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05.2008	

Electric hammer EH 23, 27 Low Vib



Operator's manual

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1 Foreword

This operator's manual contains information and procedures for the safe operation and maintenance of your WACKER machine. In the interest of your own safety and to prevent accidents, you should carefully read through the safety information, familiarize yourself with it and observe it at all times.

This operator's manual is not a manual for extensive maintenance and repair work. Such work should be carried out by WACKER Service or authorized specialists.

The safety of the operator was one of the most important aspects taken into consideration when this machine was designed. Nevertheless, improper use or incorrect maintenance can pose a risk. Please operate and maintain your WACKER machine in accordance with the instructions in this operator's manual. Your reward will be troublefree operation and a high degree of availability.

Defective machine parts must be replaced immediately!

Please contact your WACKER representative if you have any questions concerning operation or maintenance.

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We expressly reserve the right to make technical modifications – even without special notice – which aim at further improving our machines or their safety standards.

2 Introduction

2.1 Means of representation for this operator's manual

Warning symbols

This operator's manual contains safety imformation of the categories: DANGER, WARNING, CAUTION, NOTICE.

They should be followed to prevent danger to life and limb or damage to equipment or improper service.



DANGER

This warning notice indicates hazards that result in serious injury or even death.

Danger can be avoided by the following the actions mentioned.



WARNING

This warning notice indicates hazards that can result in serious injury or even death.

Danger can be avoided by the following the actions mentioned.



CAUTION

This warning notice indicates hazards that can result in minor injury.

▶ Danger can be avoided by the following the actions mentioned.

NOTICE

This warning notice indicates hazards that can result in material damage.

▶ Danger can be avoided by the following the actions mentioned.

Notes

Note: Complementary information will be displayed here.

Instructions

- ► This symbol indicates there is something for you to do.
- 1. Numbered instructions indicate that you have to carry out something in a defined sequence.
- This symbol is used for lists.

2.2 WACKER representative

Depending on your country, your WACKER representative is your WACKER Service, your WACKER affiliate or your WACKER dealer.

You can find the addresses in the Internet at www.wackergroup.com.

The addresses of the WACKER main locations are located at the end of this operator's manual.

2.3 Described machine parts

This operator's manual is valid for different machine parts from a product range. Therefore some figures can differ from the actual appearance of your machine. It is also possible that the descriptions include components which are not a part of your machine.

Details for the described machine types can be found in the chapter *Technical Data*

3 Safety information

3.1 Principle

State of the art

This machine has been constructed with state-of-the-art technology according to the recognized rules of safety. Nevertheless, when used improperly, dangers to the life and limb of the operator or to third persons or damage to the machine or other materials cannot be excluded.

Proper use

The machine must only be used for the following purposes:

- To break off concrete and asphalt and soil that is full of boulders.
- To break off concrete, masonry and other construction materials, untouched and frozen ground.
- To scarify roads and concrete, asphalt, tar and wooden and stone paving.
- To cut clay, loam, peat and salts.
- To break up compacted soils.
- To ram in posts, probes and grounding rods with the corresponding tools.
- To tamp sleepers in track construction.

Its proper use also includes the observance of all instructions contained in this operator's manual as well as complying with the required service and maintenance instructions.

Any other use is regarded as improper. Any damage resulting from improper use will void the warranty and the liability on behalf of the manufacturer. The operator assumes full responsibility.

Structural modifications

Never attempt to modify the machine without the written permission of the manufacturer. To do so will endanger your safety and the safety of other people! In addition, this will void the warranty and the liability on behalf of the manufacturer.

Requirements for operation

The ability to operate the machine safely requires:

- Proper transport, storage and setup.
- Careful operation.
- Careful service and maintenance.

Operation

Operate the machine only as intended and only when in proper working condition.

Operate the machine in a safety-conscious manner with all safety devices attached and enabled. Do not modify or disable any safety devices.

Before starting operation, check that all control and safety devices are functioning properly.

