



# EIBENSTOCK

## Elektrowerkzeuge

### Original Instructions



**EDS 181 U**





**WARNING:**

This product can expose you to chemicals including **METHANOL**, which is known to the State of California to cause birth defects or other reproductive harm.

For more information, go to:  
[www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

## Important Safety Instructions

Important instructions and warning notices are allegorized on the machine by means of symbols:



**Before you start working, read the operating instructions of the machine.**



**Work concentrated and carefully. Keep your work-place clean and avoid dangerous situations.**



**In order to protect the user, take precautions.**

During work you should wear ear protectors, goggles, dust mask, protective gloves and sturdy work clothes!



**Use ear protection**



**Wear safety goggles**



**Wear a dust mask**



**Wear protective gloves**



**Warning of general danger**



**Warning of dangerous voltage**



**Warning of hot surface**



**Danger of being ripped or cut**

## Technical Data

### Wet-Dry Diamond Saw EDS 181 U

Rated voltage:	120 V ~
Rated current	20 A
Order Number:	0660S000

Frequency:	50 / 60 Hz
No-load speed:	8500 rpm
Max. disc diameter:	7"
Spindle connection:	7/8"
Cutting depth max.:	2 1/2"
Protection class:	I
Degree of protection:	IP 20
Net weight:	17 lbs
Interference suppression:	EN 55014 and EN 61000

### Available accessories:

	Ordernumber:
Diamond cutting 180 mm	37463000
Diamond cutting 200 mm	37444000
Guide rail 750 mm	37461000
Guide rail 1500 mm	37462000
Set of 2 suction holder for guide rail	37464000
Industrial Vacuum Cleaner DSS 25 M	09917000
Industrial Vacuum Cleaner DSS 35 M iP	09919000

## Content of Delivery

**EDS 181 U** with diamond cutting disc Ø 180mm, tool kit and operating instructions in a metal case.

## Application for Indented Purpose

The Wet-Dry Diamond Saw is intended for professional use and may only be operated after being fully installed in accordance with the installation instructions. With the appropriate diamond cutting disc, the **EDS 181 U** can be used to cut natural stone such as granite, marble, concrete items such as flagstones, lawn borders and terrazzo as well as for joint renovation. During wet cutting, the diamond cutting disc must be cooled with water from the available water supply. During dry cutting, vacuum removal of the dust is absolutely essential.

**Only diamond cutting discs recommended by the manufacturer should be used.**

## Safety Instructions



**Safe work with the machine is only possible if you read this operating instruction completely and follow the instructions contained strictly. Additionally, the general safety instructions of the leaflet supplied with the tool must be observed. Prior to the first use, the user should absolve a practical training**



Work concentrated and carefully. Keep your work place clean and avoid dangerous situations.



In order to protect the user, take precautions.



If the mains cable gets damaged or cut during the use, do not touch it, but instantly pull the plug out of the socket. Never use the tool with damaged mains cable.



The tool must neither be wet nor used in humid environment.

- Do not use the tool in an environment with danger of explosion.
- Do not drill into asbestos-containing materials.
- Modifications of the tool are prohibited.
- Never use the machine without dust guard.
- Always check the tool, cable and plug before use and plug before use. Have damages only repaired by specialists. Insert the plug into the socket only when the tool switch is off.
- When you work outside, the machine has to be used with a fault-current circuit breaker with max. 30 mA.
- The machine should only work under supervision of somebody. Plug and switch the machine off if it is not under supervision, in case of putting up and stripping down the machine, in case of voltage drop or when fixing or mounting an accessory.
- Switch the machine off if it stops for whatever reason. You avoid that it starts suddenly and not under supervision.
- Don't use the machine if a part of the housing is damaged or in case of damages on the switch, the cable or plug.
- **Pay attention that the speed indicated on the cutting disc meets or is higher than the max. speed indicated on the machine.**
- Use **only** diamond cutting wheels for your power tool.
- Wheels must be used only for recommended applications. For example : do not grind with the side of cutting wheel.
- Cutting wheels have to be stored and used carefully according to the instructions of the producer.

- Cutting discs flanges and other accessories must properly fit on the spindle of the power tool. Do not use any reducing pieces or adapters.
- Check the accessories before use. Do not use any products which are broken, cracked or damaged in another way.
- Before use, make sure that the tool is correctly fixed and fastened. Let it run idle for about 30 seconds in a safe position. If considerable vibrations occur or if other defects are recognised, switch off immediately.
- Always lead the mains and extension cable as well as the extraction hose to the back away from the machine.
- Make sure the wheel is not contacting the workpiece before the switch is turned on.
- Wait until the wheel attains full speed before cutting.
- **Attention! The tool still runs for a little while after the machine was switched off.**
- Before setting the tool down after completing a cut, be sure that the wheel has come to a complete stop.
- Do not stop the wheel by lateral pressure on the disc.
- Never carry the machine at its cable.
- Do not touch rotating parts.
- Persons under 16 years of age are not allowed to use the tool.



