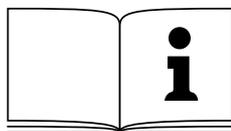


# ELEKTRA BECKUM

metabo germany



## SPA 2001 W



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**D DEUTSCH****KONFORMITÄTSERKLÄRUNG**

Wir erklären in alleiniger Verantwortlichkeit, dass dieses Produkt mit den folgenden Normen übereinstimmt\* gemäß den Bestimmungen der Richtlinien\*\*

**F FRANÇAIS****DECLARATION DE CONFORMITE**

Nous déclarons, sous notre seule responsabilité, que ce produit est en conformité avec les normes ou documents normatifs suivants\* en vertu des dispositions des directives \*\*

**IT ITALIANO****DICHIARAZIONE DI CONFORMITÀ**

Noi dichiariamo sotto la nostra esclusiva responsabilità che il presente prodotto è conforme alle seguenti norme\* in conformità con le disposizioni delle normative \*\*

**PT PORTUGUÊS****DECLARAÇÃO DE CONFORMIDADE**

Declaramos sob nossa responsabilidade que este produto está de acordo com as seguintes normas\* de acordo com as directrizes dos regulamentos \*\*

**FIN SUOMI****VAATIMUKSEN MUKAISUUSVAKUUTUS**

Vakuutamme, että tämä tuote vastaa seuraavia normeja\* on direktiivien määräysten mukainen\*\*

**DA DANSK****OVERENSSTEMMELSESATTEST**

Hermed erklærer vi på eget ansvar, at dette produkt stemmer overens ed følgende standarder\* iht bestemmelserne i direktiverne\*\*

**EL ΕΛΛΗΝΙΚΑ****ΔΗΛΩΣΗ ΑΝΤΙΣΤΟΙΧΕΙΑΣ**

Δηλώνουμε με ίδια ευθύνη ότι το προϊόν αυτό αντιστοιχεί στις ακόλουθες προδιαγραφές\* σύμφωνα με τις διατάξεις των οδηγιών\*\*

**ENG ENGLISH****DECLARATION OF CONFORMITY**

We herewith declare in our sole responsibility that this product complies with the following standards\* in accordance with the regulations of the undermentioned directives\*\*

**NL NEDERLANDS****CONFORMITEITSVERKLARING**

Wij verklaren als enige verantwoordelijke, dat dit product in overeenstemming is met de volgende normen\* conform de bepalingen van de richtlijnen\*\*

**ES ESPAÑOL****DECLARACION DE CONFORMIDAD**

Declaramos bajo nuestra exclusiva responsabilidad, que el presente producto cumple con las siguientes normas\* de acuerdo a lo dispuesto en las directrices\*\*

**SV SVENSKA****FÖRSÄKRAN OM ÖVERENSSTÄMMELSE**

Vi försäkrar på eget ansvar att denna produkt överensstämmer med följande standarder\* enligt bestämmelserna i direktiven\*\*

**NO NORGE****SAMSVARERKLÆRING**

Vi erklærer under eget ansvar at dette produkt samsvarer med følgende normer\* henhold til bestemmelsene i direktiv\*\*

**POL POLSKI****OŚWIADCZENIE O ZGODNOŚCI**

Oświadczamy z pełną odpowiedzialnością, że niniejszy produkt odpowiada wymogom następujących norm\* według ustaleń wytycznych \*\*

**HU MAGYAR****MEGEGYZŐSÉGI NYILATKOZAT**

Kizárólagos felelősségünk tudatában ezennel igazoljuk, hogy ez a termék kielégíti az alábbi szabványokban lefektetett követelményeket\* megfelelő az alábbi irányelvek előírásainak\*\*