Never operate the machine in a potentially explosive environment.

Maintenance

Regular maintenance is required in order for the machine to operate properly and reliably over time. Neglected maintenance work can make the machine dangerous to use.

- Strictly observe the prescribed maintenance intervals.
- Do not use the machine if it requires maintenance or repairs.

Malfunctions

If you detect a malfunction, you must shut down and secure the machine immediately.

Eliminate the malfunctions that impair safety immediately!

Have damaged or defective components replaced immediately!

For further information, refer to chapter *Troubleshooting*.

Spare parts, accessories

Only use spare parts and accessories from WACKER. Non-compliance will exempt the manufacturer from all liability.

Exclusion of liability

WACKER will refuse to accept liability for injuries to persons or for damage to materials in the following cases:

- Structural modifications.
- Improper use.
- Improper handling.
- Use of spare parts and accessories not produced by WACKER.

Operator's manual

Always keep the operator's manual near the machine or near the worksite for quick reference.

If you have misplaced the operator's manual or require an additional copy, contact your WACKER representative or download it from the Internet (www.wackergroup.com).

Always hand over this operator's manual to other operators or to the future owner of the machine.

Country-specific regulations

Observe the country-specific regulations, standards and guidelines in reference to accident prevention and environmental safety, for example those pertaining to hazardous materials and wearing protective gear.

Complement the operator's manual with additional instructions taking into account the operational, regulatory, national or generally applicable safety guidelines.

Operator's controls

Always keep the operator's controls of the machine dry, clean and free of oil or grease.

The function of the operator's controls must not be manipulated or rendered ineffective.

Cleaning

Always keep the machine clean and be sure to clean it each time you have finished using it.

Do not use gasoline or solvents. Danger of explosion!

Checking for signs of damage

Inspect the machine when it is switched off for any signs of damage at least once per work shift.

Do not start the machine if there is visible damage or defects.

Have any damage or defects eliminated immediately.

3.2 Qualification of the operating personnel

Operator qualifications

Only trained personnel are permitted to start and operate the machine. The following rules also apply:

- You are physically and mentally fit.
- You have received instruction on how to independently use the machine.
- You have received instruction in the proper use of the machine.
- You are familiar with required safety devices.
- You are authorized to start machines and systems in accordance with the standards governing safety.
- You have been assigned to work on the machine by your company.

Incorrect operation

Incorrect operation or misuse by untrained personnel can endanger the health and safety of the operator and also cause machine and material damage.

Work recommendations

Please observe the recommendations below:

- Work only if you are in a good physical condition.
- Work attentively, particularly as you finish.
- Do not operate the machine when you are tired.
- Carry out all work calmly, circumspectly and carefully.
- Never operate the machine under the influence of alcohol, drugs or medication. This can impair your vision, reactions and your judgment.
- Work in a manner that does not endanger others.

3.3 Protective gear

Work clothing

Clothing should be appropriate, i.e. should be close-fitting but not restrict your movement.

When on construction sites, do not wear long hair loosely, loose clothing or jewelry including rings. These objects can easily get caught or be drawn in by moving machine parts.

Personal protective gear

Wear personal protective gear to avoid injuries or health hazards:

- Non-skid, hard-toed shoes.
- Work gloves made of durable material.
- Overalls made of durable material.
- Hard hat.
- Ear protection.
- Face protection (optional).
- Eye protection.
- Breathing protection in the case of dusty ambient air (optional).

Ear protection

This machine generates noise that exceeds the country-specific permissible noise levels (individual rating level). It may therefore be necessary to wear ear protection. You can find the exact value in the chapter *Technical Data*.

WACKER recommends that you always wear ear protection.

3.4 Transport

Restarting

Machines, machine parts, accessories or tools that were detached for transport purposes must be re-mounted and fastened before restarting.

Only operate in accordance with the operating instructions.

Transporting the machine

Secure the machine on the transport device against tilting, falling or slipping.