- During use, the operator and other persons standing nearby have to wear suitable ear protectors, a dust mask, protection goggles as well as protective gloves.
- Make sure that persons in the work space are not endangered by particles flying around.
- Keep the handles dry, clean and free of oil and grease.
- Power tools have to be inspected by a specialist in regular intervals.

**For further safety instructions, please refer to the enclosure!**



### Electrical Connection

The **EDS 181 U** is made in protection class II. For protection purposes the machine can only be run with a GFCI. The machine is standard equipped with a PRCD protective switch integrated in the cord.

#### Attention!



- **The PRCD protective switch must not lay in water.**
- **PRCD protective switches must not be used to switch the tool on and off.**
- **Before starting your work, check the proper function by pressing the TEST button.**

First, check the correspondence between voltage and frequency against the data mentioned on the identification plate.

Voltage differences of + 6 % to – 10 % are allowed.

Recommended extension cord sizes for use with portable electric tools:

Length of Cord in Feet										
110 V		25 Ft.	50 Ft.	100 Ft.	150 Ft.	200 Ft.	250 Ft.	300 Ft.	400 Ft.	500 Ft.
Nameplate Ampere Rating	0-2	18	18	18	16	16	14	14	12	12
	2-3	18	18	16	14	14	12	12	10	10
	3-4	18	18	16	14	12	12	10	10	8
	4-5	18	18	14	12	12	10	10	8	8
	5-6	18	16	14	12	10	10	8	8	6
	6-8	18	16	12	10	10	8	6	6	6
	8-10	18	14	12	10	8	8	6	6	4
	10-12	16	14	10	8	8	6	6	4	4
	12-14	16	12	10	8	6	6	6	4	2
	14-16	16	12	10	8	6	6	4	4	2
	16-18	14	12	8	8	6	4	4	2	2
	18-20	14	12	8	6	6	4	4	2	2

**Switching on and off**

The EDS 181 U is equipped with a lock-off button against unintentional switch-on.



Switching-on: push the on/off switch forward (1) and then down (2)

Switching-off: release the on/off switch

**Instructions for Use**

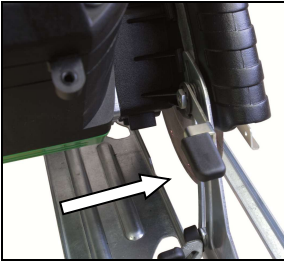
**Do not strain the machine so heavily that it comes to a standstill. In order to work with as little dust as possible, we recommend setting the saw to the max. cutting depth for dry cutting. This assures optimum suction.**

**We recommend wet cutting for cuts with reduced cutting depth.**

Adjust the cutting depth; see “Adjust cutting depth” section. Hold the tool firmly with the right hand on the switch handle and the left hand on the front handle. Place the sliding block on the workpiece to be cut without allowing the diamond disc to come into contact with it. Then activate the tool and wait until the diamond disc has reached full speed. Now slide the tool in a flat and even manner across the surface of the workpiece until the cut is completed. To achieve a clean cut, maintain a straight cutting line and a steady speed of advance. Curved cuts are **not** possible, as the diamond cutting disc will be angled into the workpiece.

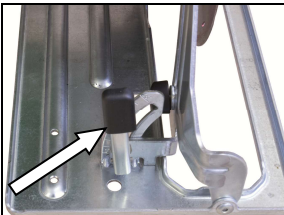
Noticeable decreasing work progress and circular sparking are indications of a blunt diamond cutting disc. Briefly cutting into abrasive material (e. g. lime-sand brick or the EIBENSTOCK-diamond-sharpening-stone) can re-sharpen the disc again.

### Pre-selection of the Cutting Depth



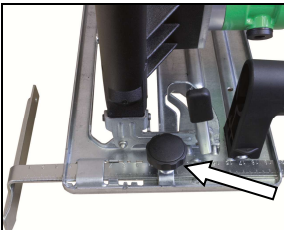
Release the lever on the depth control and move the sliding block up or down. Stop the sliding block at the desired cutting depth by tightening the lever. To achieve the maximum cutting depth of 63mm (with cutting disc Ø 200 mm – special accessories) the cutting depth limiter must be removed (see Section dipping function).

### Mitre cuts



Release both levers on the respective angle scales on the front and rear of the sliding block. Incline the tool to the desired angle (0 - 45°) and tighten the levers.