## Späneabsauganlage SPA 2001 W

\* DIN EN 292-1, DIN EN 292-2, EN 60204-1, DIN 8416, GS-HO-07

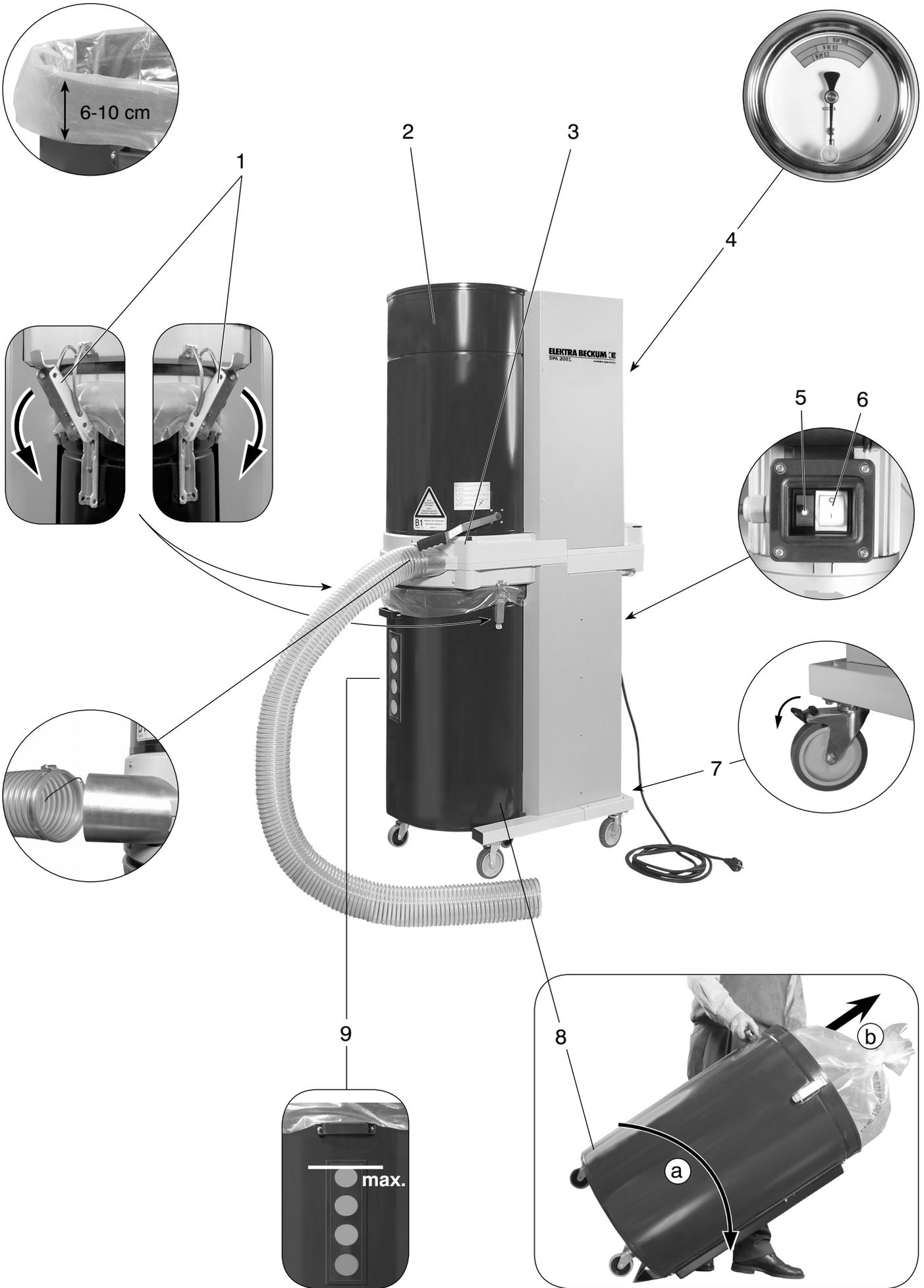
\*\* 98/37/EG - 73/23/EWG - 89/336/EWG - 93/68/EG



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ENG ENGLISH

# Operating Instructions

Dear customer,

Many thanks for the trust that you have placed in us by purchasing your new Elektra Beckum dust extractor. Every Metabo dust extractor is carefully tested and subjected to stringent quality control procedures by the Elektra Beckum quality assurance department. The service life of a dust extractor depends a great deal on you, however. Please read the information in these operating instructions and the accompanying documents. The greater the care with which you handle your Elektra Beckum dust extractor, the longer it will provide a reliable service to you.

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## 1 Read first!

