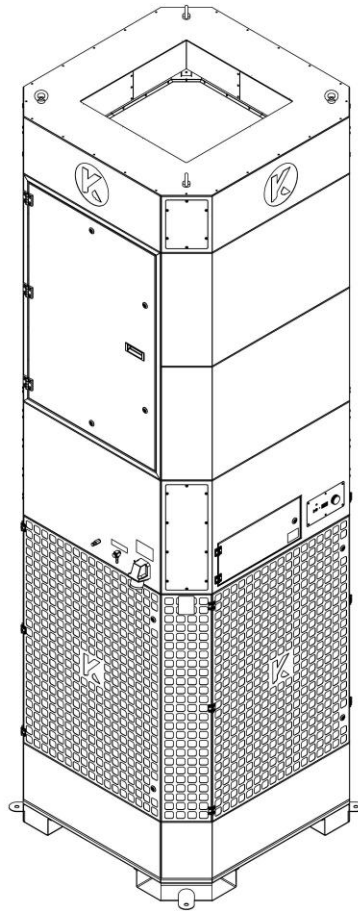
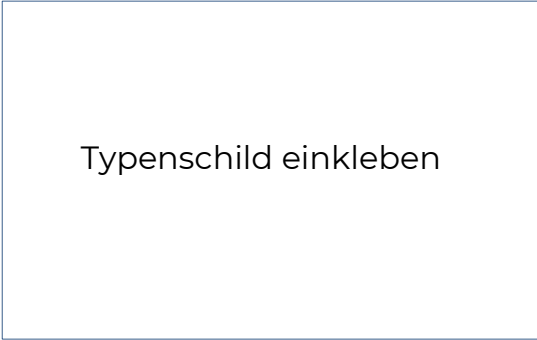




AirDome

EN – Operating Manual



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1 General

1.1 Introduction

This manual is an essential aid for the proper and safe operation of the product.

These operating instructions contain important information to ensure safe, proper and efficient operation of the product. Observing these instructions helps avoiding danger, reducing repair costs and downtimes and increasing the reliability and service life of the product. The operating instructions must be kept available at all times and have to be read and applied by every person who is assigned to work on or with the product.

These include amongst others:

- the operation and troubleshooting during operation
- the maintenance (care, maintenance, repair)
- the transport
- the assembly
- the disposal

Technical modifications and errors expected.

1.2 References to copyright and industrial property rights

These operating instructions are to be kept confidential and made accessible only to authorised persons. Disclosure to third parties is only permitted with the prior written consent of the manufacturer KEMPER GmbH.

All documents are protected under the Copyright Act. Any form of disclosure, reproduction, or partial use, as well as the communication of its content, is prohibited without express written permission.

Violations will be prosecuted under criminal law and will incur liability for any resulting damages.

Industrial property rights such as patents, trademarks, or designs are exclusively held by the manufacturer.

1.3 Notes for the operating company

The operating instructions are an essential part of the product.

The operating company must ensure that the operating personnel is aware of the contents of this manual.

Based on national regulations for accident prevention and environmental protection, the operating instructions are to be supplemented by the operating company's own operating instructions, including information on regulatory and reporting requirements to meet specific operating requirements, such as work organisation, work flow and staff employed. In

addition to the operating instructions and the relevant obligatory regulations for accident prevention applicable in the country of use, it is also imperative to comply with the recognised technical rules for safe and professional handling.

Without prior consent from the manufacturer, the operating company may not carry out any changes, conversions or additions to the product which may impair safety. Spare parts used must comply with the manufacturer's specified technical requirements. This is always the case with original replacement parts.

Only use trained and instructed staff for the operation, maintenance, repair and transport of the product. Clearly define for staff who is responsible for operation, maintenance and transport.

2 Safety

2.1 General information

The product is designed and built according to state-of-the-art technology and the recognised safety rules and regulations. When operating the product, technical hazards for the operator or impairment of the product as well as other property may occur, if:

- it is not operated by trained or instructed personnel
- it is not used for the purpose intended and/or
- it is improperly maintained

2.2 Information on signs and symbols

⚠ DANGER

This symbol in conjunction with the signal word "Danger" indicates imminent danger. Non-adherence of the safety note leads to death or serious injuries.

⚠ WARNING

The symbol in conjunction with the signal word "Warning" indicates a potentially dangerous situation. Non-adherence to the safety notice may lead to death or serious injuries.

⚠ CAUTION

The symbol in conjunction with the signal word "Caution" indicates a potentially dangerous situation. Non-adherence of the safety note may lead to slight or negligible injuries.

May also be used for warnings against property damage.

NOTE

The general information is simple additional information which does not warn about personal injury or property damage.

1. Enumerations of action steps are marked as numbers with a dot, where the order is important.
- Bullet points indicate lists of parts in a legend or instructions for which the sequence is unimportant

2.3 Markings/signs to be affixed by the operating company

The operating company is obliged to post further markings and signs on the product and the surrounding area if necessary.

Such markings and signs might be related, for example, to the requirement for wearing personal protective equipment.

2.4 Safety instructions for operating staff

Before use, the operator of the product must be instructed through information, instructions and training on the handling of the product and the materials and aids to be used.

The product system may only be used in technically perfect condition, for its intended purpose, in full awareness of the safety aspects and potential dangers and in accordance with these instructions. All errors, especially those that may affect safety, must be removed immediately.

Every person who is charged with commissioning, operation or maintenance must have fully read and understood these operating instructions. This specifically applies to staff who only operate the product occasionally.

The operating instructions must always be within reach of the product.

We accept no liability for any damages or injuries caused by failure to observe these operating instructions.

The relevant accident prevention regulations and other generally recognised safety and occupational health regulations must be observed.

The responsibilities for the various activities included in maintenance and repair must be clearly defined and adhered to. Only then will human error - especially in dangerous situations - be avoided.

The operating company is to enforce wearing of personal protective equipment by operating and maintenance staff. These include in particular safety shoes, safety glasses and gloves.

Do not wear loose, long hair, loose clothing or jewellery. In theory, there is a risk of getting caught on something, or being pulled in or dragged along by moving parts.

If there are any safety-related changes to the product, immediately halt the process, secure it and report the occurrence to the relevant authority/person!

Work on the product may only be carried out by reliable, trained staff. Observe the minimum legal age.

Staff who require training, teaching or instructing or staff who undergo a general apprenticeship may only operate the product under the supervision of an experienced member of staff.

2.5 Safety instructions for maintenance/troubleshooting

Service and maintenance doors must be freely accessible at all times.

Setting up, maintenance and repair work and troubleshooting must only be performed when the product is switched off.

Always tighten bolt connections that have been loosened during repair work. If specified, tighten the relevant bolts with a torque wrench.

In particular, protect connections and screw connections from dirt or care products at the beginning of maintenance/repair/care

The time frames for periodic testing/inspections stipulated or specified in the operating instructions must be observed.

Before disassembling, mark the parts that belong together.

2.6 Notes regarding special types of hazard

⚠ DANGER

Danger of electric shock!

Any work on the electrical equipment of the product must only be performed by a qualified electrician or by operating personnel under the direction and supervision of a qualified electrician in accordance with electronic regulations.

Before opening the product, pull the plug, if available, and secure it against accidental switch-on.

For faults with the product's electrical energy supply, immediately switch the product off at the on/off switch and if available, also pull the plug.

Use only original fuses with the prescribed amperage.

Electrical components, on which inspection, maintenance and repair work must be carried out, must be disconnected from the power supply. Secure equipment that has been used for disconnection against unintentional or automatic reconnection. Firstly check that no voltage is present in activated, electrical components, then isolate adjacent components under voltage. When making repairs, ensure that constructive characteristics are not altered in a way that reduces safety.

Check cables regularly for damage and replace if necessary.



CAUTION: Automatically Operated Device –
To Reduce The Risk Of Injury Disconnect From
Power Supply Before Servicing.

WARNING: To Reduce The Risk Of Electric Shock,
Do Not Expose to Water or Rain.

ATTENTION: Appareil fonctionnant automatiquement
– afin de réduire les risques de blessure, débrancher
l'alimentation électrique de procéder à l'entretien.

AVERTISSEMENT: Pour réduire le risque de choc
électrique, ne pas exposer à l'eau ou à la pluie.

⚠ WARNING

Electric shock if earthing is missing!

If the protective earth connection of devices is missing or incorrectly executed, high voltages may be present on exposed parts or housing parts which, if touched, can lead to serious injury or death.

⚠ WARNING

Electric shock if an unsuitable power supply is connected!

The connection of an unsuitable power supply can cause parts that can be touched to be under dangerous voltage. Contact with dangerous voltage can lead to serious or fatal injury.

For electrical connection data, see the name plate of the product

Note on connection to the mains supply for products with extraction capacity control

⚠ DANGER

Danger of electric voltage!

Products with extraction power control (frequency inverters) are intended for protection by line protection fuses.

If the product is operated on a mains supply with a residual current circuit breaker (RCCB) connected upstream, the following must be observed.

Since the operation of the frequency inverter on the protective earth conductor can cause a direct current, the residual current circuit breaker (RCCB) connected in series with the mains must meet the following requirements.

Products with 16/ 32 Ampere – Plug

Category type:	Rated current	Tripping fault current	Note
Type B	40 A	30 mA	short time-delayed
Type B	63 A	30 mA	short time-delayed

Tab. 1: Requirements for residual current circuit breaker

Power supply

The product is designed for the mains voltage indicated on the name plate. If mains cables or mains plugs are not fitted to the product, they must be fitted in accordance with national standards.

⚠ CAUTION

Insufficiently dimensioned electrical installation can lead to serious damage to property.

The mains supply line and its fuse protection must be designed in accordance with the existing power supply. Observe the technical data on the name plate.

The mains fuse should be equipped with at least a **category C** circuit breaker.

⚠ DANGER

Suspended loads

Tipping or falling loads lead to severe to fatal injuries.

- Never step under suspended loads.
- Always remain outside the danger zone.
- Observe the total weight, attachment points and centre of gravity of the load.
- Observe the transport instructions and symbols on the transported goods.

⚠ DANGER

Suspended loads – Transport crane lugs

Tipping or falling loads lead to serious or even fatal injuries.

- The assembled product must not be transported as a complete unit on the crane lugs! (Crane eyelets can tear out)
- The components must be dismantled individually. These can then be reassembled at the new destination.
- Always stay outside the danger zone during transport.
- Observe the total weight, attachment points and centre of gravity of the load.

See also information on the product.

HINWEIS Der Betreiber darf die gesamte Filteranlage nicht über die Kränösen am Ansaugteil versetzen! Es müssen die Komponenten einzeln zurückgebaut werden. Im Anschluss können diese dann wieder an dem neuen Bestimmungsort zusammengesetzt werden. INFORMATION The operator may not move the entire filter system using the crane eyelets on the suction component! The components must be removed separately. Afterwards, they can once again be reassembled at the new location. INDICATION L'exploitant ne doit pas déplacer l'installation de filtration complète par le biais des œillets de levage de l'élément d'aspiration! Les composants doivent être démontés séparément. Immédiatement après, ils peuvent être réassemblés sur le nouveau lieu de destination. AANWIJZING De exploitant mag het hele filtersysteem niet m.b.v. de hysogen op het zuigdeel plaatsen! De componenten moeten afzonderlijk gedemonteerd worden. In vervolg hierop kunnen deze dan weer conform de bestemming in elkaar gezet worden. NOTA El explotador no debe desplazar todo el sistema de filtración mediante las argollas para grúa en la parte de aspiración! Los componentes deben desmontarse individualmente. Posteriormente pueden volver a montarse en el nuevo lugar de utilización. NOTA L'escrcente non può trasferire l'intero impianto di filtrazione sugli occhielli di sollevamento dell'aspiratore! I componenti devono essere rimontati singolarmente. Questi componenti possono quindi essere riasssemblati sul nuovo luogo di destinazione. UPOZORNĚNÍ Provozovatel nesmí přemísťovat filtraci vzduchu pomocí jeřábových ok na sací části naráž! Musí se odinstalovat jednotlivé komponenty. Nakonec je lze opět smontovat na novém místě určení. WSKAZÓWKA Nie wolno przenosić całej instalacji filtrującej za uchwyty dźwigowe na części zasysającej! Należy rozmontować wszystkie elementy. Następnie można je z powrotem zmontować w nowym miejscu przeznaczenia. ИНСТРУКЦИЯ Эксплуатанту запрещается перемещать всю фильтровальную установку за транспортировочные проушины всасывающего блока! Демонтаж компонентов необходимо выполнять по отдельности. Затем их можно собрать снова на новом месте установки. MEGJEGYÉS Az üzemeltetőnek a teljes szűrőberendezést nem szabad a darufülekken át a beszívórészre helyezni! A komponenseket egyenként kell visszaszerelni. Végezetül ezek ismét az új rendeltetési helyen összeszerelhetők. OPOMBA Upravljavec ne sme premikati celotnega filtra preko dviznih ušes na vstopnem delu! Komponente je treba ločeno razstaviti. Nato jih lahko ponovno sestavite na novi destinaciji.

Fig. 1: Safety instructions on the product

⚠ CAUTION

Health hazard due to noise!

The product can produce noise, please refer to information in the technical data. In connection with other machines and/or local conditions, a higher noise level can occur at the operation site of the product. In this case, the operating company is obliged to provide the operating personnel with the appropriate protective equipment.

3 Product information

3.1 Functional description

The product is suitable for extracting and filtering room air and, according to the room, returning the clean air.

It is designed for use in production halls and warehouses, in which the air in the room must be free from particulate contamination such as smoke and dust.

The room air is suctioned in from the upper part of the product. The filter unit retains the particles fed with it, such as fumes and dust, with a filter efficiency higher than 99%. The air cleaned in this way is fed back to the room at low velocity in the lower part of the product.