### Parallel stop

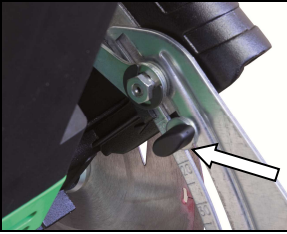


The parallel stop enables precise cuts to be made.

Simply push the parallel stop firmly against the edge of the workpiece and secure it with the clamping screw on the front of the sliding block.

For absolutely precise cuts, especially at larger cutting lengths, guide rails (750mm and 1500mm) are available as an accessory.

### Dipping function



To create cut-out sections or for joint renovation, you can dip into the material with the diamond saw.

To do this, adjust the desired cutting depth using the cutting depth limiter (see arrow). This is fitted to the depth control (see image).

Bring the sliding block to the desired position (the desired max. cutting depth) and position the cutting depth limiter directly below the depth control lever.

The lever must be open while dipping.

Place the machine on the workpiece.

Activate the machine without allowing the diamond cutting disc to touch the workpiece, and dip it into the workpiece.

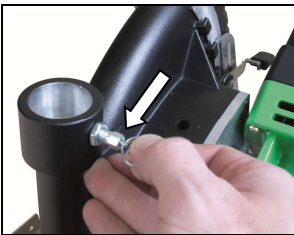
After the cut, lift out of the material before switching the machine off.

**Take extreme care when using this function!**

### Dry cutting

**Dust which occurs during your work is hazardous to health. That is why the EDS 181 U must be used with a vacuum cleaner, and a dust mask has to be worn.**

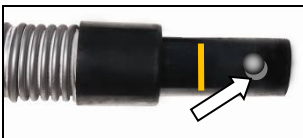
The suitable Wet/Dry Vacuum Cleaner DSS 25 M is available as accessory. It can directly be attached to the connection on the dust hood.



The suction hose can be locked against slipping out by means of the hose fixing.

Make the necessary drill hole as follows:

Put the suction hose in the connector of the hood.



Mark the plug-in depth with a crayon. (see arrow)

Drill 12 mm from this marking (line) a hole with diameter 6 mm in the nozzle.

When insert the suction hose pull the ring of the hose fixing and turn the nozzle till the fixation engages.

## Wet cutting

If the diamond cutting disc is not adequately cooled with water, the diamond part can heat up, which can damage and weaken it. You should therefore always ensure that the water supply is not clogged.

To supply the machine with water please proceed as follows:



Fasten the water connection to the connecting piece on the protective hood.

To do this, pull the anchorage ring when inserting the connection, and turn the water connection until the anchorage clicks into the corresponding hole.

- Connect the tool to the water supply system or a water pressure vessel using the GARDENA connector.
- Always make sure that the machine only runs with enough clear water as the seals get damaged when the machine is running dry.
- Attention! The maximum water pressure should not exceed 3 bar!
- Make sure that the segments are well cooled. If the drilling water is clear, the segments are well cooled.
- In case of frost warning, drain the water system.

## Changing the Diamond Cutting Discs

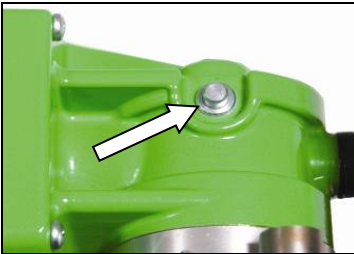


### Attention!

The Cutting discs, spacer discs and the flange nut might heat up enormously during operation. You could burn your hands or get cut or ripped by the segments.

Therefore, always use protective gloves when changing the grinding wheel.

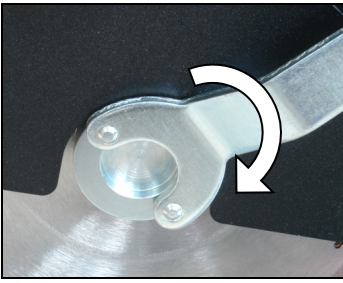
**Before any work on the tool, disconnect the plug from the mains!**



Press the spindle lock button to lock the work spindle .

**Actuate the spindle lock button only when the work spindle is at a standstill.**

Otherwise, the machine may become damaged.



Open the clamping screw with the face spanner and remove the diamond cutting discs as well as the spacer discs from the work spindle.

**Clean the work spindle and all parts to be mounted.**

Put the diamond cutting disc on the work spindle.

**When mounting the diamond cutting discs, ensure that the direction of rotation arrows on the diamond cutting disc match with the rotation direction of the machine (see direction of rotation arrow on the protective hood).**

Press the spindle lock button to lock the work spindle

Press the spindle lock button to lock the work spindle (see arrow).