These operating instructions have been presented in a way that will allow you to work quickly and safely with your machine. Here are a few tips to help you read these operating instructions:

- Read all of these operating instructions prior to commissioning the machine. Pay particular attention to the safety instructions.
- These operating instructions are intended for people with basic technical knowledge in handling machines such as the one described here. If you have had no experience with machines of this kind, you should initially work under the supervision of people with previous experience.
- Keep safe all documents supplied with this machine so that you can refer to them if required. Keep proof of purchase for possible warranty cases.
- Should you ever lend or sell the machine, make sure that any machine documents are passed on with it.
- The manufacturer bears no liability for damage caused by non-compliance with these operating instructions.

## 2 Specified Use

The dust extractor has been tested at the testing premises of the "HOLZ" Fachausschuss (Technical Committee responsible for testing wood dust), Kalscheurer Weg 12, 50969 Köln, Germany, in accordance with testing principles GS-HO-07 from the chief association of the Gewerbliche Berufsgenossenschaft e.V. (Registered German Industrial Employers' Liability Insurance Association), Alte Heerstraße 111, 53757 St. Augustin, Germany, technical "HOLZ" Fachausschuss.

It is therefore suitable for separating wood dust, where the residual dust content level 2 "H2" of 0.2 mg/m<sup>3</sup> is reliably observed.

The dust extractor bears the mark of conformity with the corresponding supplement:



The result of the dust test is based on the extraction of dry wood dust and dry wood chips with a wood moisture content < 30%.

### 1. Use as a dust extractor

The machine can be used to extract wood dust and chips from individual wood-processing machines (also oak and beech wood dust). The diameter of the extractor connection piece on the machine can be up to 100 mm. Reduction pieces may be required and are supplied by Elektra Beckum as accessories. Wood-processing machines whose extractor connection piece diameter is greater than 100 mm must not be connected to the dust extractor.

### 2. Use as a vacuum cleaner

The machine can be used for vacuuming deposited wood dust and chips (also oak and beech wood dust) in combination with the cleaning nozzle, order no. **0913031270**.

When connecting an extractor hose, make sure that only electroconductive and flame-retardant hoses are used and that the electric connection between the hose and connector is correct.

Only original Elektra Beckum accessories and spare parts should be used.

The user bears sole responsibility for damage caused by improper use. Generally accepted accident-prevention regulations and safety instructions should be observed.

## 3 General information on safety

Before using the dust extractor, read the operating instructions carefully all the way through. Keep safe all documents accompanying the dust extractor.



For your own safety and for protection of your dust extractor, read all parts of the text marked with this symbol!

- Only original Elektra Beckum accessories and spare parts should be used.
- The dust extractor should only be operated by people who have been informed on how to use it and who have been given express permission to do so.
- The machine should only be used for dry cleaning tasks and not outdoors.
- Make sure that the power cable is not damaged by being driving over, crushed, dragged or similar.
- The power cable must be inspected regularly for signs of damage or aging.
- The machine should not be used if the power cable is not in perfect condition.
- When replacing the power cable, only use a rubber hose line, type HO7RN 3 x 1.5 mm<sup>2</sup>.
- Use a protective contact connector when replacing the mains plug.
- The power cable and mains plug should only be replaced by personnel qualified to perform this task.
- If the mains or machine power cable needs to be replaced, the type specified by the manufacturer must be used, without exception.
- The plug should only be plugged in once the dust extractor has been successfully set up at the location of use; connection to alternating current protective contact mains wall socket with inert upstream 10 A fuse.
- Disconnect the mains plug after use, prior to moving the dust extractor to another location and before cleaning, maintaining, replacing or removing movable parts.
- Only use original Elektra Beckum accessories when operating the dust extractor.
- When extracting oak and beech wood dust, the filtered air should only be returned to the place that it was extracted from. This is ensured if the dust extractor is set up beside the machining equipment.
- When extracting oak and beech wood dust, the volumetric flow returned by the dust extractor should amount to a maximum of 50% of the intake air. In the case of free room ventilation, an intake air flow of 1 x room volume (m<sup>3</sup>/h) should be adopted (air change quantity LW = 1/h).
- Maintain sufficient air supply.
- Type 1 dust-explosion protected dust extractors are technically suitable for extracting combustible dust (moist and dry) of dust-explosion classes St 1 and St 2 (Kst value < 300 bar x m x s<sup>-1</sup>) in zone

11 (see Elex V, § 2 (4)). They should only be used to extract surface dust.