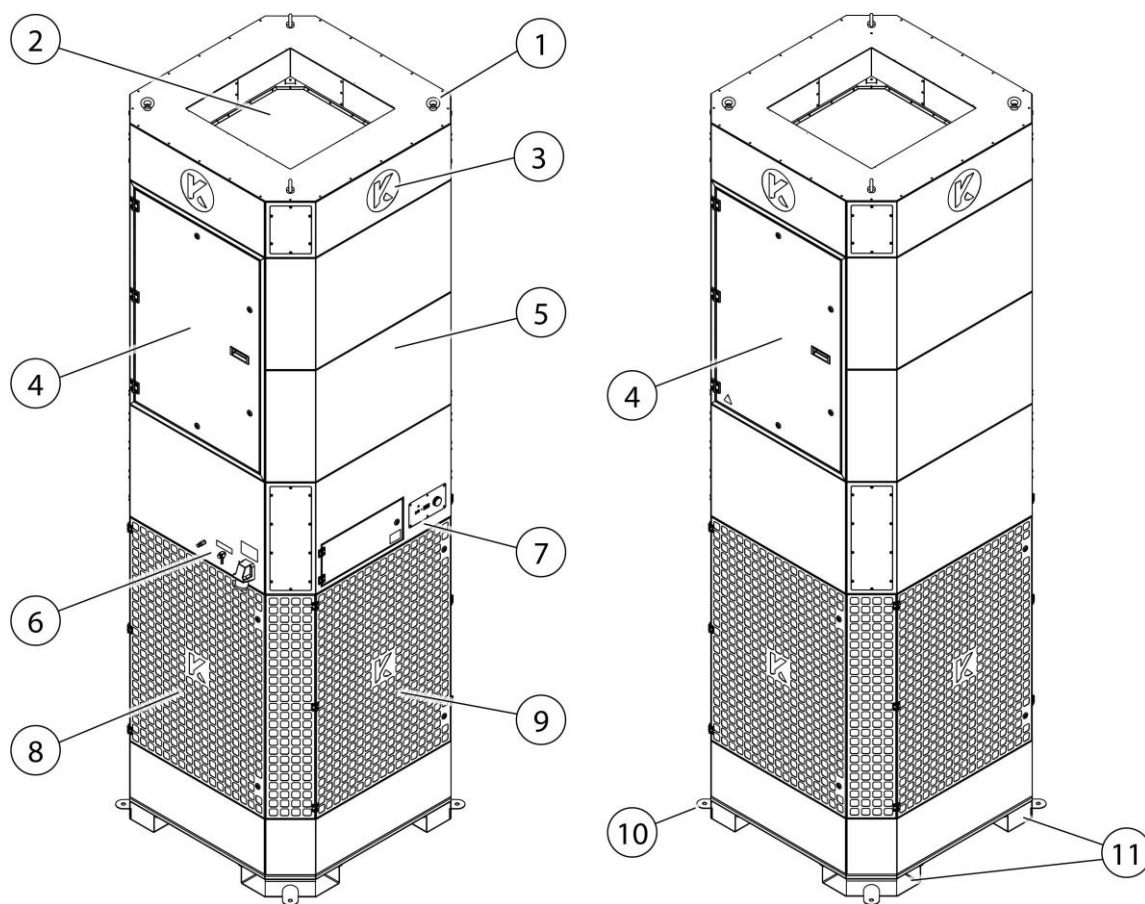


Fig. 2: Product description

Pos.	Description	Pos.	Description
1	Eye bolt/crane lug	7	Operating control
2	Intake unit (raw air inlet)	8	Air outlet grille (clean air)
3	Light indicator to indicate the operating status (optional extension)	9	Maintenance door – dust collection container
4	Maintenance door – filter unit	10	Tabs for ground anchoring
5	Filter component	11	Forklift – transport openings/forklift pockets
6	Connection panel		

Tab. 2: Positions on the product

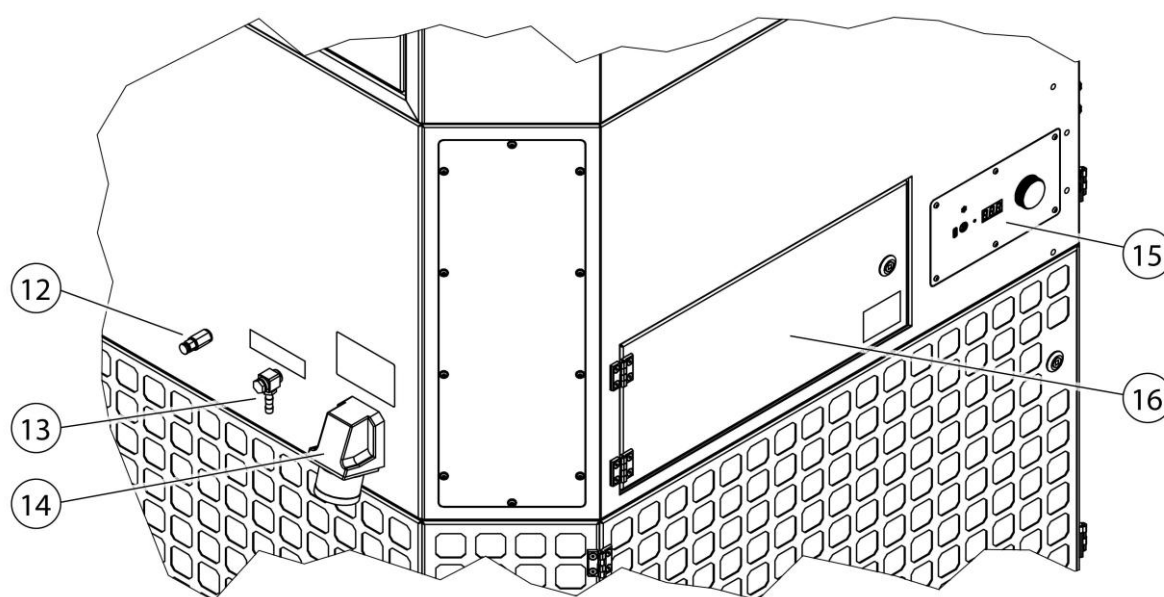


Fig. 3: Product description

Pos.	Description	Pos.	Description
12	Condensate drain valve	15	Operating control
13	Compressed air connection	16	Control cabinet
14	CEE connector plug		

Tab. 3: Product description

3.2 Intended use

The product is suitable for extracting and filtering the air in a closed room and, according to the room, returning the clean air.

It is designed for use in production halls and warehouses, in which the air in the room must be freed from particulate contamination such as fumes and dust.

These fumes and dust must not be flammable substances, as they can form an explosive mixture with the air, for which the product is not designed.

Dimensions and further product details which must be observed can be found in the technical data.

NOTE

The information in the chapter Technical data must be observed and strictly adhered to.

Intended use also includes the observation of the instructions and information on

- safety
- operation and control
- maintenance and servicing
- transport and installation

contained in this manual.

Any other use or use that goes beyond this is deemed improper use. The company operating the product is solely responsible for any damage resulting from it. This also applies to unauthorised modifications to the product.

3.3 Ambient conditions

Operation or storage of the device outside the specified area is deemed unintended use and may impair the function, the extraction capacity and the protective effect in accordance with DIN EN ISO 21904. The manufacturer is not liable for any resulting damage.

General:

- Ambient air free from dust, acids, corrosive gases or other aggressive substances.
- Height above sea level: up to 1000 m [3281 ft].
- For accordingly released products only: Indoor or outdoor operation permitted.

Temperature range of the ambient air:

Operating mode	Operation	Transport/ storage
Indoor (Indoor area)	+5 °C to 40 °C [+41 °F to +104 °F]	-20 °C to +50 °C [-4 °F to +122 °F]
Outdoor (For approved products only)	-10 °C to 40 °C [+14 °F to +104 °F]	-20 °C to +50 °C [-4 °F to +122 °F]

*Table 4: Temperature range of the ambient air***Relative humidity (non-condensing unless approved otherwise):**

- **Indoor:** up to 50% at +40 °C [+104 °F], up to 90% at +20 °C [+68 °F]
- **Outdoor:** up to 100%, including temporary condensation due to weather conditions

3.4 Reasonably foreseeable misuse

No reasonable, foreseeable misuse is possible that could lead to dangerous situations with personal injury when working with the product whilst adhering to its intended use.

The operation of the product in industrial areas that do not comply with the requirements for explosion protection is not permissible. Furthermore, the operation is prohibited for:

1. Processes that are not in the intended use list and in which the extracted air is:
 - mixed with flying sparks, e.g. from grinding and welding processes;
 - mixed with liquids and the resulting contamination of the air flow with vapours containing aerosols and oils;
 - mixed with highly flammable, combustible dusts and/or with substances that can form explosive mixtures or atmospheres;
 - mixed with other aggressive or abrasive dusts;
 - mixed with organic, toxic substances/parts of substances;
2. Outdoor locations where the product is exposed to weather conditions – the product must only be used in closed buildings.

3.5 Markings and signs on the product

Various markings and signs are affixed to the product. If these are damaged or removed, please replace them immediately with new ones in the same location.

The operating company is obliged to post further markings and signs on the product and the surrounding area if necessary.

Such notes and signs might be related, for example, to the requirement for wearing personal protective equipment.

In the country of use, additional required safety instructions and pictograms can be provided by the manufacturer in accordance with applicable law.

3.6 Residual Risk

Even when all safety rules are observed, when operating the product a residual risk remains, as described below.

All persons working on and with the product must be aware of these residual risks and follow the instructions that prevent these residual risks from causing accidents or damages.

⚠ WARNING

Danger of serious injury to the lungs and respiratory tract – always wear respiratory protection, Class FFP2 or higher.

Skin contact with dust, etc. can cause skin irritation in sensitive persons – wear protective clothing.

Dust can escape into the environment through leaks in the filter section and connecting pipes. Eliminate leaks immediately and clean the contaminated area. Wear respiratory protection and protective clothing.

Before carrying out any repair, set-up and maintenance work on the pneumatic system, it must first be depressurised.

The product is only fully functional when it is switched on.

⚠ DANGER

Life-threatening injury due to electric shock!

Pull out the mains plug before all repair, set-up and maintenance work on the product.

Secure the product against unintentional switching on. Put up warning signs.

4 Transport and Storage

4.1 Transport

⚠ DANGER

Life-threatening crushing possible when loading and transporting the product!

Improper lifting and transporting may cause the pallet (if present) to tilt and fall!

- Never stand under suspended loads.
- Observe the permissible loads of the transport and lifting aids.
- Observe the applicable accident prevention and occupational safety regulations.

For transporting products with a pallet, use a suitable pallet truck or forklift. The weight of the product can be found on the name plate.

4.2 Storage

The product must be stored in its original packaging at an ambient temperature of 20 °C to +50 °C in a dry and clean place. The packaging must not be loaded by other objects.

The storage duration is not critical for all products.

4.3 Safety instructions for transporting the product

⚠ DANGER

- Potentially fatal crushing injuries when lifting and transporting the individual components of the product! Incorrect installation can cause components to fall down.
- Incorrect lifting and transport can cause the components of the product to tip over and fall down.
- The components of the product may only be lifted and transported with suitable lifting gear.
- Never stand under suspended loads or under improperly installed components.
- Lift and transport the individual components of the product with a single forklift only. The permissible load of the forklift must not be exceeded.
- Use suitable standard-compliant climbing aids and ensure that you are standing securely.
- Observe the applicable accident prevention and occupational safety regulations.
- Follow the instructions and regulations of the carrier.

The following safety instructions must be observed when transporting the product with a crane:

- Check that lifting gear is fixed firmly at the attachment points and on the crane hook.
- Attach the transport ropes to the crane hook in such a way that, when taut, they do not touch the machine parts lying above the attachment points.
- Use a loading harness if necessary.
- Adjust the lengths of the suspension cables so that the components of the product hang horizontally. Hook the suspension cables with shackles into all eyebolts/crane lugs. The angle of the suspension cables to the vertical must not exceed 30° and the eyebolts/crane lugs must not be loaded laterally. The eyebolts/crane lugs must not be deformed and should not be subsequently colour-coded (especially red) due to the risk of confusion.

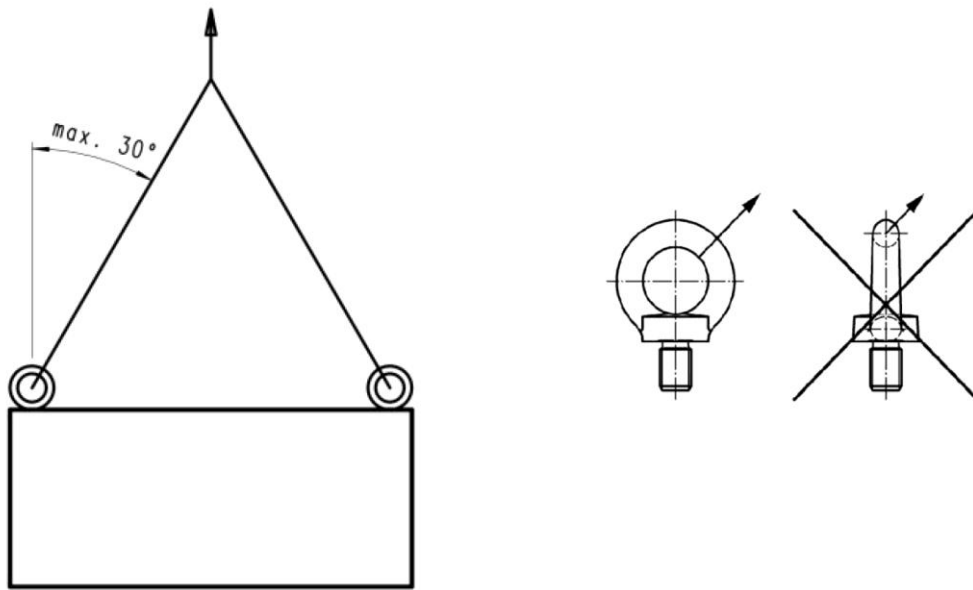


Fig. 4: Information on lifting procedure

- When choosing the shackle, ensure that each individual shackle has sufficient load capacity.

Transport of the product with forklift or pallet truck:

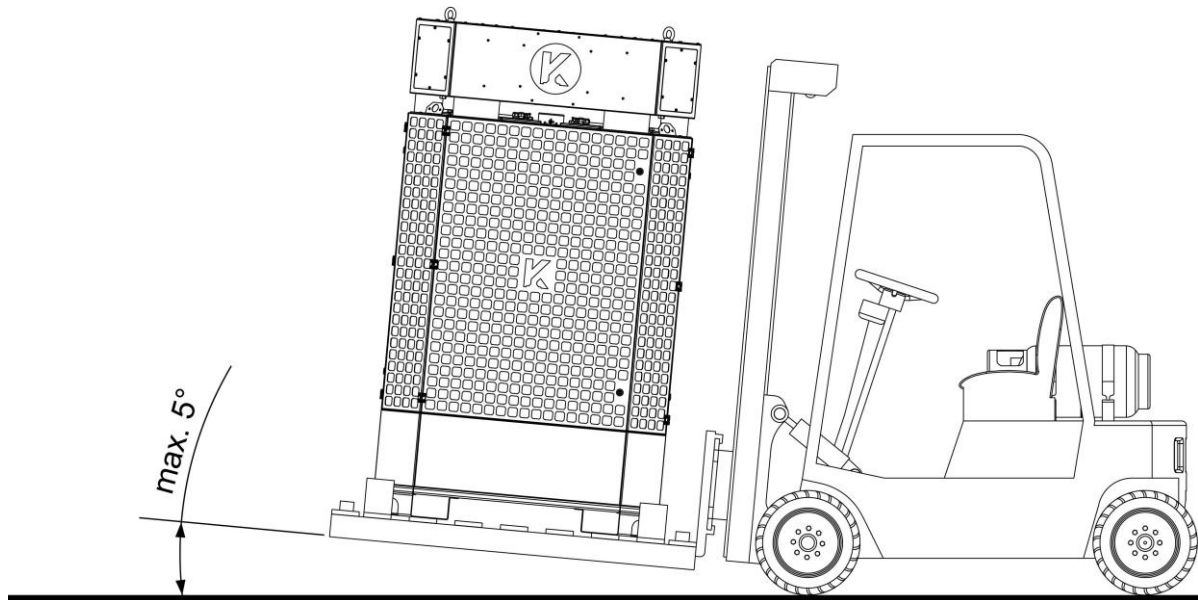


Fig. 5: Transporting the product

The product is delivered on two pallets. Use a suitable forklift or pallet truck to transport the product. During transport, ensure that the routes are stable and level.

Ensure that the product is straight during transport! The tilt angle must not exceed 5°.