3.5 Operating safety

Work environment

Familiarize yourself with your work environment before you start work. This includes e.g. the following items:

- Obstacles in the work and traffic area.
- Load-carrying capacity of the ground.
- The measures needed to cordon off the construction site from public traffic.
- The measures needed to secure walls and ceilings.
- Options available in the event of an accident.

Safety in the work area

When working with the machine especially pay attention to the following points:

- Electric lines or pipes in work area.
- Gas lines or water lines in the work area.
- No one may stay in the room to which a passage is broken through, since there is a danger of injury from falling stones and tools.

Checks before starting work

Check the following points before beginning work:

- Condition of tools.
- Machine settings.
- Connection value of the machine.

Starting the machine

Observe the safety information and warning notices located on the machine.

Never attempt to switch on a machine that requires maintenance or repairs.

Switch on the machine as directed in the operator's manual.

Vertical stability

Always make sure that you stand firmly when working with the machine. This applies particularly when working on scaffoldings, ladders, etc.

Caution with hot parts

Do not touch any hot parts such as tools or tool holders during operation or directly afterwards. These parts can become very hot and can cause severe burns.

Caution with movable parts

Keep your hands, feet and loose clothing away from moving machine parts.

Caution with toxic materials

Some materials may contain toxic chemicals which are released during demolition. Therefore personal protective equipment must be worn to prevent inhalation of and skin contact with work dust.

Do not direct towards people

Do not direct the machine towards people in the vicinity during operation. The tool might be flung out and cause serious injuries.

Switching off the machine

Switch off the engine and pull the plug out of the plug receptacle in the following situations:

- Before breaks.
- If you are not using the machine.
- If you are changing the tool.

Before storing the machine, wait until it has completely stopped running.

Store the machine or put it down in such a way that it cannot tilt, fall down or slip.

Storage location

Store the machine after operation at a sealed off, clean and dry location inaccessible to children.

3.6 Safety during the operation of hand machines

Safe working with hand machines

Secure loose workpieces with suitable methods.

While working, as a rule hold the machine on the provided handles with both hands.

Setting the hand machine down properly

Set the machine down carefully. Do not drop the machine to the floor or from greater heights. Dropping the machine can cause injuries to other persons or the machine itself can be damaged.

Safe working with the hammer

Keep the tool holder closed during operation.

3.7 Safety during the operation of electric appliances

Specific regulations for electrical appliances

Observe the safety information provided in the brochure *General Safety Rules* which is included in the scope of delivery of your machine.

Also observe the country-specific regulations, standards and guidelines in reference to accident prevention in connection with electrical equipment and machines.

Electric power supply for electrical appliances of class rating II

Note: The rated voltage is indicated on the nameplate of your machine.

The machine may only be connected to an electric power supply with all machine parts in proper working condition. Take special notice of the following machine parts:

- Plug.
- Power cable over the entire length.

The machine may only be connected to an electric power supply whereby the connector of the grounded conductor (PE) is intact.

Electrical appliances of class rating II have a strengthened or double insulation (protective insulation). They have no connection to the grounded conductor.

Note: Observe the respective national safety regulations!

Extension cable

The machine may only be operated with undamaged extension cables!

Only use extension cables with grounded conductor and correct connection of the grounded conductor to the plug and coupling (only for machines of class rating I).

Only use extension cables which are suitable for use at construction sites: Average rubber hose H05RN-F or better – WACKER recommends H07RN-F or a country-specific equivalent design.

Immediately replace damaged extension cables (e.g. tears in the sheathing) or loose plugs and couplings.

Protecting the power cable

Do not use the power cable to pull or lift the machine.

Do not unplug the power cable by pulling on the cable.

Protect the power cable from heat, oil and sharp edges.

If the power cable is damaged or the plug is loose, have it replaced immediately by your WACKER representative.

Protecting from moisture

Protect the machine against rain, snow or any other forms of moisture. This could cause damage or malfunctions.