- Type 1 dust-explosion protected dust extractors are technically suitable for extracting combustible dust (moist and dry) of dust-explosion classes St 1 and St 2 (Kst value  $< 300 \text{ bar} \times \text{m} \times \text{s}^{-1}$ ) in zone 11 (see Elex V, § 3 (4)). They are not suitable for extracting objects (from wood-processing machines) where active ignition sparks cannot be ruled out. They should only be used to extract individual sources of dust.
- From a safety viewpoint, dust-explosion protected industrial vacuum cleaners and dust extractor are unsuitable for vacuuming or extracting materials that pose a danger of explosion or similar based on § 1 Explosive G, dust of dust-explosion class St 3, and flammable liquids.
- The use of electric coupling devices and adapters is not permitted during operation.
- The dust-collection container must be emptied when necessary, but should always be emptied after use. Only original Elektra Beckum replacement parts should be used.
- Fluids, aggressive gases, easily flammable materials or glowing particles (glowing embers or similar) should not be extracted. It is prohibited to use the dust extractor e.g. in paintshops. Extraction at wood-processing machines where active ignition sparks and glowing embers are expected (e.g. multiple-bladed saws) is prohibited.
- Do not extract from sources of sparks! Do not extract from spark-generating machines!
- Caution! Clean the machine after it has been used, but a minimum of once a day! (See Section 9)

#### Caution:

Safety equipment that prevents or eliminates hazards must be maintained regularly and checked a minimum of once a month for safe, faultless function by a skilled expert in accordance with § 39(3), VBG 1 – General regulations – and in accordance with TRGS 560. See Section 14.

#### 4 Preventing danger

##### • Mechanisms

All moving machine components driven by electric motors must be covered by static, safely attached protective panelling that can only be removed using tools.

**Other risks:** If a panel that can only be disassembled using tools is removed, there is a possibility of injury from the operating machine.

##### • Electrics

All electrical components must be covered by static, safely attached protective panelling that can only be removed using tools. The machine corresponds to safety class I in accordance with EN 60 335.

**Other risks:** If a panel that can only be disassembled using tools is removed, there is a danger of electric shocks.

##### • Dust

Using disposable dust bags with a sealable opening ensures dust-free disposal of collected material.

**Other risks:** When a dust bag is changed, there is a risk of inhaling dust.

Compliance with the instructions in Section 10 (Disposing of collected material) minimises these dangers.

#### 5 Delivery and assembly

The machine is already fully assembled.

- 1) Remove the packaging foil.
- 2) Unscrew and remove the corner plate that secures the machine to the pallet.
- 3) Lift the machine from the pallet with help from a second person.

#### 6 Overview

See page 3 (please unfold).

- 1 Latches (dust containers)
- 2 Filter housing
- 3 Cleaning lever
- 4 Pressure gauge
- 5 Button (overload protection)
- 6 On/off switch
- 7 Lockable machine roller
- 8 Dust containers
- 9 Viewing window (filling level)

#### 7 Initial Operation

**Note:** The extraction hose and dust bag supplied are located inside the container (8).

##### 7.1 Setting up

The dust extractor should be set up as close to the wood-processing machine as possible. It should be set up on a level surface. Lock the rear machine roller.

##### 7.2 Inserting the dust bag

- 1) Fold down both latches (1) **simultaneously**: The container (8) is lowered.
- 2) Roll the container forwards.
- 3) Insert new dust bag in the container (make sure that the dust bag rests as flush against the container wall as possible) and fold approx. 6-10 cm over the edge of the container, minimising creases while doing so (see Figure on page 3).
- 4) The dust bag should rest flush in the area around the viewing window (9) so that the filling level can be seen clearly.
- 5) Roll the container under the dust extractor.
- 6) Close both latches (1) : The container is raised and forms a tight seal with the dust extractor.

*The next time the machine is switched on, a vacuum is generated in the container. The dust bag then automatically nestles against the wall of the container, optimising use of the dust bag capacity.*

##### 7.3 Connecting the extractor hose



Only use electroconductive hoses. Hoses made from plastic must be flame-retardant.