Lifting the product with a crane / hoist

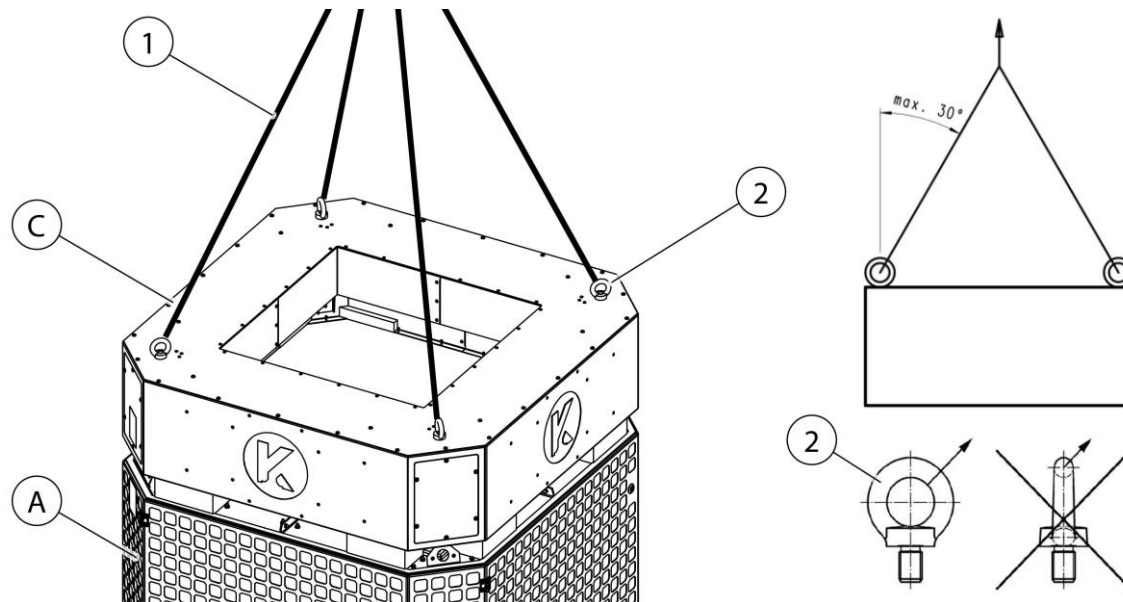


Fig. 6: Lifting the product with a crane / hoist

Pos.	Description	Pos.	Description
1	Hoist (on site)	2	Eyebolt / crane lug
A	Fan component	C	Suction component

Tab. 5: Lifting the product with a crane / hoist

ATTENTION

Damage to the product!

The product must not be transported in a fully assembled state.

The product must be partially dismantled for transport.

⚠ DANGER**Danger from suspended loads!**

Tipping or falling loads lead to severe to fatal injuries.

The product must not be transported when completely assembled!

- The product may tip over or be damaged during transport using a pallet truck, forklift or crane.
 - Never step under suspended loads.
 - Observe the total weight, attachment points and centre of gravity of the load.
-

5 Assembly

Instructions for safe installation of the product

NOTE

The operating company of the product may only assign specialists to carry out independent assembly.

- At least two people are needed to assemble the product.
 - Only use suitable transport and lifting equipment.
 - It must be ensured that the assembly location provides sufficient load-bearing capacity.
 - Only use suitable fixing material.
 - The fixing material must be selected according to the local conditions.
 - The product must not obstruct anyone in their working area.
 - Existing air outlet grilles must not be covered.
 - Existing maintenance doors and covers must be freely accessible.
-

⚠ DANGER

Falling parts may cause life-threatening injuries!

Tipping or falling loads lead to severe to fatal injuries.

- Never step under suspended loads.
 - Always remain outside the danger zone.
 - Observe the total weight, attachment points and centre of gravity of the load.
 - Observe the transport instructions and symbols on the transported goods.
-

⚠ WARNING

Incorrect connections may cause serious injuries!

Please note the necessary safeguards and only have the product connected by trained specialists.

5.1 Unpacking and assembling the product

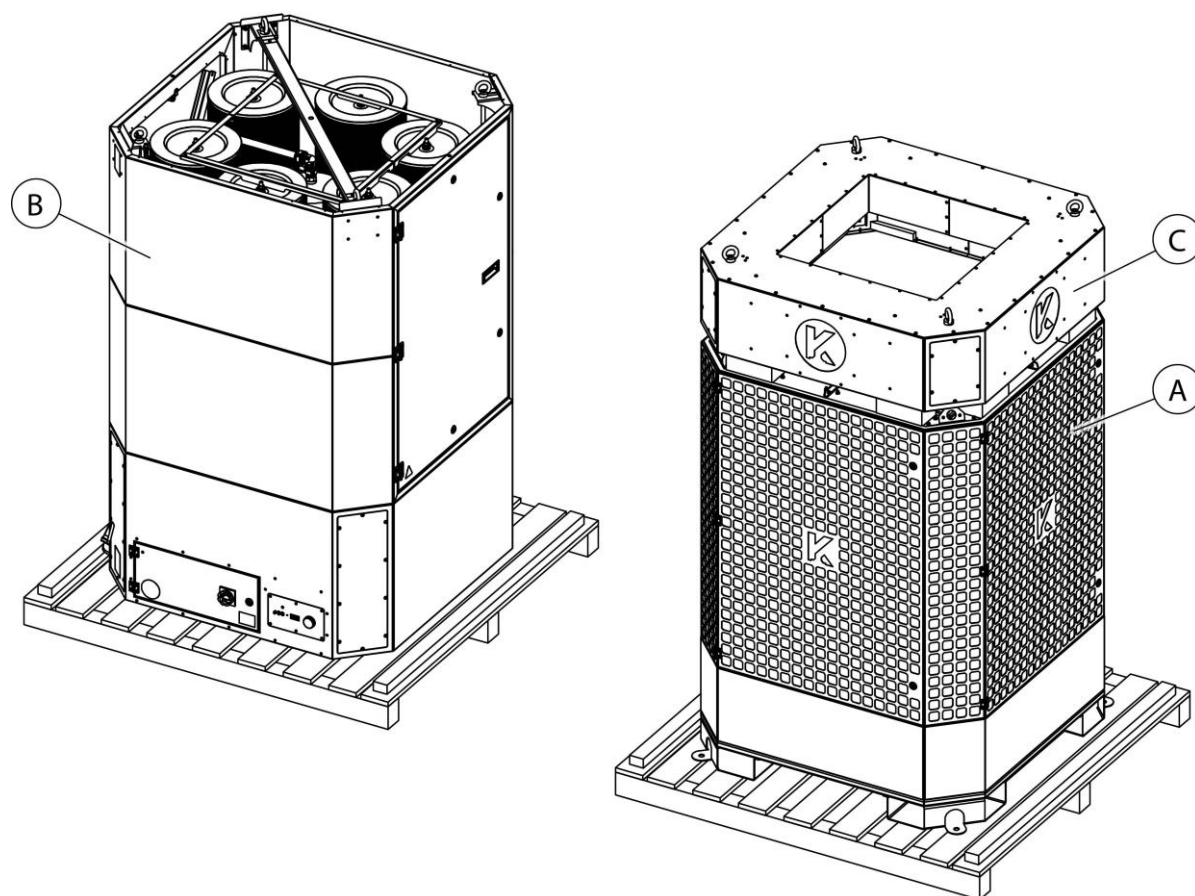


Fig. 7: Scope of supply of the product

Pos.	Description	Pos.	Description
A	Fan component	C	Suction component
B	Filter component		

Tab. 6: Scope of supply of the product

NOTE

Suitable power and compressed air supplies must be available at the installation site.

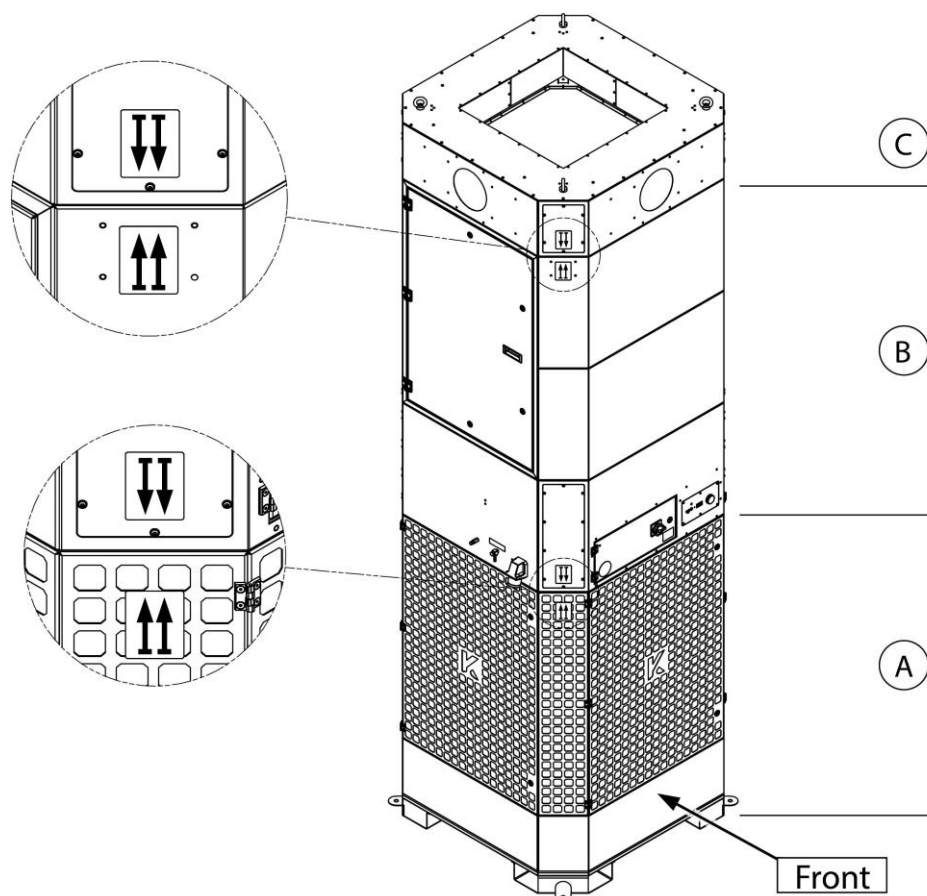


Fig. 8: Positioning of the components

NOTE

When assembling the components (Pos. A, B and C), pay attention to the position stickers as shown in the figure.

Proceed to mount the components as follows:

1. Remove the packaging film and the tensioning straps.

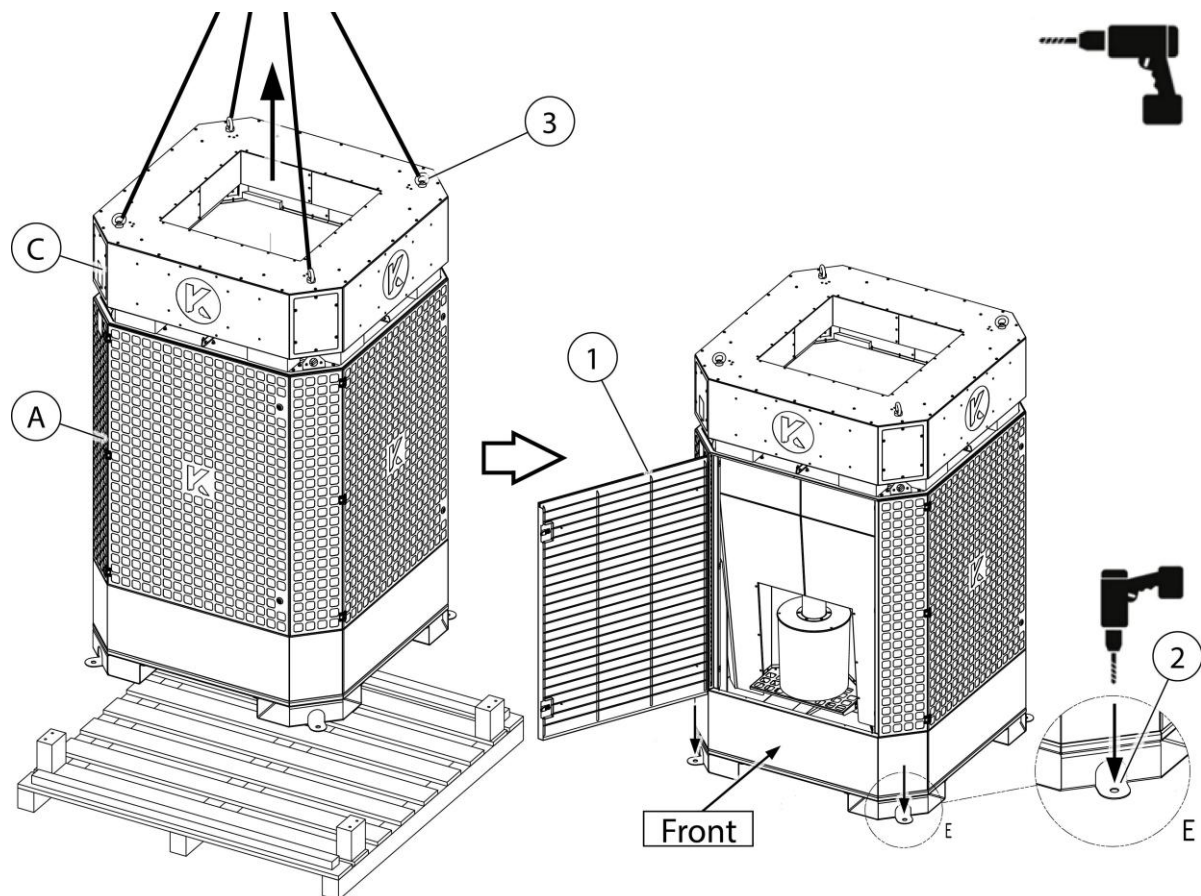


Fig. 9: Assembly – Fan component

Pos.	Description	Pos.	Description
1	Maintenance door (dust collection container)	A	Fan component
2	Foot tab	C	Suction component
3	Eye bolt (crane lug)		

Tab. 7: Assembly – Fan component

2. Lift the fan component (Pos. A) and the intake unit (Pos. C) from the pallet and set down at the planned installation location. Make sure that the dust collection container is easily accessible for maintenance work and that the floor is level and stable.
3. Fix the fan component (Pos. A) to the floor. To do this, screw the four foot tabs (Pos. 2) to the floor using suitable fastening material (not included in the scope of supply).

