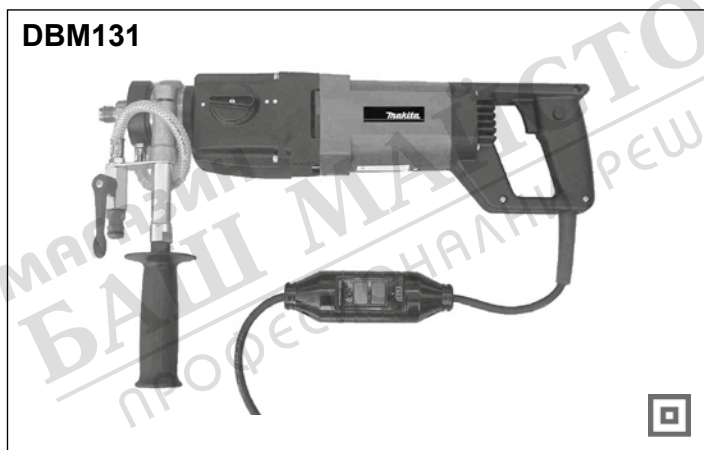


<b>D</b>	Nass-Trocken-Diamant-Kernbohrmaschine	Betriebsanleitung
<b>GB</b>	Wet and Dry Diamond Core Drill	Operating Instructions
<b>F</b>	Carotteuse diamant à eau et à sec	Manuel d'instruction
<b>I</b>	Carotatrice a secco e a umido	Istruzioni per l'uso
<b>E</b>	Taladro Para Broca de Diamante	Manual de Instrucciones
<b>NL</b>	Nat/droog-diamantkernboor	Gebruiksaanwijzing
<b>DK</b>	Våd-tør-diamantkerneboremaskine	Betjeningsvejledning
<b>CZ</b>	Diamantová jádrová vrtačka pro mokré a suché vrtání	Návod k obsluze
<b>H</b>	Vizes-száraz-gyémánt-magfúrógép	Üzemeltetési Utasítás
<b>GR</b>	Διαμαντοδράπανα ξηράς και υγρής κοπής	Οδηγίες χρήσεως



## ENGLISH

### Technical Characteristics

Rated voltage:	110 V
Rated power input:	1500 W
Load speed:	1 <sup>st</sup> speed 0 - 800 min <sup>-1</sup> 2 <sup>nd</sup> speed 0 - 1570 min <sup>-1</sup>
maximum drilling capacity:	1 <sup>st</sup> speed 132 mm 2 <sup>nd</sup> speed 70 mm
Protection class:	II
Collet:	M 18
Weight(net):	6.8 kg
Collar clamping diameter:	53 mm

This machine is meant for professional use only!

All rights of changes due to technical development reserved.

### Safety Instructions

Read and obey these instructions before using this machine.

#### ADDITIONAL SAFETY RULES FOR THIS MACHINE

1. This core-drill must only be used under constant supervision. Unplug and make sure the mains switch is OFF whenever core-drill is not in use or left unattended, before servicing, adjustments, change of cutter or other accessories and when there is a voltage drop (below 200V)
2. Only grip by insulated part of auxiliary handle and other plastic surfaces when performing drilling where cutter is likely to contact hidden electrical wiring or its own cable. Contact with a "Live" wiring will make all exposed metal surfaces of the machine "Live" and danger for an electric shock.
3. Do not use the machine if a defect is found on the plug, mains lead, trigger switch or any part of housings (daily inspection). Have them repaired by a qualified person.
4. For longer machine use, wear hearing protectors.
5. Machine should never be damp or wet. Do not use the machine in damp or wet locations.
6. Likewise it is recommended to wear safety helmet, safety glasses and/or face shield. Also wear a dust mask and thickly padded gloves.
7. Prior to work starting, make sure that cutting accessory is fitted properly.
8. Before starting work carefully check all screws for tightness. Due to vibration screws come loose and can cause serious breakdown or injury.
9. Make sure no one is below when using the machine in high locations.
10. Keep hands well away from rotating parts.
11. During machine operation, cooling water must never be allowed to enter motor or other electrical installation.
12. Should there be any leaking of water between synthetic ring and gearbox, stop immediately and have the fault rectified by an authorised service workshop.
13. Overhead (upward) drilling can only be carried out with the use of suitable protection shielding (water collecting device).
14. After interrupt cutting, do not switch on the motor again unless core bit can rotate freely.
15. Avoid touching near dry-cut immediately after work process. Area can be very hot and cause severe burns.
16. To avoid machine self-starting, always trigger-off the switch should power supply become interrupted or plug accidentally withdrawn from the socket while motor is still running.
17. When coring manually, always use also auxiliary handle (side handle) and hold the machine firmly with both hands.
18. Keep sure-footing and body balance at all times for better control of reaction torque.

## Main Instructions

The DBM131 is in connection with diamond core drill bits meant for drill in bricks, brickwork and lime-sand-stone for dry cut and in concrete and stone for wet cut.

The plastic cap stays also during the dry cut on the spindle and is only to remove for replace the shaft seals.