- 1) At one end of the spiral hose, strip the metal spiral so that approx. 5 cm of the metal spiral protrudes.
- 2) Cut off the piece of hose that the metal spiral was removed from.
- 3) Bend the stripped piece of metal spiral in such a way that it protrudes inside the spiral hose.
- 4) Push the end of the hose (and one hose clamp) over the extractor connection piece from the dust extractor and secure with the hose clamp: Attach the hose clamp in such a way that the stripped metal spiral is pressed against the extractor connection piece on the dust extractor to ensure that there is an electroconductive connection.



Make sure that the electrical connection between the hose and extractor connection piece on the dust extractor is perfect.

#### 7.4 Power supply



Before plugging in check to see that the rated mains voltage and mains frequency, as stated on the rating label, match with your power supply.

#### 7.5 Switching On and Off

After connecting the extraction hose to the wood-processing machine:

- 1) first switch on the dust extractor at the on/off switch (6),
- 2) then switch on the wood-processing machine

Perform these actions in reverse order when switching off the machines.

#### 8 Monitoring the minimum volume flow rate

The vacuum should be monitored at the pressure gauge (4).

##### a.) Use as a dust extractor

Wood-processing machines with different extraction connection piece diameters can be connected to the dust extractor. Pay attention here that the extracted volumetric flow does not fall below the minimum quantity. This minimum volumetric flow depends on the diameter of the connection piece on the machine generating the dust.

There are red areas on the pressure gauge scale, which are marked with the extractor connection piece diameters.



**If the pointer of the pressure gauge is in the red area of the extractor connection piece being used, the filter must be cleaned.**

**Note:** The minimum volumetric flow on the dust extractor is monitored by measuring the vacuum upstream of the ventilator. If the maximum permitted vacuum value is exceeded, the pointer moves to the red area.

If the diameter of the extractor connection piece or minimum volumetric flow at the machine generating dust is between the range of values in the table, the next largest diameter is used for monitoring the value.

The ratios are shown in the following table:

Meaning of columns:

**Column 1:** Diameter of extractor connection piece on the wood-processing machine.

**Column 2:** Minimum volumetric flow in extractor connection piece at 20 m/s.

**Column 3:** Possible vacuum at start of extraction hose (2.5 m long). Interface between machine generating dust and dust extractor, at minimum volumetric flow. The manufacturer of the wood-processing machine specifies the vacuum required for the machine. This value must be less than the value for the dust extractor in order for extraction from the wood-processing machine to occur as specified.

**Column 4:** Vacuum indicated on the pressure gauge scale.

1	2	3	4
(mm)	(m <sup>3</sup> /h)	(Pa)	(Pa)
100	565	1020	1560
80	362	1460	1740
63	224	1680	1840

##### b.) Use as a vacuum cleaner

With the cleaning nozzle, order no. **0913031270**, the dust extractor can also be

**ENG ENGLISH**

used as a vacuum cleaner for vacuuming deposited wood dust or chips, and corresponds to applicable regulations, even for oak and beech wood dust.

Here, the minimum volume flow is also monitored at the pressure gauge. For a cleaning nozzle with a connector diameter of 100 mm, the filter must be dedusted if the pointer on the pressure gauge is in the red area of the 100 mm extractor connection piece diameter being used.

**9 Dedusting the filter**

If the pointer of the pressure gauge is in the red area, the filter must be cleaned.

Clean the machine after it has been used, the filter should be dedusted a minimum of once a day!

- 1) Switch off the wood-processing machine
- 2) Switch off the dust extractor at the on/off switch (6)
- 3) Wait until the rotor on the ventilator comes to a halt (otherwise cleaning will be inadequate).
- 4) Actuate the cleaning lever (3) on the filter housing several times.

If the pointer on the pressure gauge is still in the red area after cleaning and start-up:

- 1) Check whether the maximum filling capacity in the container (8) has been reached (top edge of the top viewing window (9)). If necessary, empty the container (see Section 11).
- 2) Check whether the extraction hose is blocked. (See Section 13).
- 3) Is the suction hose being used too long? If necessary, reduce the suction hose to a standard 2.5 m.
- 4) To avoid kinks and constrictions, do not lay the suction hose around sharp corners.
- 5) If the pointer is still in the red area, the filter bag must be replaced (see Section 11).

