploded view

DKS-162/DC-H



No.	Designation	Number
1	Front handle, plastic	1
2	Hexagon head screw M14x40	1
3	Connecting rod of the front handle	1
4	Clamp for front handle	1
5	Hexagon head screw M8x100	1
6	Spirit level Φ 12	1
7	Inner circlip Φ 52	1
8	Deep groove ball bearing 6028Z	1
9	Outer circlip Φ 28	1
10	Wire retaining ring Φ 45x Φ 2	2
11	Radial shaft seal TC 28x43x7	2
12	Water ring washer Φ 43x Φ 28.2x2	2
13	Water ring bushing	1
14	Rotary shaft seal TC 25x47x7	1
15	Phillips sheet metal screw M5x50	2
16	Phillips sheet metal screw M5x80	2
17	Spring washer Φ 5	5
18	Flat washer (Φ 5x Φ 9x1)	4
19	Square spirit level 10x10x30	1
20	Gearbox housing	1
21	Seal (Φ 35x Φ 27.1x3)	2
22	Connection G3/4" external thread	1
23	Quick coupling with G3/4" female thread	1
24	Specially shaped sealing ring for coupling piece	3
25	Hexagon head screw M5x12	1
26	Gear stick	1
27	Dowel pin Φ 3x8	1
28	O-ring (Φ 22x Φ 2)	1
29	Gear switch washer	1
30	Steel ball 5/32" (Φ 3.969)	1
31	Expanding pin Φ 4x8	3
32	Selector lever	1

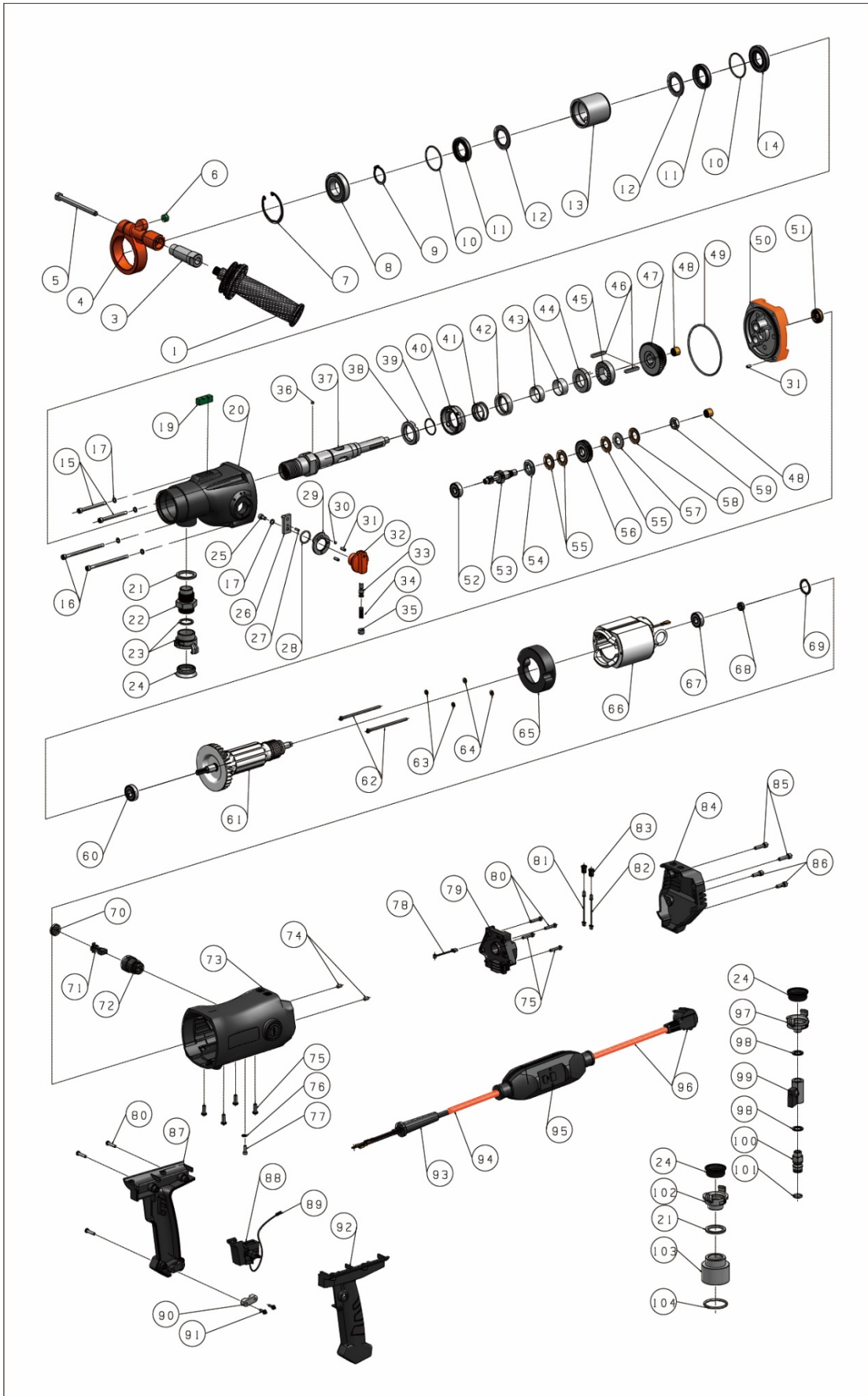
No.	Designation	Number
53	Pinion shaft Z15-Z8	1
54	Friction disc	1
55	Copper friction disc	3
56	Helical gearing Z34-M1 Clockwise rotation	1
57	Clutch disc	1
58	Cup spring	1
59	Hexagon nut M12xP1.25 T=6 mm	1
60	Deep groove ball bearing 6001V	1
61	Rotor cpl. (230V)	1
62	Phillips sheet metal screw M4x90	2
63	Spring washer M4	2
64	Washer 4.2	2
65	Wind deflector	1
66	Stator cpl. (230V)	1
67	Deep groove ball bearing 6000Z	1
68	Magnetic ring, class 2 (Φ 14x Φ 7x5.5)	1
69	Shaft washer Φ 26	1
70	Carbon brush cover	2
71	Carbon brush	2
72	Carbon brush holder	2
73	Motor housing	1
74	Grub screw with taper point M5x10	2
75	Hexagon socket mushroom head screw M4x20	6
76	Serrated lock washers External serration M4	1
77	Flat head screw with cross recess M4x6	1
78	Temperature sensor cable	1
79	Motor PCBA (230 V)	1
80	Hexagon head screw M4x25	5
81	Yellow LED	1
82	Red LED	1
83	LED socket	2
84	Engine rear cover	1

