BOSCH
Ideas that work.

* Des idées en action.

GBM 23-2
GBM 23-2 E
PROFESSIONAL

Bedienungsanleitung
Operating instructions
Instructions d'emploi
Instrucciones de servicio
Manual de instruções
Istruzioni d'uso
Gebruiksaanwijzing
Betjeningsvejledning
Bruksanvisning
Brukerveiledningen
Käyttöohje
Οδηγία χειρισμού
Kullanım kılavuzu

General Safety Rules

⚠ WARNING **Read all instructions.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury. The term "power tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

Save these instructions.

1) **Work area**
   a) **Keep work area clean and well lit.** Cluttered and dark areas invite accidents.
   b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
   c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2) **Electrical safety**
   a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
   b) **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
   c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
   d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
   e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.

3) **Personal safety**
   a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
   b) **Use safety equipment. Always wear eye protection.** Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
   c) **Avoid accidental starting. Ensure the switch is in the off position before plugging in.** Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
   d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
   e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
   f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
   g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of these devices can reduce dust related hazards.

4) **Power tool use and care**
   a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
   b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
   c) **Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
   d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
   e) **Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.

f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

g) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

5) Service

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

Machine-specific Safety Notes

- **When working with the machine, always hold it firmly with both hands and provide for a secure stance.** The power tool is guided more secure with both hands.
- **Secure the workpiece.** A workpiece clamped with clamping devices or in a vice is held more secure than by hand.
- **Always wait until the machine has come to a complete stop before placing it down.** The tool insert can jam and lead to loss of control over the power tool.
- **Never use the machine with a damaged cable. Do not touch the damaged cable and pull the mains plug when the cable is damaged while working.** Damaged cables increase the risk of an electric shock.
- **Connect machines that are used in the open via a residual current device (RCD).**
- **Always use the auxiliary handle supplied with the machine.** Loss of control can cause personal injury.
- **Use appropriate detectors to determine if utility lines are hidden in the work area or call the local utility company for assistance.** Contact with electric lines can lead to fire and electric shock. Damaging a gas line can lead to explosion. Penetrating a water line causes property damage or may cause an electric shock.
- **Switch off the power tool immediately when the tool insert suddenly jams. Be prepared for high reaction torque that can cause kickback.** The tool insert jams when:
  – the power tool is subject to overload or
  – it becomes wedged in the workpiece.
- **Hold the power tool only by the insulated handles, when performing an operation where the tool insert can run into hidden wiring.** Contact with a “live” wire can make metal parts of the power tool “live” and lead to an electric shock.

Functional Description

Read all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

While reading the operating instructions, unfold the graphics page for the machine and leave it open.

Intended Use

The machine is intended for drilling in wood, metal, ceramic and plastic.

Machine Elements

The numbering of the machine elements refers to the illustration of the machine on the graphics page.

1 Rotatable pressure plate
2 Auxiliary handle
3 Opening for drift
4 Tool holder
5 Lock-on button for On/Off switch
6 On/Off switch
7 Gear selector
8 Thread for auxiliary handle
9 Drift
10 Reducing sleeve*
11 Tapered arbor*
12 Key chuck*

***Not all of the accessories illustrated or described are included as standard delivery.**

Tool Specifications

Rotary drill		**GBM 23-2 PROFESSIONAL**	**GBM 23-2 E PROFESSIONAL**
Article number		0 601 121 1..	0 601 121 6..
Rated power input	W	1150	1150
Output power	W	670	670
No-load speed			
1st gear	rpm	400	0–400
2nd gear	rpm	920	0–920
Rotational speed under load, max.			
1st gear	rpm	280	0–280
2nd gear	rpm	640	0–640
Maximum drilling diameter (1st/2nd gear)			
Steel	mm	23/13	23/13
Wood	mm	50/35	50/35
Aluminium	mm	28/18	28/18
Tool holder		MK 2 – DIN 228	MK 2 – DIN 228
Weight according to EPTA-Procedure 01/2003	kg	4.6	4.8
Protection class		□/II	□/II

The values given are valid for nominal voltages [U] of 230/240 V. For lower voltage and models for specific countries, these values can vary.

Please observe the article number on the type plate of your machine. The trade names of the individual machines may vary.

Noise/Vibration Information

Measured values determined according to EN 60745.