3.8 Maintenance

Maintenance work

Service and maintenance work must only be carried out to the extent described in these operating instructions. All other procedures must be performed by your WACKER representative.

For further information, refer to chapter *Maintenance*.

Disconnecting the machine from the electric power supply

Before carrying out service or maintenance work, pull the plug out of the plug receptacle in order to disconnect the machine from the electric power supply.

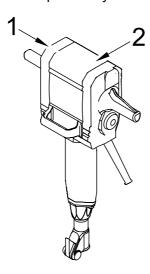
Cleaning the zerk fitting

Wipe the zerk fitting with a clean cloth after the lubrication of the machine. There is a danger of electrocution if there is excessive grease on the zerk fitting.

3.9 Safety labels

Your machine has adhesive labels containing the most important instructions and safety information.

- Make sure that all the labels are kept legible.
- Replace any missing or illegible labels.



Item	Label	Description
1	DO NOT OPERATE WITHOUT SAFETY GUARDS, READ AND UNDERSTAND INSTRUCTION BOOK. NICHT CHINE SCHUTZVORRICHTUNG BETREIBEN. BEDIENUNGSANWEISUNG GENAU DURCHLESEN. NO OPERE SIN LOS DISPOSITIVOS DE SEGURIDAD, LEA Y ENTIENDA PRIMERO LAS INSTRUCCIONES. NE PAS OPERER SANS DEFLECTEUR PROTECTIF. LIRE ET COMPRENDRE LES INSTRUCTIONS DE SERVICE.	Warning Do not operate without protective device. Read the operator's manual carefully.
2		Use eye and ear protection.

4 Scope of delivery

The scope of delivery includes:

- Machine.
- Operator's manual.
- Parts book.
- General safety instructions.

EH Description

5 Description

5.1 Application

You can use the machine with different tools for the following tasks:

- Breaking off concrete and asphalt and soil that is full of boulders.
- Breaking off concrete, masonry and other construction materials, untouched and frozen ground.
- Scarifying roads and concrete, asphalt, tar and wooden and stone paving.
- Cutting clay, loam, peat and salts.
- Breaking up compacted soils.
- Ramming in posts, probes and grounding rods with the corresponding tools.
- To tamp sleepers in track construction.

5.2 Functionality

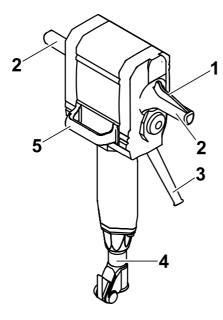
Principle

The machine is a demolition hammer with a pneumatic percussion system. It is driven by an electric motor.

The rotary movement of the electric motor is converted into a stroke movement via a transmission and a crank gear.

The piston is moved forwards and backwards by the crank gear, this compresses the air (forward movement) or generates a partial vacuum (backward movement). Due to change in pressure the percussion piston is moved forward and backwards (air cushion percussion system) and hits the tool.

5.3 Components and operator's controls



Item	Designation	Item	Designation
1	ON/OFF switch	4	Tool holder
2	Handle	5	Supplementary handle
3	Power cable with plug		

Tool holder

The machine is equipped with a silenced tool holder into which the tool is clamped by means of a handle.

Supplementary handle

The supplementary handle ensures a safe work position and reduces operator fatigue. It makes placing the machine in position and working with a tilt easier. WACKER recommends to carry the machine using the supplementary handle.

EH Transport

6 Transport



WARNING

Improper handling can result in injury or serious material damage.

► Read and follow all safety instructions of this operator's manual, see chapter Safety information.

Transporting the machine

- 1. Pull the plug from the plug receptacle.
- 2. Remove tool.
- 3. Wind up the power cable.
- 4. Lift machine with the supplementary handle.
- 5. Place the machine on or into a suitable transport vehicle.
- 6. Secure the machine against falling over and down or sliding.

Note: WACKER recommends to use the truck for the transport on the construction site, refer to chapter *Accessories*.