Screw on the clamping screw and tighten it with the face spanner

- **Use only original accessory!**
- **The EDS 181 is in power and speed optimal adjusted to the EIBENSTOCK-diamond cutting discs.**

**In order to check whether the spindle stop is released before you switch on the tool, turn the spindle slightly.**

**Let the machine run for a short period of time and in a safe position. If the machine does not run easily, stop working immediately.**

### **Overload Protection**

In order to protect the operator, motor and tool, the wall chaser is equipped with an electronic and thermal overload protection.

**Electronic:** To warn the user against an overload of the machine due to too high contact pressure, a LED is attached to the switch grip. It does not light during idle run or at normal load. When the unit is overloaded the LED lights red, in this case, the unit must be stress-relieved. You can continue working after having stress-relieved and switching OFF and ON the power tool again.

**Thermal:** In case of permanent overload, a thermocouple protects the motor against destruction. In this case, the tool switches off automatically and can only be restarted after a certain cooling period (approx. 2 minutes). The cooling period depends on the heating of the motor winding and the ambient temperature.

## Care and Maintenance



**Before the beginning of maintenance or repair works you have to disconnect the plug from the mains.**

Repairs may be executed only by appropriately qualified and experienced personnel. After every repair the machine has to be inspected by an electric specialist.

Due to its design, the machine needs a minimum of care and maintenance. However, the following points always have to be observed:

- Always keep the power tool and the ventilation slots clean.
- During work, please pay attention that no particles get inside the machine.
- In case of failure, a repair has to be carried out by an authorised service workshop.

## Environmental Protection



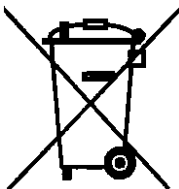
**Raw material recycling instead of waste disposal**

To avoid damages on transportation, the power tool has to be delivered in a sturdy packing. Packaging as well as unit and accessories are made of recyclable materials and can be disposed accordingly.

The tool's plastic components are marked according to their material, which makes it possible to remove environmental friendly and differentiated because of available collection facilities.

### **Only for EU countries**

Do not dispose of electric tools together with household waste material!



In observance of the European Directive 2012/19/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.

## Noise Emission / Vibration

The indication of noise emission is measured according to DIN 45 635, part 21. The level of acoustic pressure on the work place could exceed 85 dB (A); in this case protection measures must be taken.



### **Wear ear protectors!**

The typical hand-arm vibration is below 2.5 m/s<sup>2</sup>.  
Measured values determined according to EN 60 745.

The vibration emission level given in this information sheet has been measured in accordance with a standardized test given in EN 60745 and may be used to compare one tool with another. It may be used for a preliminary assessment of exposure.

The declared vibration emission level represents the main applications of the tool. However if the tool is used for different applications, with different accessories or poorly maintained, the vibration emission may differ. This may significantly increase the exposure level over the total working period.

An estimation of the level of exposure to vibration should also take into account the times when the tool is switched off or when it is running but not actually doing the job. This may significantly reduce the exposure level over the total working period.

Identify additional safety measures to protect the operator from the effects of vibration such as: maintain the tool and the accessories, keep the hands warm, organisation of work patterns.

## Dust Protection

Dust from material such as paint containing lead, some wood species, minerals and metal may be harmful. Contact with or inhalation of the dust may cause allergic reactions and/or respiratory diseases to the operator or bystanders.

Certain kinds of dust are classified as carcinogenic such as oak and beech dust especially in conjunction with additives for wood conditioning (chromate, wood preservative). Material containing asbestos must only be treated by specialists.

- Where the use of a dust extraction device is possible it shall be used.
- To achieve a high level of dust collection, use industrial vacuum cleaner DSS 25/50 for wood and/or minerals together with this tool.
- The work place must be well ventilated.
- The use of a dust mask of filter class P2 is recommended.

## Warranty

According to our general terms of delivery for business dealings, suppliers have to provide to companies a warranty period of 12 months for redhibitory defects (to be documented by invoice or delivery note).

Damages due to natural wear, oversteering or improper handling are excluded from this warranty.

Damages due to material defects or production faults shall be eliminated free of charge by either repair or replacement.

Complaints will be accepted only if the tool is returned in non-dismantled condition to the manufacturer or an authorized Eibenstock service centre.

## CE Declaration of Conformity

We declare under our sole responsibility that the product described under "Technical Data" is in conformity with the following standards or standardization documents:

EN 60 745

according to the provisions of the directives 2011/65/EU, 2004/108/EG, 2006/42/EG

Technical file (2006/42/EC) at:

Elektrowerkzeuge GmbH Eibenstock  
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Frank Markert  
Head of Engineering

17.12.2024



Your distributor

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