Typically the A-weighted noise levels of the machine are: sound pressure level 86 dB(A); sound power level 97 dB(A). Measurement uncertainty K=3 dB.
Wear hearing protection!

The typical hand/arm vibration is below 2.5 m/s^2.

CE Declaration of Conformity

We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents: EN 60745 according to the provisions of the directives 89/336/EEC, 98/37/EC.

Dr. Egbert Schneider
Senior Vice President
Engineering

Dr. Eckerhard Strötgen
Head of Product
Certification

ppa. i.V.

Robert Bosch GmbH, Geschäftsbereich Elektrowerkzeuge

Assembly

Auxiliary Handle

Operate your machine only with the auxiliary handle 2.

Screw the auxiliary handle **2** into the thread **8** on the gear head.

Changing the Tool

Before any work on the machine itself, pull the mains plug.

Drilling tools with a MK2 morse taper can be inserted directly into the tool holder **4**. For drill bits with MK1 morse taper, use the reducing sleeve **10**.
Pay attention that the morse cone and the morse taper are free of grease.

The use of drilling tools with cylindrical shank is possible with the key chuck **12**. For this, place the tapered arbor **11** into the tool holder **4** and firmly screw on the key chuck **12**.

Do not exert any force when inserting the morse taper or the tapered arbor. This can damage the tool holder and the inserted tool.

Before removing the inserted tool, unscrew the auxiliary handle **2**.
Place the drift **9** into the opening **3** in such a manner that the rounded-off side faces to the pressure plate **1**. If the drift **9** cannot be inserted through the drive spindle, turn the tool insert a little.
Press the drift **9** toward the pressure plate **1** and release the tool insert from out of the tool holder.

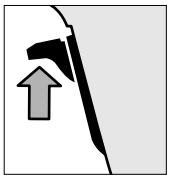
Operation

Starting Operation

Observe correct mains voltage! The voltage of the power source must agree with the voltage specified on the nameplate of the machine. Power tools marked with 230 V can also be operated with 220 V.

Switching On and Off

To **start** the machine, press the On/Off switch **6** and keep it depressed.



Lock the **pushed** On/Off switch **6** by pushing the lock-on button **5** upward.

To **switch off** the machine, release the On/Off switch **6** or when it is locked with the lock-on button **5**, briefly press the On/Off switch **6** and then release it.

Adjusting the Speed (GBM 23-2 E)

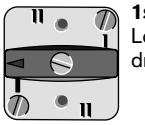
The machine runs with variable speed, depending on the pressure applied on the On/Off switch **6**.

Light pressure on the On/Off switch **6** results in a low rotational speed. Further pressure on the switch results in an increase in speed.

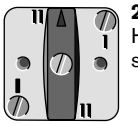
Gear Selection, Mechanical

Actuate the gear selector **7** only when the machine is at a standstill.

Two speed ranges can be preselected with the gear selector **7**.



1st gear:
Low speed range; for working with large drilling diameter.



2nd gear:
Higher speed range; for working with small drilling diameter.

If the gear selector **7** cannot be fully engaged, lightly rotate the drive spindle with the drill bit by twisting the drill chuck.

Operating Instructions

Tips

For drilling in metal, use only perfectly sharpened HSS drill bits (HSS=high-speed steel). The appropriate quality is guaranteed by the Bosch accessories program.

The machine vice, which is available as an accessory, enables secure clamping of workpieces. This prevents the workpiece from turning and any accidents this would cause.

Maintenance and Service

Maintenance and Cleaning

Before any work on the machine itself, pull the mains plug.

For safe and proper working, always keep the machine and ventilation slots clean.

If the machine should fail despite the care taken in manufacturing and testing procedures, repair should be carried out by an after-sales service centre for Bosch power tools.

In all correspondence and spare parts order, please always include the 10-digit article number given on the type plate of the machine.

Service and Customer Assistance

Exploded views and information on spare parts can be found under:
www.bosch-pt.com

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Robert Bosch Ltd. (B.S.C.)
P.O. Box 98
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Environmental Protection

Recycle raw materials instead of disposing as waste
The machine, accessories and packaging should be sorted for environmental-friendly recycling.
These instructions are printed on recycled paper manufactured without chlorine.
The plastic components are labelled for categorized recycling.

Subject to change without notice.