Operation EH

7 Operation



WARNING

Improper handling can result in injury or serious material damage.

Read and follow all safety instructions of this operator's manual, see chapter Safety information.



WARNING

Electrical voltage.

Injuries from electrocution.

▶ Remove the plug from the plug receptacle before all work on the machine.

7.1 Prior to starting the machine

After unpacking, the machine is ready for operation.

Plug

The machine comes with a country-specific plug as a standard equipment.

Checking the machine

Check the machine and all components for damages.

Checking the mains

- ▶ Check if mains or power distribution on the construction site have the correct operating voltage (see nameplate of the machine or chapter *Technical Data*).
- ► Check if mains or power distribution on the constructions site are protected in accordance with current standards and regulations.

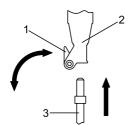
7.2 Changing tools

General notes

Only use tools with intact shanks.

Before inserting the tool, ensure that the tool is sufficiently sharpened to prevent impact damage and that it is suitable for the intended application.

Inserting tool



Item	Designation
1	Handle
2	Tool holder
3	Tool

- 1. Clean shank.
- 2. Swivel out handle on the tool holder.
- 3. Push tool into the tool holder as far as it will go.
- 4. Press the handle on the tool holder.

Removing tool

- 1. Swivel out handle on the tool holder.
- 2. Remove tool from the tool holder.
- 3. Press the handle on the tool holder.

Operation EH

7.3 Starting up

Connecting the machine to the power supply

The machine may only be connected to AC single phase, connection values see chapter *Technical Data*.

NOTICE

Electrical voltage.

Incorrect voltage can cause damage on the machine.

► Check if the voltage of the current source corresponds with the information of the machine, see chapter *Technical Data*.



WARNING

Electrical voltage.

Injuries from electrocution.

- ▶ Check power cable and extension cable for signs of damage.
- ▶ Only use extension cables for which grounded conductors are connected to the plug and the coupling (only for machines of class rating I).
- 1. If required, connect the machine to a permitted extension cable.

Note: See chapter *Technical data* for the permitted lengths and cross-section areas of extension cables.

2. Insert the plug into the plug receptacle.

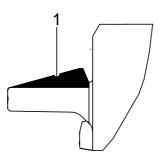
Switching on the machine



WARNING

Injuries from insufficiently guided or uncontrolled machine.

Always hold machine with both hands and stand firmly.



Item	Designation
1	ON/OFF switch

- 1. Place the hammer on the material to be broken.
- 2. Press the ON/OFF switch.

Note: When the ON/OFF switch is pressed, the machine starts to run at full speed immediately.

Work tips

- When working, use the weight of the electric hammer.
- Pressing forcefully against the surface you are working on does not improve the tool's performance.
- To prevent empty impacts and to ensure comfortable handling, a minimum pressure of 100 N must be applied to the two handles.
- Do not place the chisel too far from the edge. That way the material to be processed can be chipped off. The chisel cannot get jammed and the breaking output is increased.

7.4 Decomissioning

Switching off the machine

- 1. Release ON/OFF switch.
- 2. Wait until the machine has come to a complete standstill.
- 3. Set down the machine in such a way that it cannot tilt, fall or slip.
- 4. Pull the plug from the plug receptacle.

Maintenance

EH

8 Maintenance



WARNING

Improper handling can result in injury or serious material damage.

► Read and follow all safety instructions of this operator's manual, see chapter Safety information.

8.1 Maintenance schedule

Task	Daily be- fore oper- ation	Every 20 hrs.	Monthly
Check power cable for perfect condition – if power cable is defective, have it replaced. *	•		
Visual inspection of all parts for damage.			
Clean the machine.			
Keep ventilation slots on the laterial protective cover free from dirt – clean if required.	•		
Check shanks and cutting edges of tool – sharpen, reforge or replace as needed.	•		
Lubricate motor head via the zerk fittings.		•	
Check tool holder for wear – have it changed, if necessary.			•

^{*} Have the machine repaired by your WACKER representative.