For drill about more than 40 mm and operating in the 1<sup>st</sup> speed the use of the drill stand is absolute necessary. The user is responsible for damages caused by inappropriate use.

**Hand drilling in the first speed forbidden! Counter torque can lead to risk in case of careless use.**

## Auxiliary Handle

In hand held drilling operations, only use the machine with the auxiliary handle fixed. This handle must be tighten on the collar, by turning the lever.

## Putting into operation

First, check the correspondence between voltage and frequency against the data mentioned on the identification plate.  $\pm 5\%$  voltage difference is allowed.

The machine is supplied with a standard integrated PRCD-protection switch for use at a grounded socket.

Check before every use the proper function of the PRCD-protection switch (see special instruction!)

Attention! Don't use PRCD switch for switching on / off the machine!

Use only 3-wire extension cable with protecting conductor and sufficient cross-section (min. 2.5 mm<sup>2</sup>). A cross-section which is too small could lead to excessive power loss and to overheating of motor and cable. The drilling progress must correspond with the bit diameter and the drive power of the machine so that the rated power will not be exceeded.

## Gear Shifting

According to the drill bit diameter you have to choose between the both possible speeds.

For drilling up to 70 mm we recommend the 2<sup>nd</sup> speed •• (pointed side of the gear switch shows towards motor) and for drilling over 70 mm you have to use the 1<sup>st</sup> speed • (pointed side of the gear switch shows towards spindle).

If it is not possible in standstill to turn the gear switch in end position just turn the spindle a little bit.

**Attention! Gear shifting only when the machine is stopped. Turn in clockwise direction!**

## On-Off Setting

The diamond drill machine is equipped with an electronic controller with locking device.

The more the switch is pressed, the higher is the speed. This allows very precise drilling when starting a hole.

In normal working conditions, always work at maximum speed.

**Attention! Do not lock the switch in case of hand held drilling.**

### *Short-Time Operation – free-hand drilling*

switching-on: press the on/off switch  
switching off: release the on/off switch

### *Permanent Operation – drilling with drill stand*

switching-on: press the on/off switch and keeping it pressed, engage the lock button  
switching-off: press the on/off switch again and let it go off

## Overload Protection

In order to protect the operator, the motor and the drill bit, the machine is equipped with a mechanical, electronic and thermal overload protection.

mechanical: If the drill bit is suddenly blocked in the hole, a clutch will slip disengaging the bit from the motor.

Pay attention to the reaction torque.

electronic: For the warning of the user at overload of the machine in case of too large crowd force there is installed a LED into the hand grip.

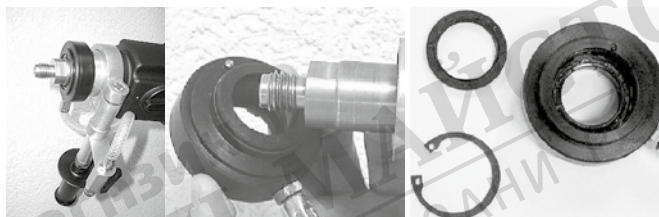
thermal:

In no-load operation and normal load occurs no indication.  
In case of overload the LED glows red. In this case you have to remove the load. For longer disregard of the red LED it follows a self-contained of the machine. After discharge and reengagement one can drill again.  
When continuous overload is applied (despite the electronic device) a thermal protection will protect the motor. The machine disengages itself in this case and can be put into operation after waiting for cooling down (approx. 2 min.) The time needed to be able to restart the machine will be vary dependent on overheating of the coil and the ambient temperature.  
To speed up the cooling down of the machine let the machine after the restart run 1-2 min. without load.

**The stop of the machine caused by overload protection is no failure. After an adequate time it is possible to restart working!**

## Water Supply

The DBM131 is designed for wet-and dry core drilling. The water supply has to stay on the spindle always. Never drill without water supply due the spindle could be damaged. If there is water leakage between the water supply ring and the gearbox housing you have to change the water supply respectively replace the shaft seals by new and slight greasy shaft seals. These are available about dealers or manufacturer. The water supply (black plastic ring) can only remove by pull down. The mounting of the water supply occurs to push open till it snapped. Pay attention to the position of the dowel (for protection against twist)



**Attention ! Do not damage the seal rings during the mounting.**

The machine has an external water supply through the work spindle. With the help of the water tap you can regulate the water quantity.

The water supply is equipped with a connector for Gardena-hose coupling.

Attention! Water pressure not higher than 3 bar.

**In case of drilling "overhead" you have to exhaust the leak out water at the drill hole by suction ring and wet-vacuum cleaner for reasons of safety at work and reliability.**

## Electrical Safety

The machine has a class II protection.

For operator full protection this machine must only be used by wet drilling with fault current protection device.

Therefore the DBM181 is standard equipped with PRCD protection switch be used on a grounded socket.

## Care and Maintenance

Due to it's design, the machine needs a minimum of care and maintenance.

**Nevertheless, you should always observe the following:**

- Keep the electric tool clean
- Avoid any particle or part to penetrate inside the tool
- If the machine is defect let carry out a repair only through an authorized workshop.