HS 40 Emma Diamond Hand Saw



closed, water cooled high frequency motor waterproof protection class IP 55

Technical Data:	Туре		HS 40
	Rated Voltage	V	230
	Nominal Power	W	3700
	Output Power	W	2800
	Cutting Depth	mm	165
	Saw Blade Ø	mm	400
	Mounting Hole	mm	20 / 15,85 (5/8")
	Speed	1/min	2600
	Weight	kg	8,5

Diamond Core Drills



Diamond Saws Hello, I am Emma, the diamond hand saw from WEKA. I cut with my diamond saw blade with 400 mm diameter concrete walls and masonry up to 165 mm deep and all this manually operated. If required I can be mounted on a very simple profile rail, so that my operator can hold and guide me even easier.

High frequency drive

My small motor after all has a power of 3700 W and all this at a mains voltage of 230 V.

It is water cooled with the cooling principle which is patented by WEKA. The cooling system is thereby completely separated from the electrical part of the motor. If on very tough use of the motor my seals should fail, the cooling water will not enter into the interior of the motor, but only to the outside.

Motor protection

My motor current is controlled according to the requirements and is limited to a maximum value. Thus I can not be overloaded.

The temperature of my motor is controlled constantly. If I am overloaded too much or cooled too less, my power electronic switches me off before something happens to me.

Motor control

I am controlled by a very efficient frequency converter which is stored in a small aluminum box. It provides me with the required energy, controls my power input and speed. The integrated PFC (power factor correction) makes sure that I do not take any wattless current form the mains, but only energy which I can convert into mechanical power.

Frequency converter FU 4

Handling and operation

Via the converter FU 4 I am connected to the 230 V mains. By turning the handle my dip feed is released. The diamond saw blade is now dipped to the requested cutting depth manually and my dip feed is now locked again via the handle. If my handle is released and no dip feed is applied the saw blade returns again into the blade guard completely by a gas spring. By this design my operation safety is increased. By the adjustment of the parallel rockers the ergonomic position of my handhold arrangement is changed only insignificantly. If I am supposed to cut dry, my motor can still be water cooled, while the water flow is deflected by a by-pass valve.

Stability and weight

Due to the favorable arrangement of the parallel rockers I am very stable and can be easily moved linearly by the four guide rollers.

As measured by the high nominal power of 3700 W I am with 8,5 kg light and handy.

Corrosion and water protection

All considerable parts on myself are rust-proof. My casing and my guide bars are made of aluminum and all significant operating elements are made of stainless steel.

My converter and myself are not only very powerful and robust, but also splash water proof according to protection class IP 55 according EN 60 529, i.e. on conventional use no water can enter into my interior.

Oil lubrication

Of course my gear is - like all gears from the WEKA family - provided with an oil bath lubrication. And thus efficient, low in maintenance and long-living.

Lifetime

The operation hours counter which is integrated in my micro controller allows myself to work for 300 hours permanently. Then I show my operator that I want to be maintained by only switching on when my ON button is pressed three times.

WEKA Elektrowerkzeuge

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