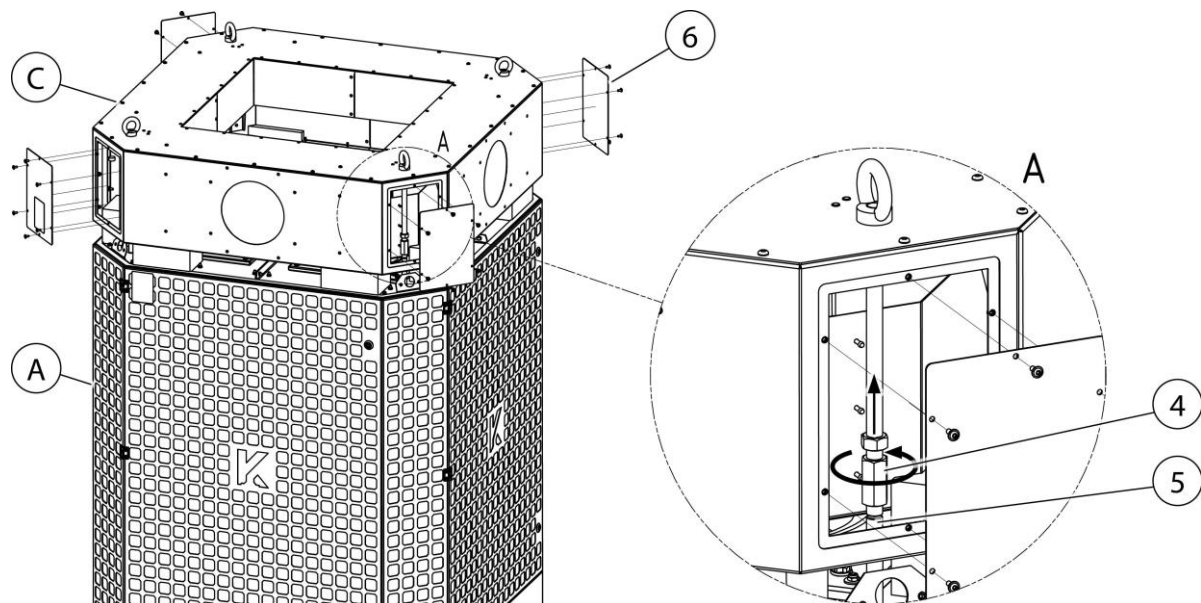


Fig. 10: Assembly – Removing the intake unit

Pos.	Description	Pos.	Description
4	Hexagon threaded sleeve	A	Fan component
5	Threaded bolt	C	Suction component
6	Cover plate		

Tab. 8: Assembly – Removing the intake unit

4. Separate the intake unit (Pos. C) from the fan component (Pos. A). To do this, remove the four cover plates (Pos. 6).
5. Loosen the lock nut in each corner of the intake unit (Pos. C) and turn the hexagon threaded sleeve (Pos. 4) upwards until the lower threaded bolt (Pos. 5) is completely loosened.

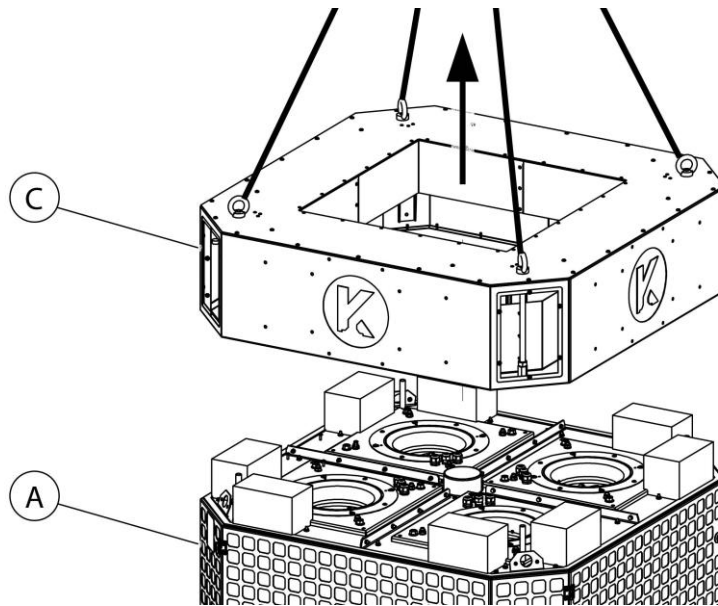


Fig. 11: Assembly – Lifting off the intake unit

6. Lift the intake unit (Pos. C) off the fan component (Pos. A) and place it on a work surface. Then remove the transport wooden blocks.

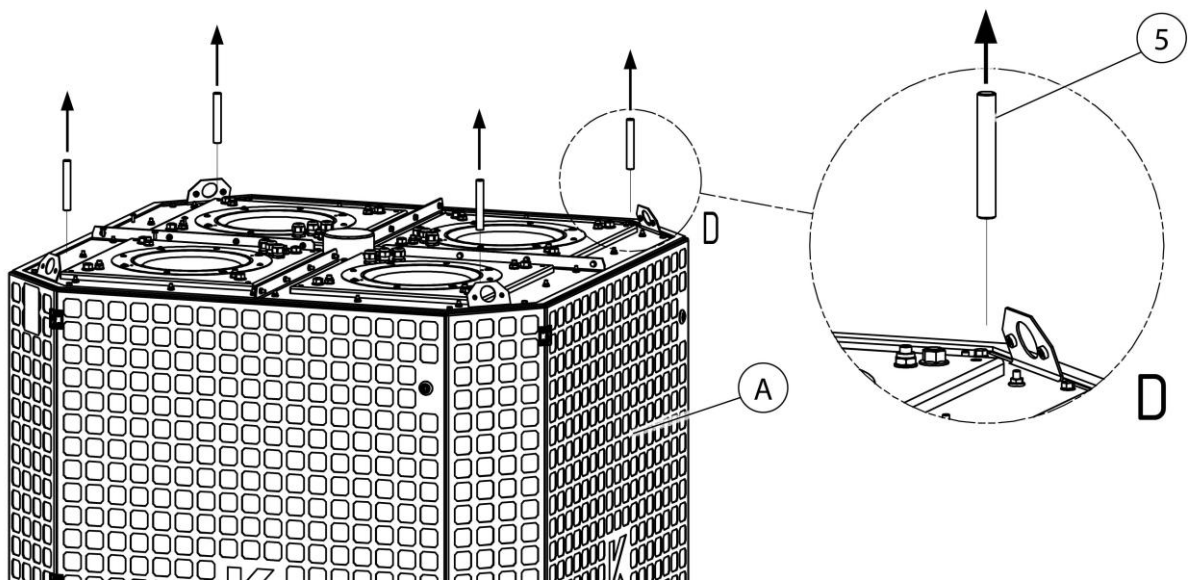


Fig. 12: Assembly – Loosening the threaded bolts

7. Completely unscrew the four threaded bolts (Pos. 5) from the fan component (Pos. A).

NOTE

The threaded bolts (Pos. 5) are no longer required and can be disposed of properly.

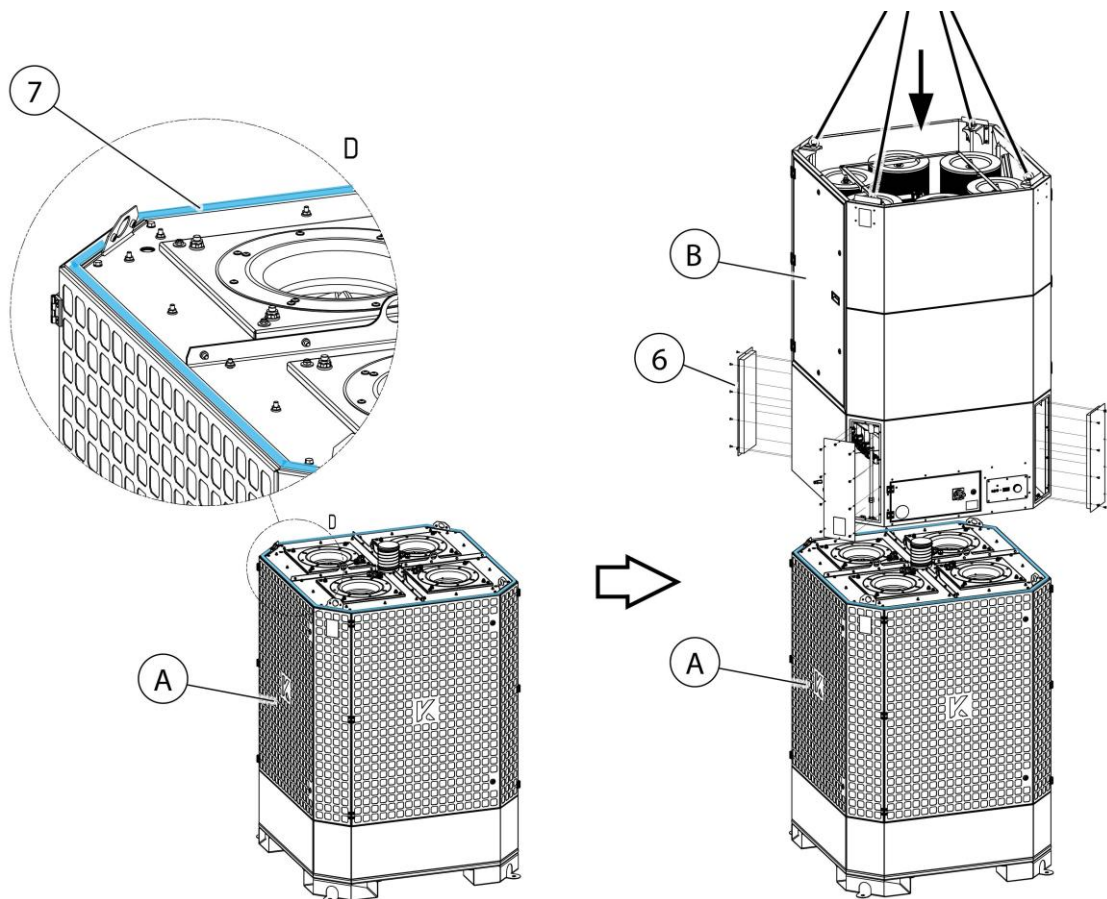


Fig. 13: Assembly – Filter component

Pos.	Description	Pos.	Description
6	Cover plate	A	Fan component
7	Sealing tape 24 x 5 mm	B	Filter component

Tab. 9: Assembly – Filter component

8. Apply the enclosed sealing tape (Pos. 7) circumferentially around the sealing surfaces of the fan component (Pos. A).
9. Carefully place and align the filter component (Pos. B) onto the fan component (Pos. A) using a suitable lifting equipment. Ensure correct positioning according to the aligning arrows.

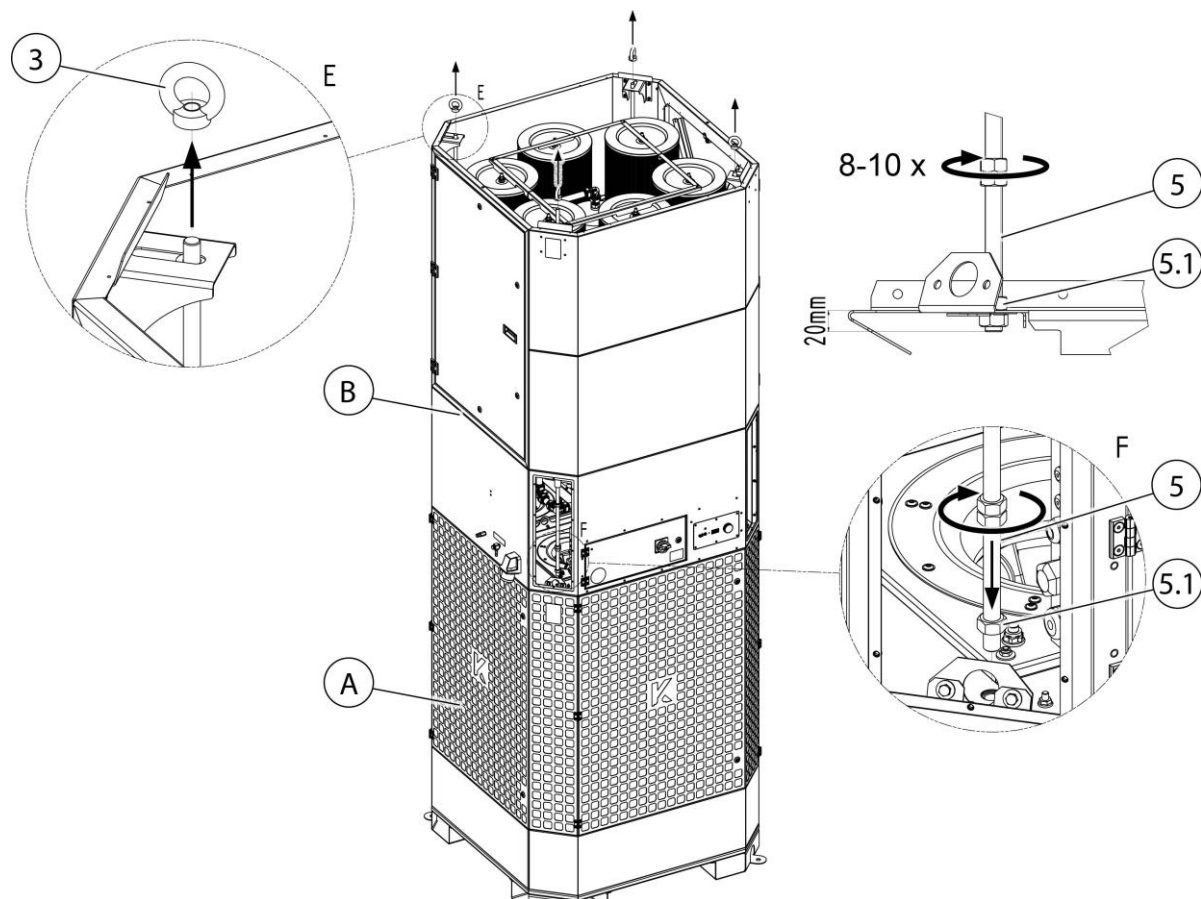


Fig. 14: Assembly – Filter component

Pos.	Description	Pos.	Description
3	Eye bolt (crane lug)	A	Fan component
5	Threaded bolt	B	Filter component
5.1	Hexagon nut – for securing		

Tab. 10: Assembly – Filter component

10. Remove the four crane lugs (Pos. 3) from the filter component (Pos. B).
11. Connect the filter component (Pos. B) to the fan component (Pos. A). To do this, screw the threaded bolt (Pos. 5) into the threaded holes of the fan component in each corner by about 8-10 threads and then secure it with the hexagon nut (Pos. 5.1).