EH Maintenance

8.2 Maintenance work



WARNING

Electrical voltage.

Injuries from electrocution.

▶ Remove the plug from the plug receptacle before all work on the machine.

Work in the workshop

Perform maintenance work in a workshop on a workbench. This has the following benefits:

- Protection of the machine of contamination on the construction site.
- A level and clean work surface makes work easier.
- There is a better overview over small parts and they are not lost as easily.

Visual inspection for damage



WARNING

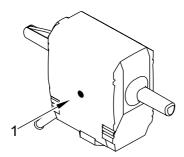
A damaged machine part or power cable can result in personal injury caused by electric current.

- ▶ Do not operate a damaged machine.
- ► Have a damaged machine repaired immediately.
- Check all machine parts and components for damage.

Cleaning the machine

- 1. Remove dirt from ventilation slots.
- 2. Wipe the housing with a damp and clean cloth.

Lubricating the machine



Item	Designation
1	Zerk fitting

Only use special lubricants for lubricating, see chapter *Technical Data*.

1. Place filled manual grease gun onto the zerk fitting and operate approx. 20 times.



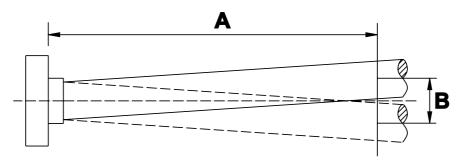
WARNING

Excessive grease.

Injuries from electrocution.

- ► Wipe off excessive grease.
- 2. Wipe off zerk fitting with a clean cloth.

Checking the tool holder for wear



Item	Value
Α	200 mm
В	Max. 6 mm

► Measure the tool play 200 mm from insertion point. Play may not exceed 6 mm.

If the play exceeds 6 mm, the tool holder bushing in the tool holder must be replaced.

9 Troubleshooting

Potential faults, their causes and remedies can be found in the following table.

Malfunction	Cause	Remedy
Machine not in operation.	Power cable interrupted.	Check power cable, have it replaced if defective. *
	Carbon brushes worn.	Have carbon brushes
Machine cuts out.	Carbon brushes worn.	replaces. *

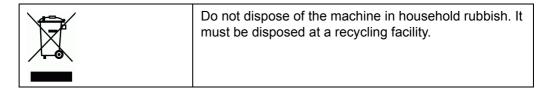
^{*} Have the machine repaired by your WACKER representative.

10 Disposal

10.1 Disposal of the machine

Your machine contains many valuable raw materials which should be disposed and recycled in an environmentally friendly manner.

During disposal of the machine observe the country-specific rules and regulations, e.g. the European Directive for obsolete electrical and electronic devices.



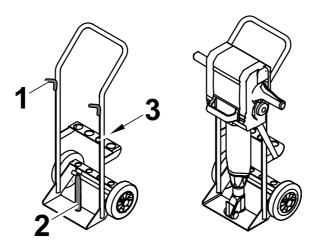
EH Accessories

11 Accessories

There is a wide range of accessories available for the machine.

For more information on the individual accessories, visit the following website: www.wackergroup.com.

11.1 Truck



Item	Designation
1	Hanging device
2	Guide rod
3	Tool holder

Proper use

The truck must only be used for the transport of WACKER large hammers and the required tools.

The truck must not be used for the following:

- Transporting people.
- Transporting other machines except WACKER large hammers.

The truck must not be attached to vehicles.

Accessories EH

Placing hammer on the truck



CAUTION

Insufficient stability of the truck.

Injury or damage caused by the truck tipping over or rolling off when the hammer is placed on it.

- ▶ Place truck on a level surface.
- ► Secure truck against rolling off and tipping over.
- 1. Remove tool from the tool holder.
- 2. Clean the truck's guide rod.
- 3. Insert hammer with the tool holder on the guide rod and rest on the handles of the truck.
- 4. Insert tool in tool holder.