33	Selector lever push pin	1
34	Spring $\Phi 7 \times \Phi 0.8 \times 18$	1
35	Screw plug M10	1
36	Steel ball 5/32" ($\Phi 3.969$)	1
37	Spindle shaft	1
38	Micro-impact ring gear	1
39	Wire circlip $\Phi 28$	1
40	Mode selection ring	1
41	Micro-percussion spring	1
42	Spring steel bush	1
43	Water ring Shaft sleeve ($\Phi 28 \times \Phi 26 \times 9.5$)	2
44	Pawl wheel	1
45	Locking pawl wheel	1
46	Key 5x5x30	2
47	Pinion Z45-Z38	1
48	Drawn cup needle roller bearings HK1010	2
49	O-ring ($\Phi 85 \times \Phi 2.5$)	1
50	Gearbox cover plate	1
51	Rotary shaft seal TC 12x24x7	1
52	Deep groove ball bearing 629Z	1

85	Phillips sheet metal screw M5x25	2
86	Phillips sheet metal screw M5x20	2
87	Cover pistol grip right	1
88	Trigger switch	1
89	Switch cable	1
90	Cable clamp	1
91	Phillips sheet metal screw M4x16	2
92	Cover pistol grip left	1
93	Mains cable gland	1
94	Mains cable (230v/3x1,5 ²)	1
95	PRCD (230V)	1
96	Mains plug (230V)	1
97	Quick disconnect coupling G1/4"	1
98	Washer for mounting BS/A12.7 (12.7x19x1.5)	2
99	Water valve switch	1
100	Water valve coupling	1
101	O-ring ($\Phi 16 \times \Phi 3.1$)	1
102	G3/4" quick release coupling	2
103	Coupling piece for dust extraction	1
104	O-ring ($\Phi 42 \times \Phi 3.1$)	1

Exploded view

DKS-162/DC-P



No.	Designation	Number
1	Front handle, plastic	1
2	Hexagon head screw M14x40	1
3	Connecting rod of the front handle	1
4	Clamp for front handle	1
5	Hexagon head screw M8x100	1
6	Spirit level Φ 12	1
7	Inner circlip Φ 52	1
8	Deep groove ball bearing 6028Z	1
9	Outer circlip Φ 28	1
10	Wire retaining ring Φ 45x Φ 2	2
11	Radial shaft seal TC 28x43x7	2
12	Water ring washer Φ 43x Φ 28.2x2	2
13	Water ring bushing	1
14	Rotary shaft seal TC 25x47x7	1
15	Phillips sheet metal screw M5x50	2
16	Phillips sheet metal screw M5x80	2
17	Spring washer Φ 5	5
18	Flat washer (Φ 5x Φ 9x1)	4
19	Square spirit level 10x10x30	1
20	Gearbox housing	1
21	Seal (Φ 35x Φ 27.1x3)	2
22	Connection G3/4" external thread	1
23	Quick coupling with G3/4" female thread	1
24	Specially shaped sealing ring for coupling piece	3
25	Hexagon head screw M5x12	1
26	Gear stick	1
27	Dowel pin Φ 3x8	1
28	O-ring (Φ 22x Φ 2)	1
29	Gear switch washer	1
30	Steel ball 5/32" (Φ 3.969)	1
31	Expanding pin Φ 4x8	3
32	Selector lever	1
33	Selector lever push pin	1