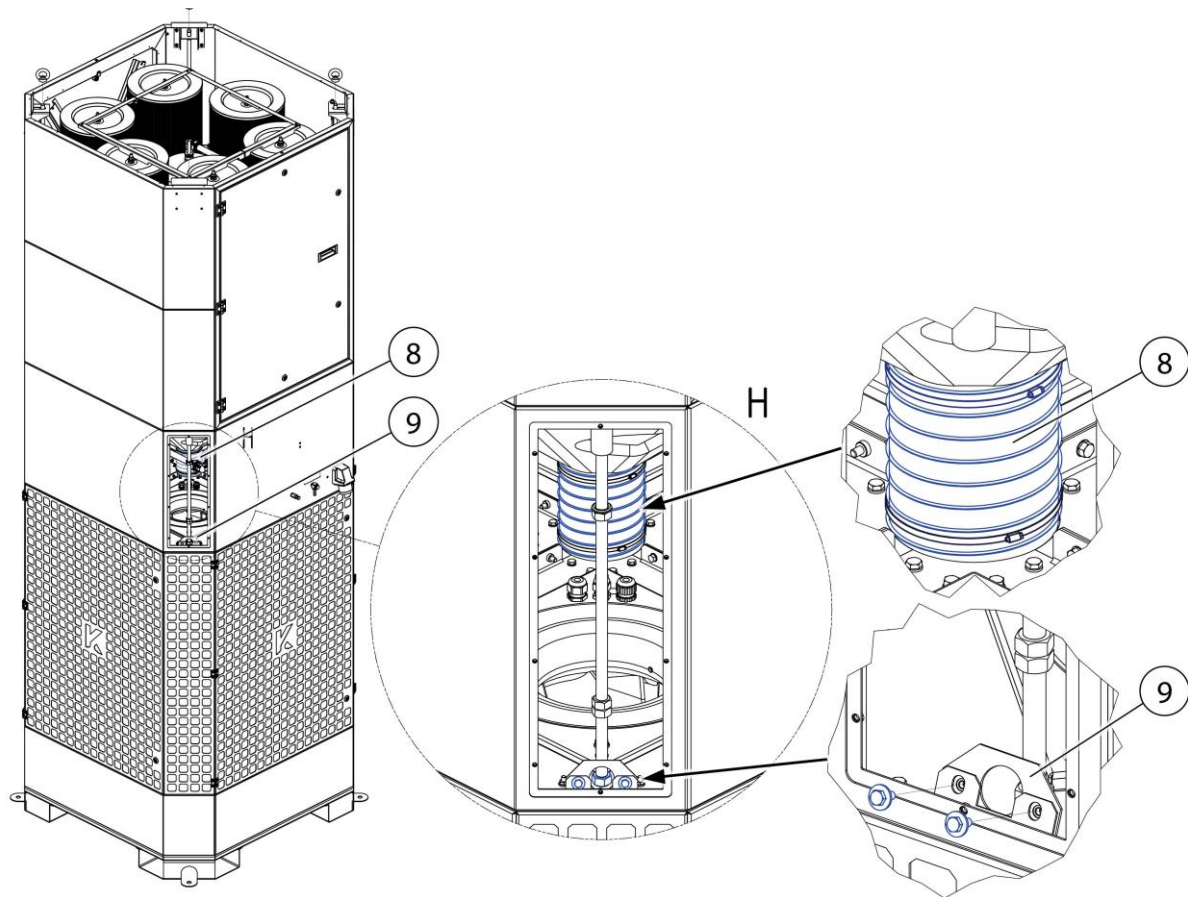


Fig. 15: Assembly – Filter component

Pos.	Description	Pos.	Description
8	Spiral hose with hose clamps	9	Connecting tabs

Tab. 11: Assembly – Filter component

12. Connect the spiral hose (Pos. 8) to the dust chute of the filter component and secure it with the enclosed hose clamps.
13. Mount the connecting tabs (Pos. 9) with the enclosed screws and screw them tight.

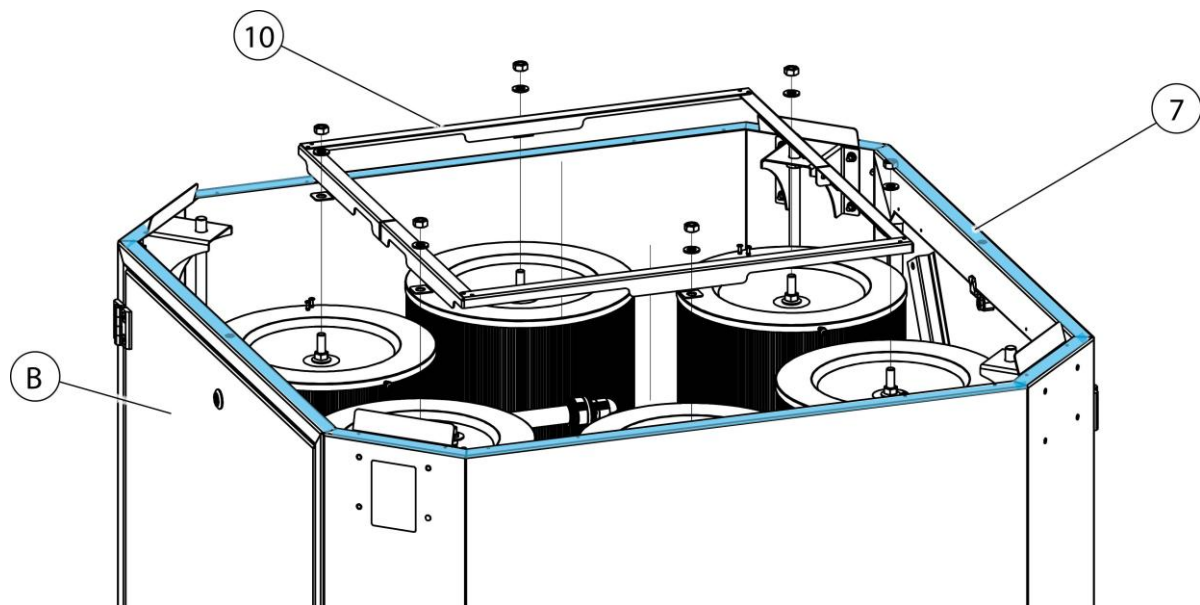


Fig. 16: Assembly – Removing the transport restraint

Pos.	Description	Pos.	Description
7	Sealing tape 24 x 5 mm	10	Transport restraint – Filter cartridges

Tab. 12: Assembly – Removing the transport restraint

14. Remove the transport restraint (Pos. 10).

NOTE

It is recommended to keep the transport restraint for any possible future transport.

15. Apply the enclosed sealing tape (Pos. 7) circumferentially around the sealing surfaces of the filter component (Pos. B).

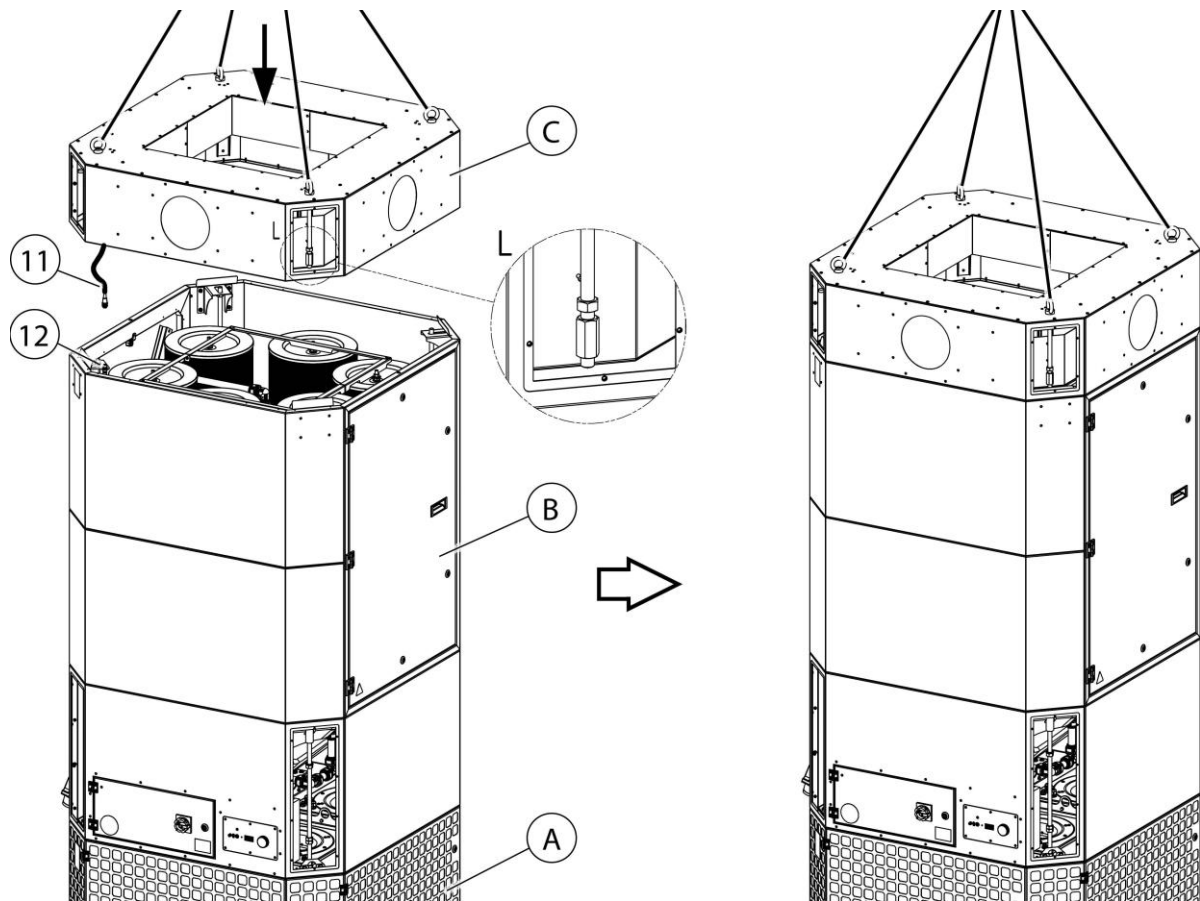


Fig. 17: Assembly – Intake unit

Pos.	Description	Pos.	Description
B	Filter component	11	Connecting cable – Signal light
C	Suction component	12	Connection socket – Signal light

Tab. 13: Assembly – Intake unit with filter component

16. Carefully place and align the intake unit (Pos. C) onto the filter component (Pos. B) using suitable lifting equipment. Ensure correct positioning according to the aligning arrows.

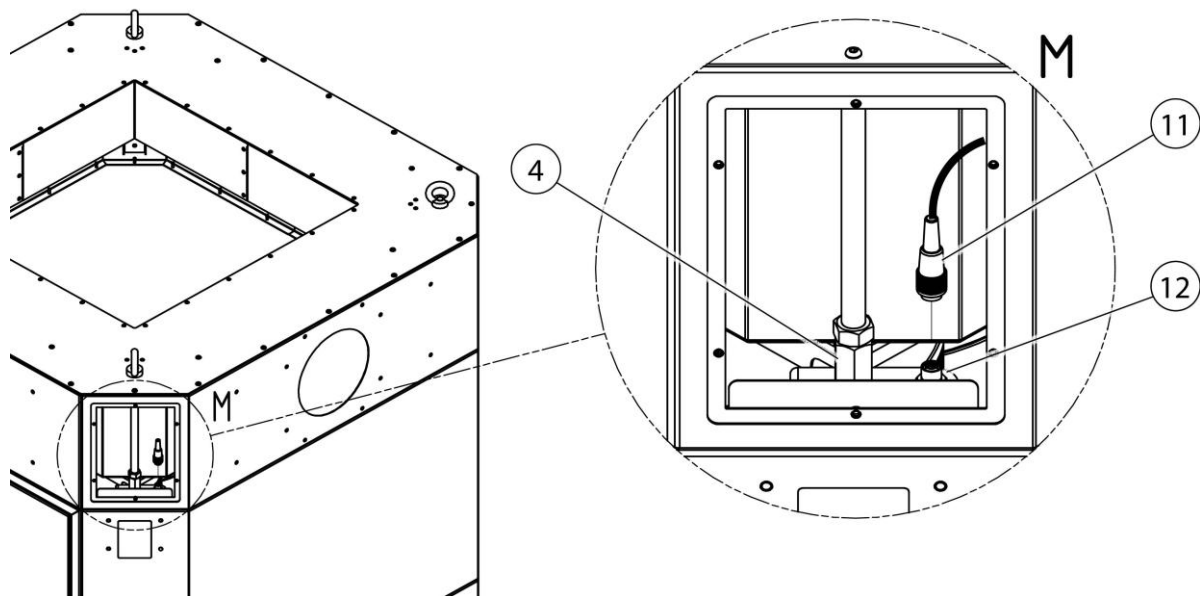


Fig. 18: Assembly – Intake unit with filter component

Pos.	Description	Pos.	Description
4	Threaded sleeve	11	Connecting cable – Signal light
		12	Connection socket – Signal light

Tab. 14: Assembly – Intake unit with filter component

17. Fix the intake unit (Pos. C) to the filter component (Pos. B). To do this, screw the threaded sleeve (Pos. 4) with 8 – 10 threads into the threaded bolts of the filter component.
18. Connect the connecting cable of the signal light (Pos. 11) to the connection socket (Pos. 12).

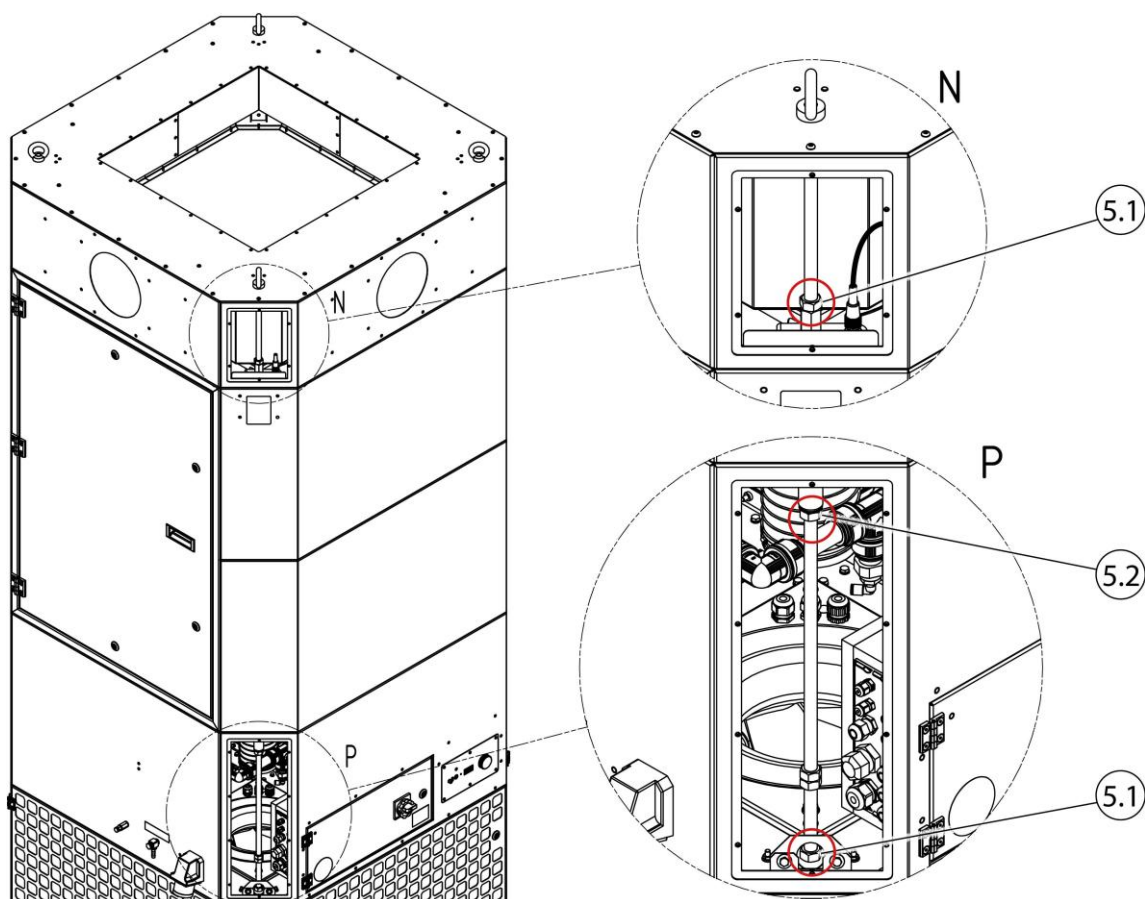


Fig. 19: Assembly – Securing the threaded bolts

Pos.	Description	Pos.	Description
5.1	Hexagon nut – for securing	5.2	Hexagon nut and sealing washer

Tab. 15: Assembly – Hexagon nuts for securing

19. Tighten the hexagon nuts (Pos. 5.1) firmly in all four corners. Only then tighten the hexagon nut and sealing washer (Pos. 5.2).