12 Technical data

12.1 EH 23/230 Low Vib

Designation	Unit		EH 23/23	0 Low Vib		
Item no.		0008914 0008943	0008944	0008941	0008942 0610297	
Length x Width x Height	mm (ft)	765 x 530 x 210 (2.5 x 1.7 x 0.7)	820 x 530 x 210 (2.7 x 1.7 x 0.7)	765 x 530 x 210 (2.5 x 1.7 x 0.7)	820 x 530 x 210 (2.7 x 1.7 x 0.7)	
Weight	kg (lb)		22.4	(49.4)		
Rated voltage	٧		230	0 1~		
Rated frequency	Hz		50	– 60		
Rated power consumption	kW	2.2				
Rated current consumption	А	10.8				
Percussion rate	rpm		1,:	280		
Single impact energy	J		Ę	50		
Tool holder		ø 27x80	hex 28x 152	hex 25x 108	hex 28x 160	
Special lubricating grease			Retinax L	X2 grease		
Drive		Univ	versal motor with	n protective insu	lation	
Class rating		II				
Sound power level L _{WA} *	dB(A)	106				
Sound pressure level L _{pA} at operator's station **	dB(A)	97				
Total vibration value of the acceleration a _{hv} ***	m/s ²		4	.8		

^{*} According to ISO 3744

^{**} According to ISO 11201

^{***} Determined according to DIN EN ISO 5349.

12.2 EH 23/115 Low Vib, EH 23/100 Low Vib

Designation	Unit	EH 23/115 Low Vib	EH 23/100 Low Vib
Item no.		0008916	0610238
Length x Width x Height	mm (ft)		30 x 210 .7 x 0.7)
Weight	kg (lb)	22.4	(49.4)
Rated voltage	V	115 1~	100 1~
Rated frequency	Hz	50-	-60
Rated power consumption	kW	2.2	1.5
Rated current consumption	А	22	15
Percussion rate	rpm	1,3	300
Single impact energy	J	50	
Tool holder		hex 2	8x160
Special lubricating grease		Retinax L	X2 grease
Drive			or with protec- sulation
Class rating			II
Sound power level L _{WA} *	dB(A)	106	
Sound pressure level L _{pA} at operator's station **	dB(A)	97	
Total vibration value of the acceleration a _{hv} ***	m/s ²	4	.8

^{*} According to ISO 3744

^{**} According to ISO 11201

^{***} Determined according to DIN EN ISO 5349.

12.3 EH 27/120 Low Vib, EH 27/127 Low Vib

Designation	Unit	EH 27/120 Low Vib	EH 27/127 Low Vib
Item no.		0610195	0610196
Length x Width x Height	mm (ft)		30 x 210 .7 x 0.7)
Weight	kg (lb)	27 (59.5)
Rated voltage	V	120 1~	127 1~
Rated frequency	Hz	50-	-60
Rated power consumption	kW	1	.8
Rated current consumption	Α	15	13.6
Percussion rate	rpm	1,0	000
Single impact energy	J	5	60
Breaking output (concrete C25)	kg/h (lb/h)	630 (1,389)	
Tool holder		hex 28	3 x 152
Special lubricating grease		Retinax L	X2 grease
Drive		Universal electric motor with protective insulation	
Class rating			I
Sound power level L _{WA} *	dB(A)	106	
Sound pressure level L _{pA} at operator's station **	dB(A)	94	
Total vibration value of the acceleration a _{hv} ***	m/s ²	5	.5

^{*} According to ISO 3744

^{**} According to ISO 11201

^{***} Determined according to DIN EN ISO 5349.

12.4 Extension cable

A permitted extension cable must fulfill the following criteria:

- The extension cable must be undamaged.
- The extension cable has to be connected correctly on plug and bushing.
- The extension cable has to be suitable for use at construction sites: Average rubber hose H05RN-F or better WACKER recommends H07RN-F or a country-specific equivalent design.
- The extension cable must have been checked by a qualified electrician.
- The required cross-section area of a designated extension has been taken from the table below.