**10 Disposing of collected dust**

Wear a dust mask (filter mask with class 2 particle filter). Avoid covering third parties with dust. Dust must be only disposed of in authorised locations (disposal as per local regulations).

When the dust bag reaches the maximum filling level in the container (level with the top edge of the top viewing window) remove and replace it with a new one.

**Removing the full dust bag:**

- 1) Secure the lockable machine roller.
- 2) Fold down both latches (1) **simultaneously**: The container is lowered.
- 3) Roll the container forwards.
- 4) Carefully close the dust bag.
- 5) Lift the dust bag from the container or tip the container upside down and place it on the ground - the dust bag can be removed more easily using the second method.
- 6) Stand the container the correct way up

**Inserting a new dust bag:**

- 1) Insert new dust bag in the container (make sure that the dust bag rests as flush against the container wall as possible) and fold approx. 6-10 cm over the edge of the container minimising creases while doing so.
- 2) The dust bag should rest flush in the area around the viewing window so that the filling level can be seen clearly.
- 3) Roll the container under the dust extractor.

- 4) Close both latches (1) : The container is raised and forms a tight seal with the dust extractor.

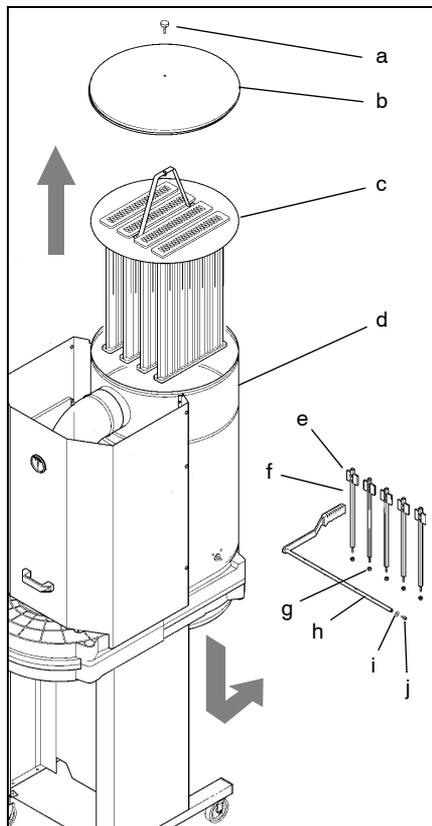
**11 Replacing the bag filter**

After longer operating periods, the filter bag slowly becomes clogged with fine dust embedded deep in its pores. The cleaning device can no longer remove this trapped dust. In this case, the filter bag must be replaced. Replacement filter, see Section 13.



The person replacing the bag must wear a dust mask (filter mask with class 2 particle filter) and appropriate eye protection. Avoid covering third parties with dust.

- 1) Pull out the mains plug
- 2) Secure the lockable machine roller.
- 3) Clean the filter thoroughly once more by actuating the hand lever (3).
- 4) Fold down both latches (1) **simultaneously**: The container is lowered.
- 5) Roll the container forwards.
- 6) One recommendation here is to carefully lay the dust extractor on its back in order to reach the components more easily. If the dust extractor is not laid on its back, a ladder will be required.
- 7) On the inside of the filter housing (d): Unscrew the 5 hexagon nuts (g) (WAF 10) and remove the wiper arm (f) from the vibration rod (h).
- 8) Replace worn wiper elements (e).
- 9) Loosen the screw (j) (Torx 20) and remove together with the washer (i).
- 10) Remove vibration rod (h).
- 11) Unscrew star handle (a) on filter cover. Remove filter cover (b).



- 12) Use a sharp knife to cut through the silicon seal between the filter bag cover (c) and the filter housing (d). Pull the filter bag upwards and remove, place in a dust bag, order no. **0913059433**, close the dust bag and dispose of in accordance with local regulations.
- 13) Insert a new filter bag (c) - make sure the vibration rod is in the correct position.

- 14) Apply new silicon sealing agent and leave to harden/bond (min. 6 hours) - **do not switch on or move**.
- 15) Assemble in reverse order.

**12 Rectifying faults**

Pointer on the pressure gauge is in the red area: see Sections "10 Dedusting the filter", "9 Monitoring the minimum volume flow rate"

If during operation the volumetric flow of the dust extractor is considerably reduced or stops altogether, the intake hose is probably blocked.