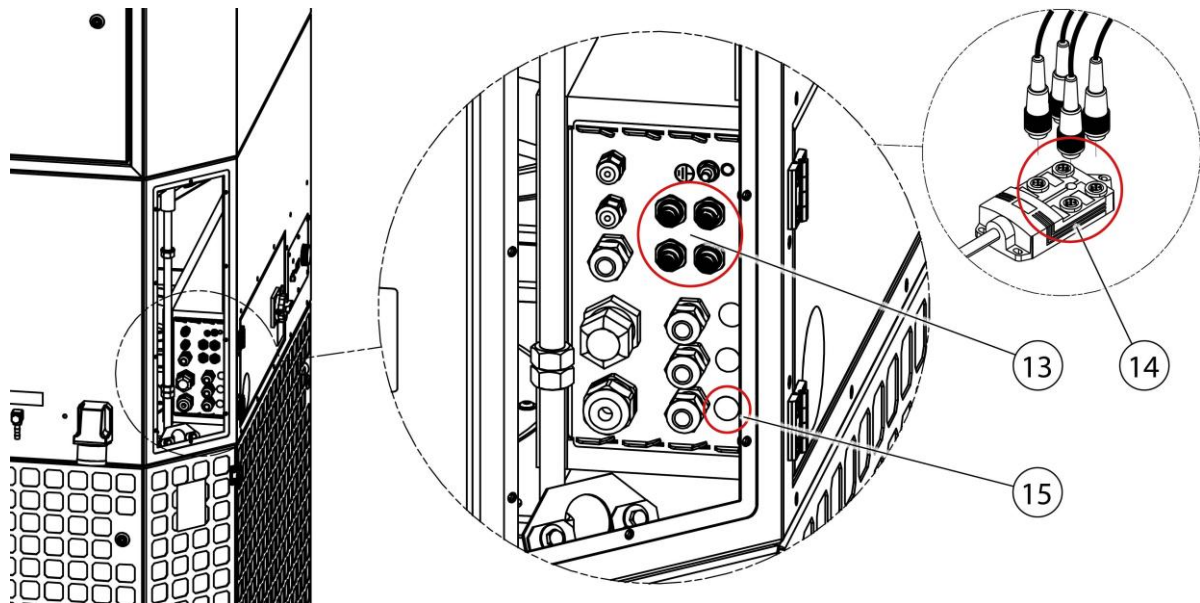


Fig. 20: Assembly – Connection

Pos.	Description	Pos.	Description
13	4x connection socket – Fan motor	15	Compressed air hose – Pressure measurement
14	4x connection socket – Control line		

Tab. 16: Assembly – Connection

20. Connect all connecting cables with plugs in the filter component to the corresponding connection sockets (Pos. 13 and 14). The order of the connections is not relevant.
21. Connect the exposed compressed air hose to the compressed air connection (Pos. 15).
22. Finally, close all maintenance openings/cover plates (Pos. 6).

6 Use

Every person who deals with use, maintenance and repair of the product must have thoroughly read these operating instructions as well as the instructions for any attachment and accessory products and have understood them.

6.1 Qualification of the operating personnel

The operating company of the product may only commission persons to use the product independently if they are well-versed in this task.

Those familiar with this task includes those who have been instructed appropriately in the task and know the operating instructions as well as the operational issues in question.

The product should only be used by trained or instructed personnel. This is the only way to ensure safety and hazard awareness of all personnel during work.

6.2 Operating elements

Operating controls and connection options are located on the front side of the product:

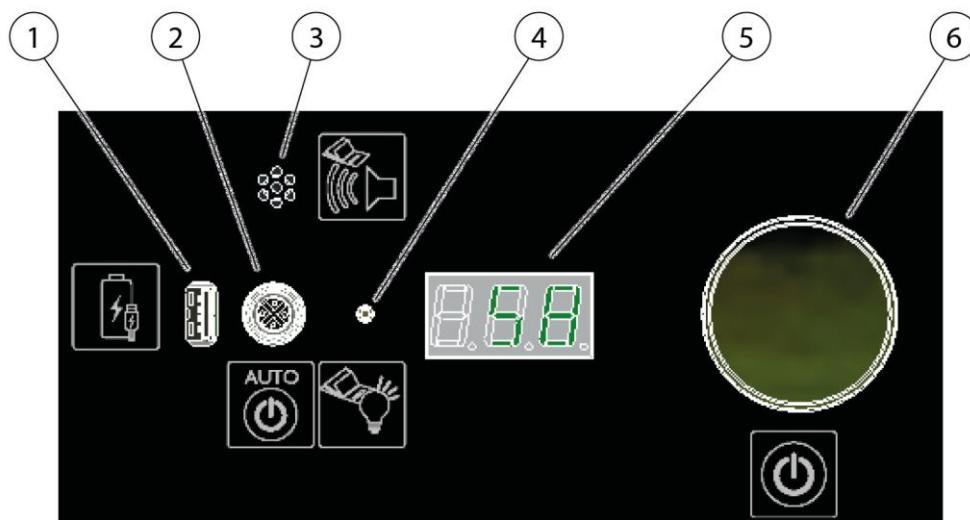


Fig. 21: Operating elements

Pos.	Description	Note
1	USB charging socket	For charging commercially available USB devices
2	Connection socket for timer	Closer contact for external On/Off switch
3	Signal horn	See also chapter "Troubleshooting"
4	LED status signal light	Indicates the current operating status
5	LEDsegment display	Indicates settings, parameters, performance values, notes and faults
6	Rotary switch	Switches the product on or off Settings and queries can be carried out by turning and pressing the buttons.

Tab. 17: Operating elements

LED status signal lamp (Pos. 4)

Signal colours are:

Green – indicates trouble-free operation

White – Menu – Queries and settings

Magenta – indicates one or more warnings (see "Troubleshooting" chapter)

Red – indicates a fault (see "Troubleshooting" chapter)

LED segment display (Pos. 5)

The digital LED display indicates all settings, parameters and performance values, as well as possible faults and information.

The digital LED display shows [**O F F**] when switched off.

Rotary switch – Switching the product on / off (Pos. 6)

The rotary switch is used for all menu queries and settings.

- Turn = select, enter
- Press = confirm, acknowledge

As soon as the rotary button (Pos. 6) is pressed briefly, the product starts and

the digital LED display switches to [**O N**]. In fault-free operation, the status LED lights up green.

Pressing the rotary switch again switches the product off.

6.2.1 Menu – Queries and settings

Pressing the rotary button for approx. 3 seconds activates the menu. Operating data can be called up and settings changed in this menu.

- Navigation in the menu is carried out by turning the rotary button – this switches between the individual menu items.
- A short press of the rotary button displays the respective value or status of the selected menu item.
- During menu operation, the status LED (Pos. 4) lights up white to indicate the active menu mode.
- The menu currently includes the following menu items that can be accessed in sequence by turning the rotary button:

LED segment display	Description 1	Description 2	Setting value
EPo	Extraction Power	Setting the required volume flow	Yes
OPH	Operating hours	Operating hours	
HUS	Hours Until Service	Hours until maintenance	
dP	delta P	Differential pressure of the filter (kPA)	
dPA	Delta P Airflow	Pressure/volume flow measurement	
tP	torch Pressure	Extraction pipe vacuum (kPA)	
CLE	Cleaning processes	Number of cleaning processes	
US	1 = US, 0 = Metr.	Displayed units; Metric or US	
FR	Frequency	Motor frequency/motor speed	
Cur	Current	Motor current in A (only for extraction capacity regulation)	
P	Power	Motor power in KW (only for extraction capacity regulation)	
FAU	Filter Cleaning Counter	Display of detailed error messages in the event of frequency converter errors F90	
OPt	Options	Enabled options	
SEC	Service code	Service codes	Yes

Tab. 18: Menu

6.2.2 Activation codes

Advanced functions of the device can be activated by entering activation codes.

- The code can be entered up to five times in a row.
- When a correct code is entered, the signal light (Pos. 4) flashes green.
- If the code is incorrect, the signal light flashes red.

Lockout after failed attempts:

- After five consecutive incorrect entries, the code entry is locked for 60 seconds.

- The “SEC” menu item cannot be accessed during the lockout time.
- Any further incorrect entry after the lockout period has expired will result in another 60 second lockout.

6.2.3 Displaying the product ID and software version

Displaying the device ID:

To do this, hold down the rotary button for more than 5 seconds.

A three-digit number appears on the display, which corresponds to the last three digits of the device ID on the name plate of the AirDome.

Example: For a product ID of 250100345, “345” is displayed.

Displaying the software version and device type:

If the rotary button is held down for more than 10 seconds, a string in the format “Software version_Device type” appears on the display.

Example: “1_20” stands for software version 1 and device type 20.

6.2.4 External On/Off

The product is equipped with a 4-pin M12 socket on the control panel.

This socket can be used to switch the product on and off externally – for example, using a timer or another external control unit.

6.2.5 Cleaning the filters

If the differential pressure at the filter cartridge exceeds 1000 Pa, the filter is automatically cleaned during operation.

- Filter cleaning is carried out sequentially for all filter cartridges, with a pause of 61 seconds between each cycle.
- If the product is switched off using the rotary button, an automatic filter cleaning process starts at a reduced fan speed. After the cleaning process is completed, the product switches to “OFF”.
- The cleaning process is indicated on the segment display with “CLE”.

ATTENTION

Do not switch off the product using the main switch, otherwise the cleaning process will not start.

6.2.6 Setting the extraction capacity

The extraction capacity of the product can be set in the range from 8,000 to 20,000 m³/h.

- Press the rotary button for approx. 3 seconds to enter the menu.
- Then select the “EPo” menu item by turning the button.
- The currently set volume flow is shown as a running value on the display.
- The extraction capacity can be adjusted in steps of 1,000 m³/h by turning the button.
- The capacity adjustment takes place immediately – the AirDome immediately adjusts the extraction capacity accordingly.

6.2.7 RGB signal light in the intake unit

The optional lighting in the upper intake unit of the product allows the current operating status to be seen at a glance. The colour display is provided by an integrated LED and provides visual information about the current status of the system. The following states are displayed:

Option not active:

- White: The signal light lights up white as soon as the product is supplied with voltage.

Option is activated:

- White: The signal light lights up white as soon as the product is supplied with voltage.
- Green: Normal operation – the product is switched on.
- Red: Fault – there is an error. See chapter Troubleshooting
- Yellow: Differential pressure of the filter cartridges too high. A filter change may be required.

6.2.8 Communication interfaces

There is a 4-pin M8 socket on the control panel, which serves as a communication interface.

Optional extensions can be connected via this interface – for example, an IoT module for connecting to higher-level systems or an external service display for maintenance purposes.

Use is reserved exclusively for service personnel.

6.3 Commissioning services

⚠ WARNING

Danger due to faulty product condition.

The product must be fully installed before commissioning begins. All doors must be closed and the necessary connections must have been made.

1. Ensure that the product is supplied with compressed air and power.
2. Press the main switch of the product.
3. Switch on the product using the button on the operating control labelled "0" and "I".
4. The fan starts and the LED segment display signals the operating status [O N].
5. Fault-free operation is signalled by the green LED status signal light.

If there is a fault, please refer to the "Troubleshooting" chapter.

7 Maintenance

The instructions in this chapter are intended as minimum requirements. Depending on the operating conditions, further instructions may be required to keep the product in optimal condition.

The maintenance and repair work described in this chapter must only be performed by specially trained repair personnel of the operating company.

Spare parts used must comply with the manufacturer's specified technical requirements.

This is guaranteed if original spare parts are used.

The safe and environmentally friendly disposal of operating materials and replacement parts must be ensured.

The safety instructions in these operating instructions must be observed during maintenance work.

7.1 Care

The care of the product is essentially limited to cleaning all surfaces of the product and – if present – checking the filter inserts.

The warning notices listed in the chapter "Safety notes for maintenance and fault removal" must be observed.

NOTE

The product may not be cleaned with compressed air. This may result in dust and/or dirt particles getting into the ambient air.

Proper care helps to maintain the product in a continuous functional state.

For optimum care and cleaning of the powder-coated surfaces, the following must be observed:

- Thoroughly clean the product monthly or as needed.
- Clean the exterior areas of the product with a suitable industrial vacuum cleaner of dust classification H or with damp soft cloths/industrial cotton wool.
- For stubborn dirt, use commercially available household cleaners. Avoid vigorous rubbing.
- Do not use any abrasive agents that scratch.
- Do not use any acidic or strongly alkaline cleaning agents.
- Do not use organic solvents containing esters, ketones, alcohols, hydrocarbons or similar.

7.2 Maintenance

Regular inspection and servicing have a positive effect on the reliable functioning of the product.

Observe the warning notices for servicing and fault clearance in the chapter Safety.

The upkeep/maintenance of the product is essentially limited to the visual control of damage or leaks, as well as cleaning the outer surfaces.

⚠ WARNING

Skin contact with dust particles, etc. may cause skin irritation in sensitive persons.

Serious injury to the lungs and respiratory tract is possible!

To avoid contact with and inhalation of dust particles, wear disposable gloves and disposable respiratory protection, Class FFP2 or higher.

When cleaning, the release of dangerous dust particles must be avoided, so that bystanders are not injured.

NOTE

Do not clean the product with compressed air. This may result in dust particles getting into the ambient air.

Always ensure there is adequate lighting for maintenance tasks.

7.2.1 Cleaning the intake unit

The intake unit must be cleaned of dust deposits at regular intervals, but at least once a month.

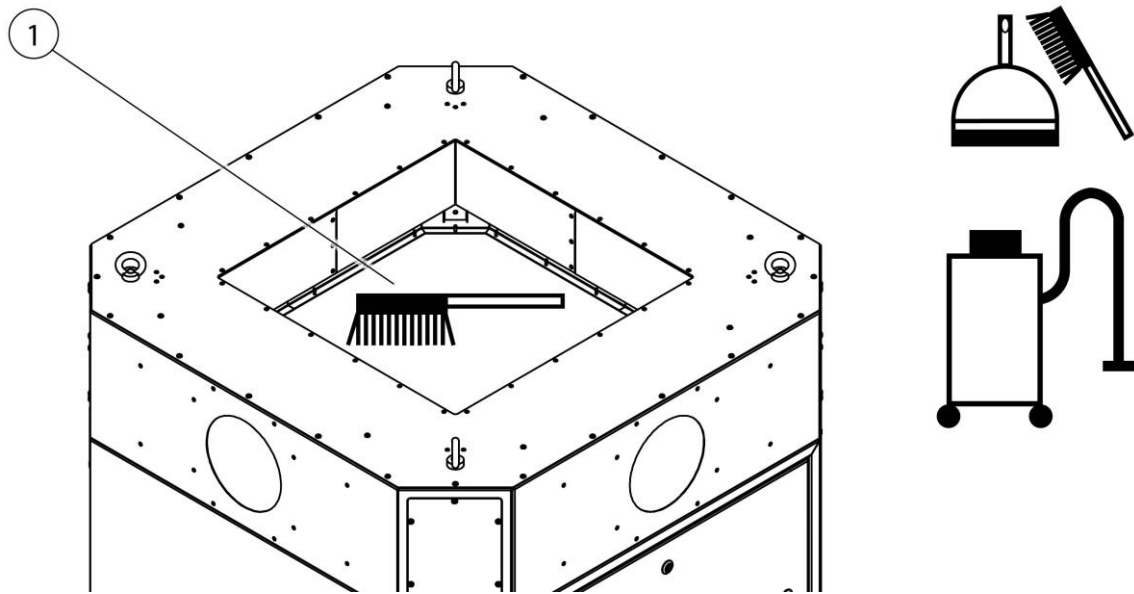


Fig. 22: Maintenance – Cleaning the intake unit

1. Switch off the product at the rotary switch.
2. Clean the intake unit with a hand brush and dustpan. Alternatively, an industrial vacuum cleaner can be used.
3. After cleaning, put the product back into service.