No.	Designation	Number
53	Pinion shaft Z15-Z8	1
54	Friction disc	1
55	Copper friction disc	3
56	Helical gearing Z34-M1 Clockwise rotation	1
57	Clutch disc	1
58	Cup spring	1
59	Hexagon nut M12xP1.25 T=6 mm	1
60	Deep groove ball bearing 6001V	1
61	Rotor cpl. (230V)	1
62	Phillips sheet metal screw M4x90	2
63	Spring washer M4	2
64	Washer 4.2	2
65	Wind deflector	1
66	Stator cpl. (230V)	1
67	Deep groove ball bearing 6000V	1
68	Magnetic ring, class 2 (Φ 14x Φ 7x5.5)	1
69	Shaft washer Φ 26	1
70	Carbon brush cover	2
71	Carbon brush	2
72	Carbon brush holder	2
73	Motor housing	1
74	Grub screw with taper point M5x10	2
75	Hexagon socket mushroom head screw M4x20	6
76	Serrated lock washers External serration M4	1
77	Flat head screw with cross recess M4x6	1
78	Temperature sensor cable	1
79	Motor PCBA (230 V)	1
80	Hexagon head screw M4x25	7
81	Yellow LED	1
82	Red LED	1
83	LED socket	2
85	Phillips sheet metal screw M5x25	2
86	Phillips sheet metal screw M5x20	2

34	Spring $\Phi 7 \times \Phi 0.8 \times 18$	1
35	Screw plug M10	1
36	Steel ball 5/32" ($\Phi 3.969$)	1
37	Spindle shaft	1
38	Micro-impact ring gear	1
39	Wire circlip $\Phi 28$	1
40	Mode selection ring	1
41	Micro-percussion spring	1
42	Spring steel bush	1
43	Water ring Shaft sleeve ($\Phi 28 \times \Phi 26 \times 9.5$)	2
44	Pawl wheel	1
45	Locking pawl wheel	1
46	Key 5x5x30	2
47	Pinion Z45-Z38	1
48	Drawn cup needle roller bearings HK1010	2
49	O-Ring ($\Phi 85 \times \Phi 2,5$)	1
50	Gearbox cover plate	1
51	Rotary shaft seal TC 12x24x7	1
52	Deep groove ball bearing 629Z	1

87	D-shape handle right cover	1
88	Release switch	1
89	Switch cable	1
90	Cable clamp	1
91	Phillips sheet metal screw M4x16	2
92	D-shaped handle cover left	1
93	Mains cable gland	1
94	Mains cable (230v/3x1,5 ²)	1
95	PRCD (230V)	1
96	Mains plug (230V)	1
97	Quick disconnect coupling G1/4"	1
98	Washer for mounting BS/A12.7 (12.7x19x1.5)	2
99	Water valve switch	1
100	Water valve coupling	1
101	O-Ring ($\Phi 16 \times \Phi 3.1$)	1
102	G3/4" quick coupling	2
103	Dust extraction coupling	2
104	O-Ring ($\Phi 42 \times \Phi 3.1$)	1
		1

EC Declaration of Conformity

The manufacturer/marketer
Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen
hereby declares that the following product

Product designation: Core drill

Typ: DKB-202/H-PRO,
DKB-202/P-PRO,
DKB-352/S-PRO,
DKB-502/S-PRO,
DKS-132/DC-H,
DKS-162/DC-H,
DKS-162/DC-P

complies with all relevant provisions of the applied legal regulations (hereinafter) - including their amendments in force at the time of the declaration. The sole responsibility for issuing this declaration of conformity lies with the manufacturer. This declaration relates only to the machine in the condition in which it was placed on the market; parts and/or interventions subsequently fitted by the end user are not taken into account.

The following legislation was applied:
Machinery Directive 2006/42/EG
EMC Directive 2014/30/EU

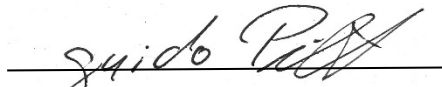
The following harmonised standards were applied:

EN ISO 12100:2010	Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)
EN 60745-1:2015	Hand-held motor-operated electric tools Safety - Part 1: General requirements
EN 60745-2-1:2010	Hand-held motor-operated electric tools Safety - Part 2-1: Particular requirements for drills and impact drills
EN 55014-1:2006 +A2:2011	Electromagnetic compatibility - Requirements for Household appliances, power tools and similar electrical appliances - Part 1: Emission limits Part 1: Emission
EN 55014-2:1997	Electromagnetic compatibility - Requirements for +A2:2008 Electric tools and similar apparatus Part 2: Immunity - Product family standard
EN 61000-3-2:2014	Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic currents
EN 61000-3-3:2013	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems for equipment with a rated current ≤ 16 A per phase and not subject to a special connection condition

Name and address of the person authorised to compile the technical file:

Kernlochbohrer GmbH
Geigersbühlweg 52
72663 Großbettlingen

Location: Großbettlingen
Date: 17.05.2023



Guido Pillat, Chief Executive Officer