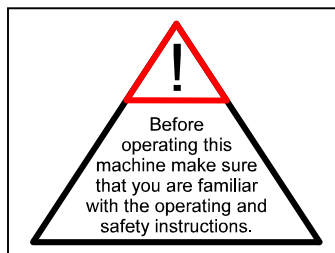


MODEL EHB 20 SERIES ELECTRIC DRILL



OPERATING MANUAL



Operating Instructions

Electrical Hand Drill EHB 20 / 2.4 EHB 20 / 2.4 S

Technical Characteristics

rated voltage:	110 V AC
rated power input:	1150 W
frequency:	40 - 60 Hz
load speed:	250 / 450 rpm
"S" load speed:	0-250 / 0-450 rpm
drilling capacity in steel 50:	20 mm
protection class:	II
degree of protection:	IP 20
interference suppression:	as per DIN VDE 0875, EN 55014
collet	MK 2
weight (net):	approx. 4.2 kg
accessories:	drill drift No. 2

The conformity with the 73/23/EEC and 89/336/EEC guidelines is indicated by the CE symbol.

All rights of changes due to technical development reserved.

Safety Instructions



1. Safe work with the machine is only possible if you read this operating instruction completely and strictly follow the instructions contained herein.
2. When drilling through ceilings or walls, make sure you will not cut through electric mains, gas or water pipes. Use metal detection systems if needed.
3. Check the drilling machine, cable and plug prior to every use of the tool. Have damages eliminated only by an authorised specialist. Take care that the tool is switched off when the plug is inserted into a power receptacle.
4. The machine must neither be wet, nor be used in humid ambient conditions.

5. Be careful for long hairs. Work only with tight fitted clothes.
6. Extension cords and plugs must be approved for works on the exterior.
7. For reasons of safety, do not work without the additional handle.
8. Always secure the working piece by means of fixtures.
9. Lead the power cable off the machines to the back.
10. During use, hold the machine always with both hands and maintain a safe stance.
11. Always consider the reaction moment of the tool, especially when the tool blocks.
12. Before all works at the machine, make sure that the plug is off the mains socket.
13. People under 16 are not allowed to use the machine.

For further safety instructions, refer to the enclosure.

Protection

Wrong handling can result in damages. Hence, the following instruction should be observed:
Sharp drill bits improve the drilling capacity and protect the tool.
Do not allow blocking of the tool due to overload.

Use only original parts from Eibenstock.

Mounting Instructions

Additional Handle

Mount the accessory additional handle to the machine and keep it always in use.

Putting into Operation

The operating voltage must correspond with that indicated on identification plate. Machines designed for 110 V can be used with 120 V, as well.

Switching on and off

Short-Time Operation

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

Permanent Operation

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

The EHB 20/2.4 S has an electronic switch, which enables low-speed starting of drilling.

Speed Selection

The machines are equipped with a mechanical two-speed gearbox. Select the required speed by pressing-in, shifting and engaging. The position of the lower speed is in direction of the working spindle. Change the speed only when the machine is not running, and support the speed-changing by slightly rotating the working spindle.

Working Instructions

Drilling machines include a MK II cone spindle. Take always care for cleanliness of the hollow spindle and use only drilling chucks with undamaged shank.

Care and Maintenance

Due to its design, the machine needs a minimum of care and maintenance.

Nevertheless, you should always observe the following:

- Keep the electric tool clean.
- Do not allow any foreign matters to pass inside the tool.
- After approx. 300 hours of operation, the carbon brushes have to be checked by a specialist. If they are shorter than 5 mm, they must be replaced by new, original brushes. They must be run in by a 20-min idle run of the tool. Also the condition of the commutator must be checked. In case of irregular colouring of the individual blades and surface crashes, send the tool to a service workshop.
- Cleaning of gearbox and motor is needed after approx. 500 hours of operation. Since this is the time of a general check of all components, send the tool to a service workshop.

Environmental Protection



Raw Material Recycling instead of Waste Disposal

In order to avoid damages on transport, the tool has to come in a stable packing. Packing as well as unit and accessories are made of recyclable materials and can be disposed accordingly. Plastic components are marked; this enables environmentally friendly and differentiated removal through the available collecting facilities.

Noise Emission

The indication of noise emission figures is basing on DIN 45 649, part 2, DIN 45 635, part 21, and DIN EN 27 574 (ISO 7574).

- noise level (L_{WA}) (94+3) dB re 1 pW
working place-related emission figure (L_{pA}) 84 dB
for idle run as per DIN 45635 - 21 - KL 2
- noise level (L_{WA}) 88 dB re 1 pW
working place-related emission figure (L_{pA} , cyc) 79 dB
for substitute run with load (without workpiece machining) as per DIN 45635

Warranty

Tools from Eibenstock are covered by a warranty according to the legal and national regulations (to be verified by invoice or delivery note).

Damages caused by natural wear, overload and incorrect use are excluded from warranty.

Only damages in the result of material and manufacturing faults will be eliminated free of charge, either by replacement or by repair.

Complaints will be recognised only when the tool was transferred in assembled condition to the supplier or one of Eibenstock's authorised service workshops.