Wear a dust mask (filter mask with class 2 particle filter). To remove the blockage, disconnect the hose and take it outside or to a room with extraction facilities. Hold the hose vertically or hang it up. Beat the outside of the hose lightly to loosen the dust clogged in the hose. This activity must be carried out without harming uninvolved third parties.

The dust extractor is fitted with an overload protector that switches the dust extractor off to prevent damage. Pinpoint and rectify the cause. Then press the button (5) to return the overload protector to its normal position.

The machine may experience temporary reductions in voltage if mains power conditions are unfavourable.

If the impedance at the connection point to the public mains power supply is greater than 0.2 ohms, other measures may be required before the machine can operate correctly at this connection point. If necessary, consult the local energy supply company regarding impedance.

**13 Spare parts and accessories**

Filter bag set with fitted filter plate (as a replacement) Order no. **0913059441**

Dust bags (pack of 10) Order no. **0913059433**

Suction hose (as a replacement), flame-retardant, dia. 100 mm, 2.5 m in accordance with Regulation ZH 1/139 Order no. **1013690533**

Universal adapter Order no. **0913031288**

Cleaning nozzle Order no. **0913031270**

Transfer ring Order no. **0913031300**

**14 Maintenance**

Regular maintenance consists of three inspections:

**The following inspections should be carried out on a daily basis:**

- Visual inspection to determine whether
- the machine or components thereof are damaged.
  - Suction performance check.

**The following maintenance should be carried out on a monthly basis:**

- Visual inspection to determine whether
- the machine or components thereof are damaged.
  - there are any leaks.
  - the minimum volumetric control (pressure gauge) is functioning correctly.
  - Suction performance check.

**The following general inspections should be carried out on an annual basis:**

- Visual inspection to determine whether
- the filter is OK (dust indicator).
  - the machine or components thereof are damaged.

- there are any leaks.
- the minimum volumetric control (pressure gauge) is functioning correctly.
- Suction performance check.

A log for annual general inspections should be kept. This must clearly show the date of the inspection, identified faults and the name of the inspector. If required, the machine should undergo an overhaul!

### 15 Overhaul

If required, an overhaul must be carried out. Written records should be made of the work carried out during the overhaul.

### 16 Repairs

**Repairs to the dust extractor should only be carried out by qualified technicians!**

Elektra Beckum machines requiring repairs can be sent to the address specified on the spare-parts list. Please enclose a description of the fault with the power tool.

### 17 Environmental Protection

Elektra Beckum packaging is 100% recyclable. Worn-out devices and accessories contain large amounts of valuable raw materials and plastics, which can also be recycled.

These operating instructions are printed on chlorine-free bleached paper.

### 18 Technical Specifications

Changes due to technological progress reserved.

Operating mode:	Continuous operation
Current type:	1-phase alternating current
Frequency:	50 Hz
Rated consumption:	$P_1=1.47$ kW
Output performance:	$P_2=1.1$ kW
Mains voltage:	~230 V
Power consumption:	6.4 A
Degree of protection:	IP 54
Idling speed:	2830 rpm

Diameter of extractor connection piece: 100 mm

Dimensions: 1085 x 655 x 1974 mm

Weight: 97 kg

Filtering surface: 3.45 m<sup>2</sup>

Dust collection volume: 135 l

Rated volumetric flow:  $V_{\text{rat}} = 775$  m<sup>3</sup>/h

Related vacuum: 2095 Pa  
(upstream of ventilator)

Minimum volumetric flow:  $V_{\text{min}} = 565$  m<sup>3</sup>/h

Related vacuum: 1572 Pa  
(upstream of ventilator)

Max. vacuum: 2430 Pa

Typical A-weighted sound level:

Sound-pressure level:  $L_{pA}=78$  dB(A)

Sound output level:  $L_{WA}=94$  dB(A)

Wear ear protection!

Sound level as per MRL, Appendix 1,  
Point 1.7.5 f, in free field, distance 1 m,  
height 1.6 m.

Measured values determined in conformity  
with EN 23744.

The stated technical specifications are  
subject to tolerances (as specified in the  
respective current standards).

**ELEKTRA BECKUM **<sup>®</sup>  

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**metabo germany**