7.2.2 Changing the dust collection container

The level in the dust collection container must be checked at regular intervals and the dust collection container changed as necessary.

The time until dust collection container must be replaced depends on the type and quantity of the dust particles that occur. The operator must check the level by hand at regular intervals to avoid the dust collection container becoming overfull.

The dust collection container must be replaced in a timely manner to prevent contamination of the environment.

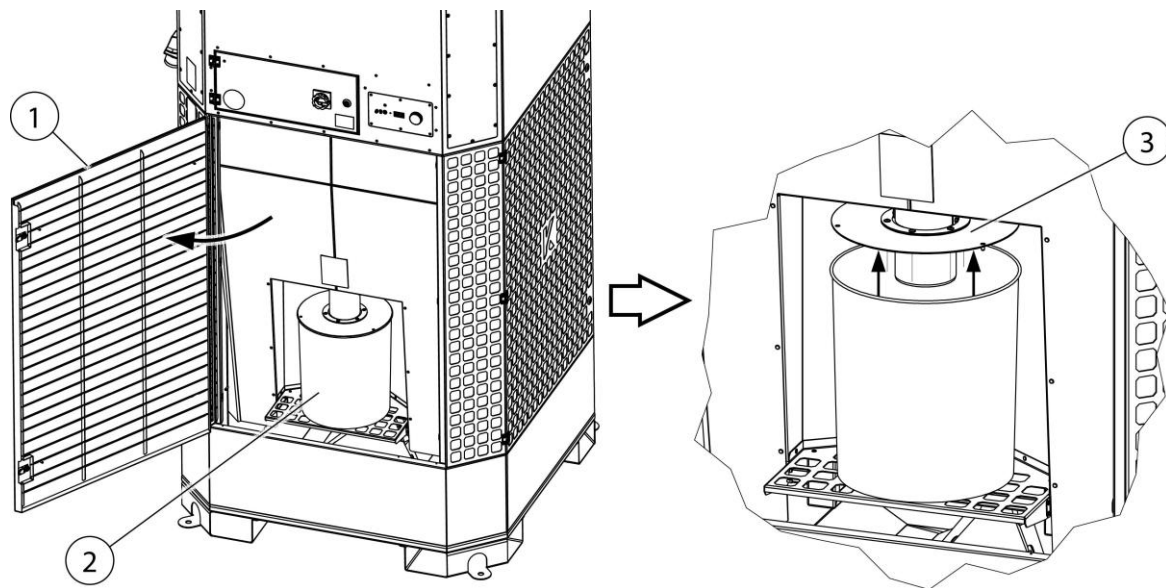


Fig. 23: Changing the dust collection container

Pos.	Description	Pos.	Description
1	Maintenance door	3	Cover
2	Dust collection container		

Tab. 19: Changing the dust collection container

To replace the dust collection container, please proceed as follows:

1. Switch off the product at the rotary switch.
2. Set the main switch to 0 and secure it against unintentional restarting.
3. Open the maintenance door (Pos. 1).
4. Release the cover of the dust collection container (Pos. 2) by opening the clamp fastener.
5. Slide the cover (Pos. 3) up.

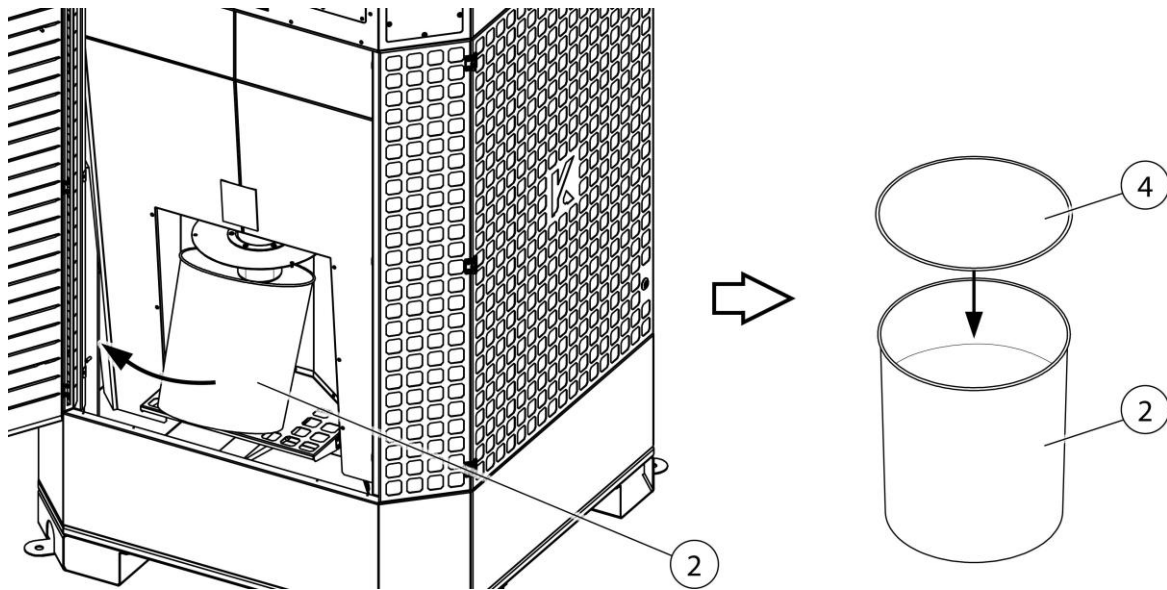


Fig. 24: Changing the dust collection container

Pos.	Description	Pos.	Description
2	Dust collection container	4	Cover

Tab. 20: Changing the dust collection container

6. Carefully remove the dust collection container (Pos. 2) from the product without whirling up dust.
7. Seal the dust collection container (Pos. 2) airtight with the cover (Pos. 4) and dispose of it according to regulations.
8. Reinsert the new dust collection container (Pos. 2) in reverse order.
9. Securely fix the cover (Pos. 3) to the dust collection container (Pos. 2) using the clamp fastener and close the maintenance door (Pos. 1).
10. Unlock the main switch, switch it to position "I" and put the device back into operation. See also chapter "Commissioning"

7.2.3 Draining the condensate from the compressed air vessel

The condensate that forms must be drained from the compressed air vessels according to usage, but at least once a month.

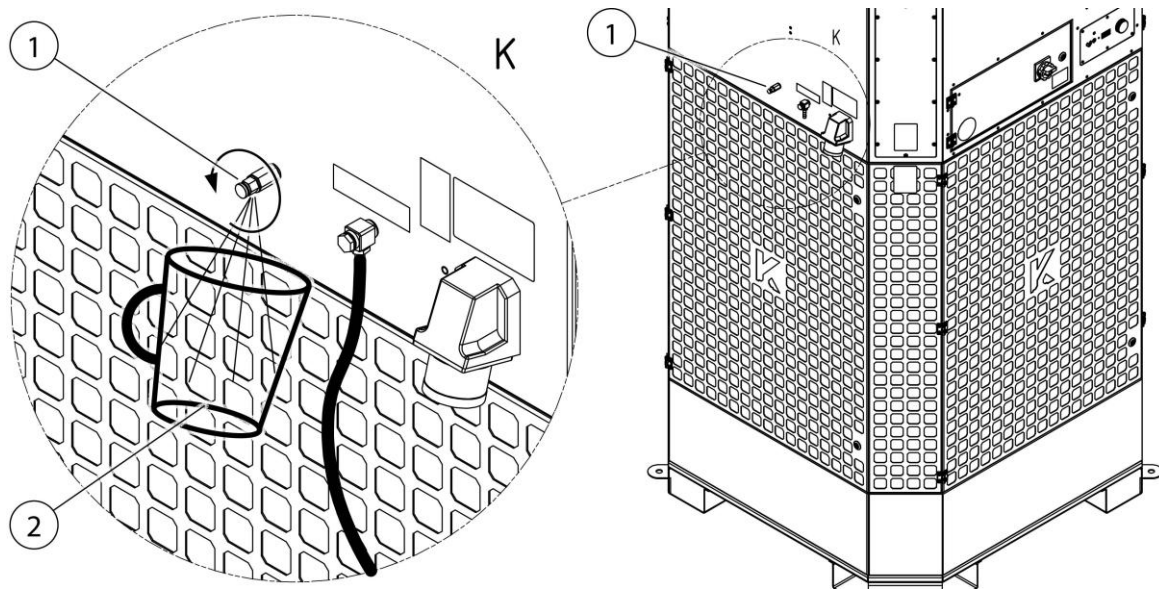


Fig. 25: Draining the condensate from the compressed air vessel

To drain the condensate, please proceed as follows:

1. Hold a suitable container, for example a beaker (Pos. 2), under the outlet opening of the condensate drain valve (Pos. 1). At the same time, slowly open the valve with your other hand.
2. Only close the valve when just air is escaping.

7.2.4 Visual inspection of the product

The product must be visually inspected every three months. The inspection is carried out as follows:

- Check the product for signs of damage.
- Have a qualified electrician check all connecting cables for damage.
- Check the compressed air connections and hoses for visible damage and leaks.
- Check the correct setting of the compressed air regulator. This is located in the fan component behind the maintenance cover.

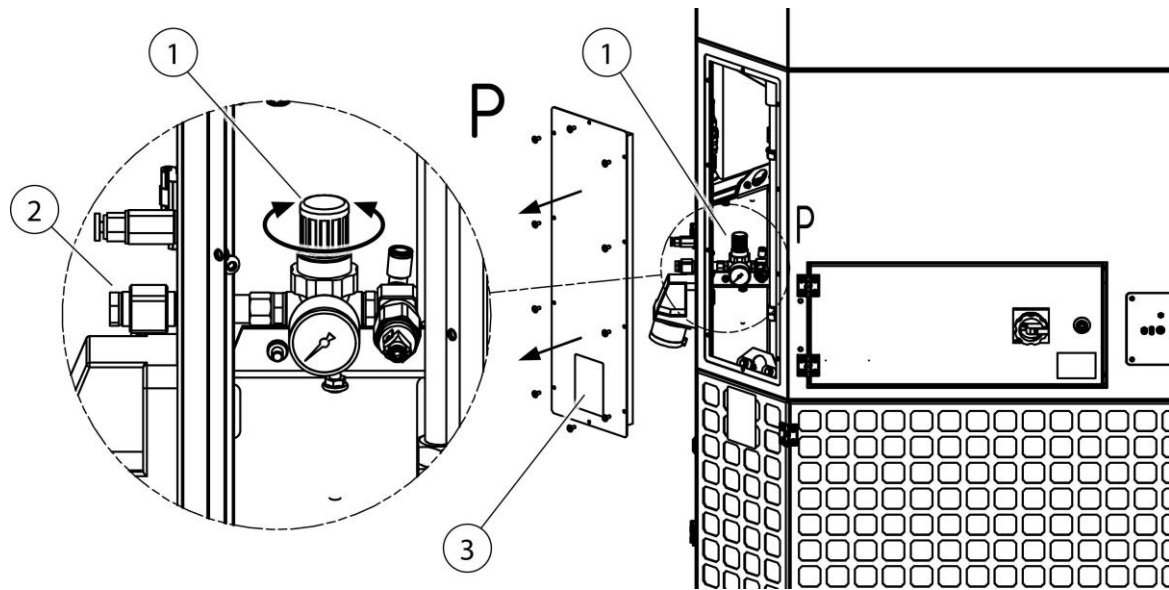


Fig. 26: Setting the compressed air regulator

To adjust the compressed air regulator, proceed as follows:

1. Switch off the product at the rotary switch.
2. Set the main switch to position "0" and secure it against unintentional restarting.
3. Completely disconnect the product from the power supply by pulling out the mains plug.
4. Remove the maintenance cover (Pos. 3).
5. Check the pressure set on the pressure reducer (Pos. 1) and, if necessary, adjust it to 5 bar using the rotary wheel.
6. Screw the maintenance cover (item 3) back on.
7. Reconnect the product to the power supply, switch on the main switch and put it into operation. See also chapter "Commissioning"

7.2.5 Checking the compressed air container with compressed air safety valve

NOTE

The product has one or more compressed air containers with compressed air safety valve.

Products with compressed air container and safety valve must be serviced/checked according to current national regulations.

7.2.6 Changing filters

The filter cartridges are located at the top of the product.

To change the filter cartridges, a scaffold or a lifting platform is required and fall protection must be ensured.

Perform the filter change as follows:

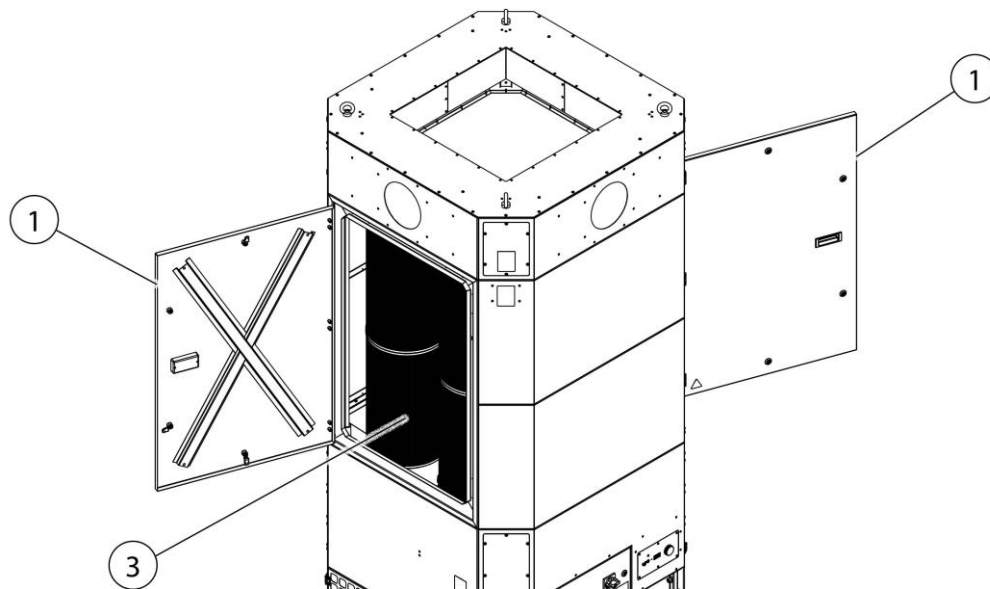


Fig. 27: Changing filters

Pos.	Description	Pos.	Description
1	Maintenance door	3	Filter cartridge

Tab. 21: Changing filters

1. Switch off the product at the rotary switch.
2. Set the main switch to 0 and secure it against unintentional restarting.
3. Prepare the new filter cartridges and the supplied disposal bags.