Note: Refer to the nameplate or the chapter *Technical data* (via the item number) for the type designation and voltage rating of your machine.

Machine	Voltage [V]	Extension [m]	Cross-section area of cable [mm ²]
EH 23/100	100	< 17	1.5
Low Vib		< 29	2.5
		< 46	4
		< 68	6
EH 23/115	115	< 23	2.5
Low Vib		< 36	4
EH 23/230	230	< 56	1.5
Low Vib		< 92	2.5
		< 147	4
EH 27/120	120	< 20	1.5
Low Vib		< 34	2.5
		< 55	4.0
EH 27/127	127	< 24	1.5
Low Vib		< 40	2.5
		< 64	4.0

Extension cable for the US market:

Machine	Voltage [V]	Extension [ft]	Cross-section area of cable [AWG]
EH 23/100	100	< 79	14
Low Vib		< 125	12
		< 197	10
EH 23/115	115	< 98	12
Low Vib		< 154	10
EH 23/230	230	< 157	16
Low Vib		< 253	14
		< 397	12
		< 492	10
EH 27/120	120	< 95	14
Low Vib		< 148	12
		< 236	10
EH 27/127	127	< 112	14
Low Vib		< 174	12
		< 276	10

Example

You utilize an EH 23/115 **Low Vib** and want to use an extension cable with a length of 36 m (118 ft).

The machine has an input voltage of 115 V.

According to the table, the extension cable must feature a cross-section area of 4 \mbox{mm}^2 (AWG 10).

Technical data EH



EC Declaration of Conformity

Wacker Construction Equipment AG, Preußenstraße 41, 80809 München certifies that the construction machines:

Category

Demolition hammer

Туре		EH 23/100 Low Vib	EH 23/115 Low Vib	EH 23/230 Low Vib	EH 27/120 Low Vib
Machine type number		0610238	0008916	0008914, 0008943, 0008944, 0008941, 0008942	0610195
Operating weight	kg		22.4		27

fulfill the requirements of the following directives:

Conformity assessment procedure	At the following test center	Measured sound power level	Guaranteed sound power level
Appendix VIII	VDE Prüf- und Zertifi- zierungsinstitut Merianstraße 28 63069 Offenbach/Main	106 dB(A)	107 dB(A)

98/37/EC 2004/108/EC EN 61000 2000/14/EC 2006/95/EC

Dr. Stenzel

Head of Research and Development



VDE Prüf- und Zertifizierungsinstitut

VDE VERBAND DER ELEKTROTECHNIK ELEKTRONIK INFORMATIONSTECHNIK e.V.

CERTIFICATE

Registration-Number: 6236/QM/06.97

This is to certify that the company



Wacker Construction Equipment AG Wacker-Werke GmbH & Co. KG

at the following locations

Head Office Munich Preußenstraße 41 80809 Munich

Production plant Reichertshofen
Karlsfeld logistics centre
Sales regions with all branches all over Germany

has implemented and maintains a **Q**ality **M**anagement **S**ystem for the following scope:

Machine manufacture Construction machines

This Q System complies with the requirements of

DIN EN ISO 9001:2000

and the requirements of the German and international Road Traffic Act.

This Certificate is valid until 2009-06-05.

VDE Testing and Certification Institute

Certification

Date: 2006-05-30

63069 Offenbach, Merianstraße 28

Telefon: +49 (0) 69 83 06-0, Telefax: +49 (0) 69 83 06-555 E-Mail: <u>vde-institut@vde.com</u>, <u>http://www.vde-institut.com</u>

The VDE Testing and Certification Institute is accredited by DAR Accreditation Bodies according to DIN EN ISO 17020 and DIN EN ISO 45012 and notified in the EU under ID.No. 0366.



TGA-ZM-09-92-00 KBA-ZM-A 00021-97