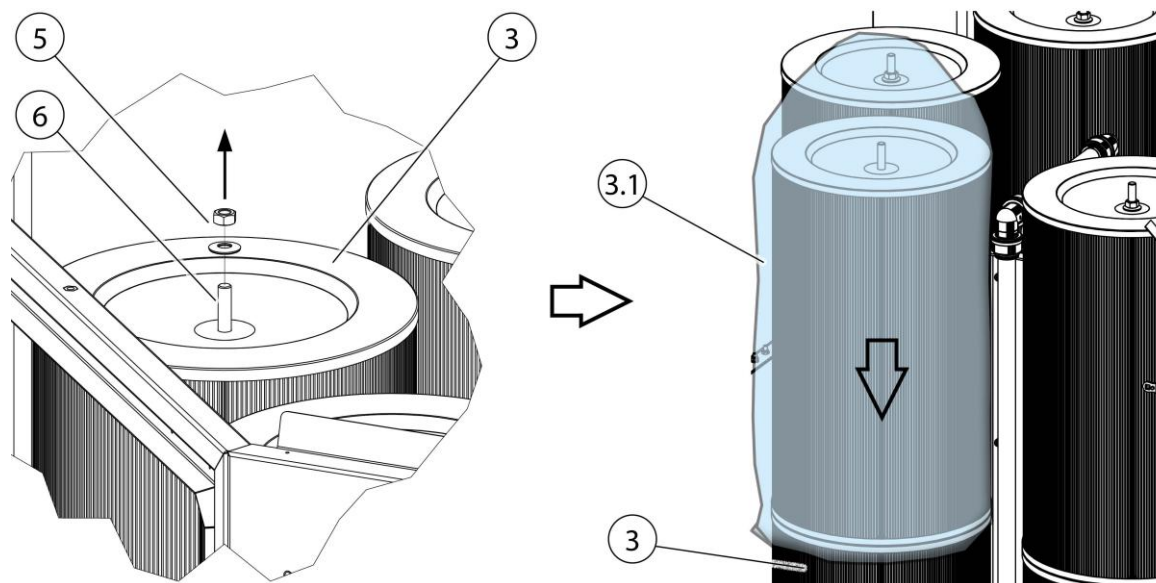


Fig. 28: Changing filters – Removing the filter

Pos.	Description	Pos.	Description
3	Filter cartridge	5	Hexagon nut + sealing washer
3.1	Disposal bag	6	Threaded bolt – Rotating nozzle

Tab. 22: Changing filters – Removing the filter

4. Loosen the filter cartridge (Pos. 3) by removing the hexagon nut + sealing washer (Pos. 5).
5. Carefully place the disposal bag (Pos. 3.1) over the contaminated filter cartridge without stirring up dust.

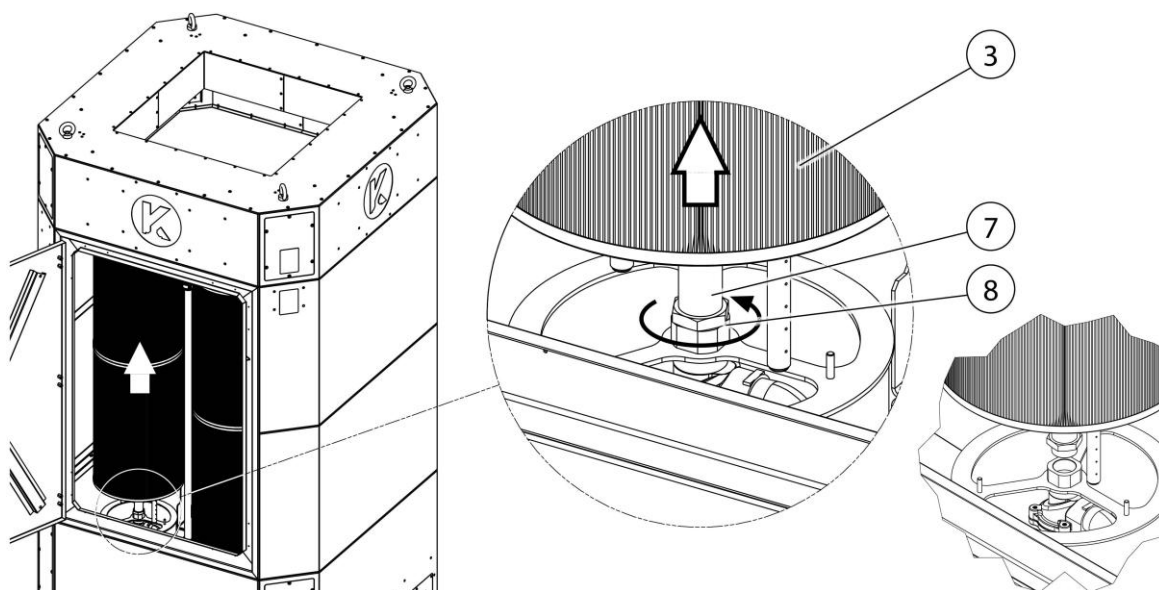


Fig. 29: Changing filters – Removing the rotating nozzle

Pos.	Description	Pos.	Description
3	Filter cartridge	7	Rotating nozzle – Pipe
		8	Hexagon nut

Tab. 23: Changing filters – Removing the rotating nozzle

6. As shown in the figure, loosen the rotating nozzle (Pos. 7); to do this, lift the filter cartridge (Pos. 3) and loosen the rotating nozzle using a suitable hexagon wrench.

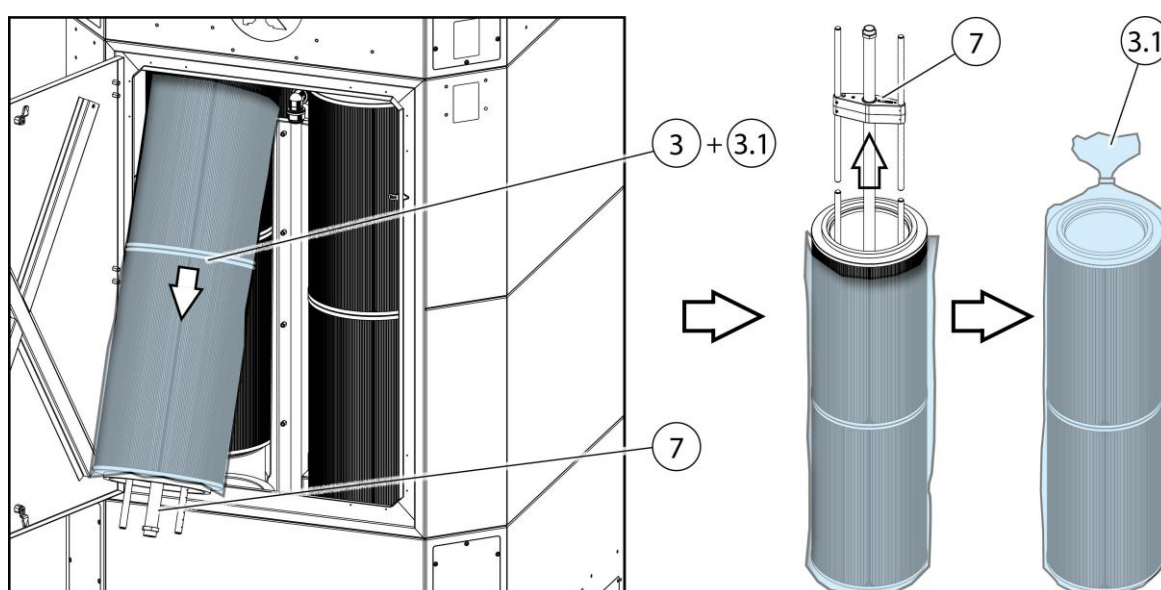


Fig. 30: Changing filters – Removing the filter + rotating nozzle

7. As shown in the figure, remove the filter cartridge + disposal bag and rotating nozzle from the product and place it on the floor turned by 180 degrees.
8. Pull the rotating nozzle out of the contaminated filter cartridge and insert it into the new filter cartridge.
9. Seal the disposal bag (Pos. 3.1) with the contaminated filter cartridge (Pos. 3) airtight and dispose of it according to regulations.
10. Perform steps 5 – 10 for all contaminated filter cartridges.
11. The new filter cartridges are installed in reverse order.
12. After installing the new filter cartridges (Pos. 3) + rotating nozzles (Pos. 7), close the maintenance doors (Pos. 1) again.
13. Unlock the main switch and set it to 1, then put the product back into operation. See also the chapter “Commissioning”.

7.2.7 Filter mat replacement

If the filter mats of the air outlet grille are damaged or contaminated, they must be replaced.

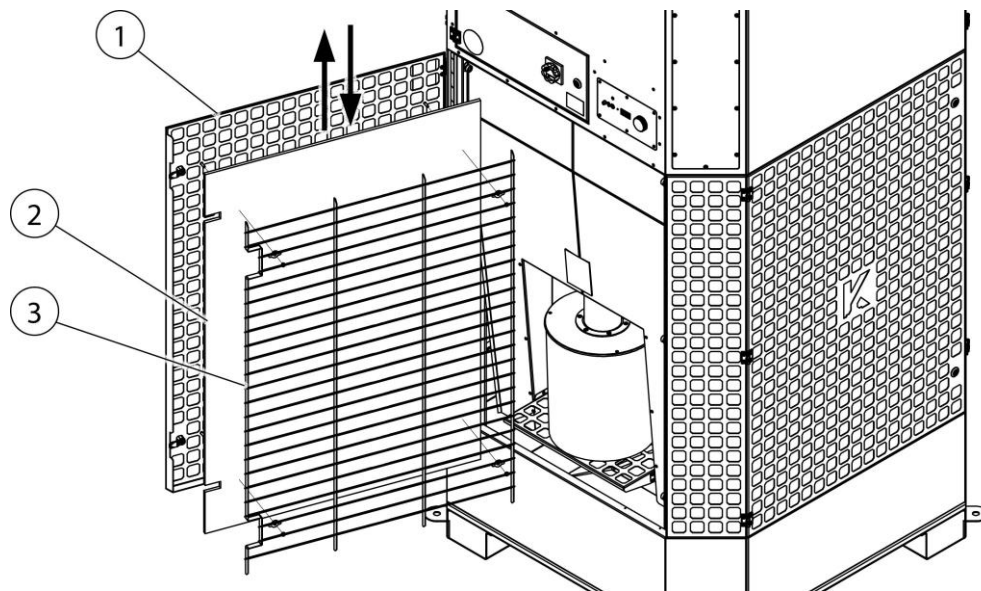


Fig. 31: Maintenance – Replacing the filter mats

Pos.	Description	Pos.	Description
1	Maintenance door	3	Protective mesh
2	Filter mat		

Tab. 24: Maintenance – Replacing the filter mats

To replace the filter mats, proceed as follows:

1. Switch off the product by pressing the rotary switch.
2. Open the maintenance door (Pos. 1).
3. Remove the protective mesh by loosening the four hexagon nuts and removing the mesh.
4. Remove the contaminated/damaged filter mat (Pos. 2) and dispose of it according to regulations.
5. Insert the new filter mat (Pos. 2) and secure it again with the protective mesh (Pos. 3).

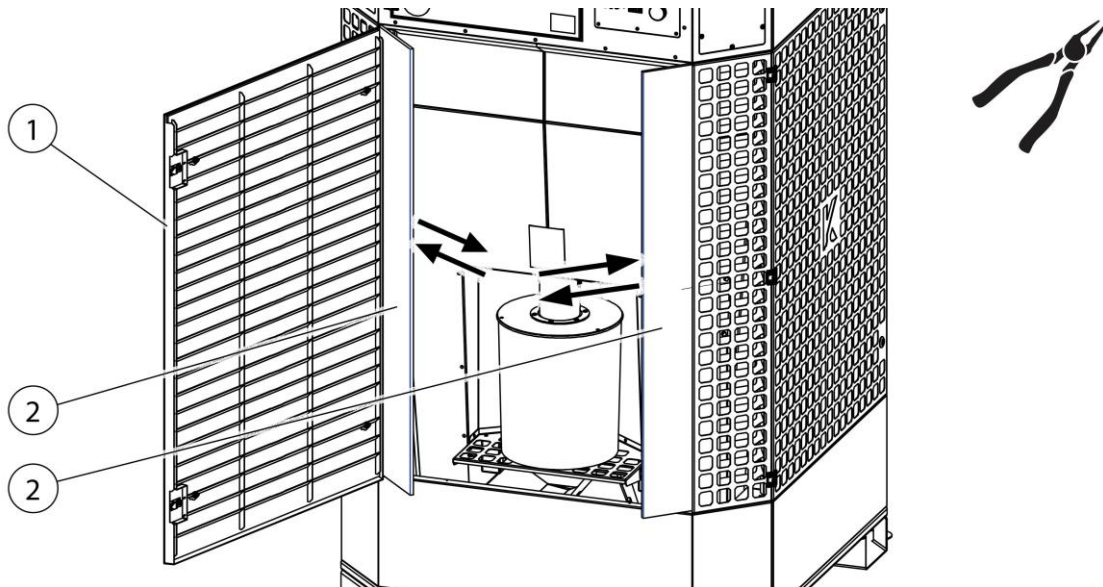


Fig. 32: Maintenance – Replacing the filter mats

6. Carefully pull the two filter mats (Pos. 2) out of the side pockets using needle-nose pliers and dispose of them according to regulations.
7. Then insert the new filter mats (Pos. 2) again.

7.3 Troubleshooting

Fault	Possible cause	Note
Fan does not start.	Insufficient/Unavailable compressed air supply	Check compressed air supply

Product does not start, operator control LED display not functioning	Thermal fuse of the control unit is defective	Replace the thermal fuse, allow the product to cool down.
Extraction capacity too low/non-existent	Dust collection container missing or not properly locked	Push in the dust collecting container as far as it will go and lock it with the clamping lever
	Filter inserts saturated	Replace filter inserts
Product cleans at short intervals.	Filter inserts saturated	Replace filter inserts
Dust escapes on the clean air side	Filter inserts damaged	Replace filter inserts
Product does not clean	Compressed air supply not available/disconnected	Check the compressed air supply and compressed air connections – necessary pressure 5–6 bar, see also the chapter Installation
Product switches off	The vacuum in the filter area is too high Emergency shutdown to protect against destruction of the filter cartridges The set minimum extraction capacity is greatly undercut Filter cartridges saturated	Filter change required / contact the service department Trigger level 1900 Pa differential pressure at the filter cartridges

Tab. 25: Troubleshooting

7.4 Troubleshooting – Error codes

Error code	Possible cause	Information/Remedy
F90	Frequency inverter fault	Disconnect the product from the power supply for 30 seconds
F93	Differential pressure at the filter too high, filter elements contaminated	Check cleaning + compressed air supply Carry out a filter change
F94	Control error	Disconnect the product from the power supply for 30 seconds
F95	Compressed air supply not available	Establish compressed air supply

Table 26: Troubleshooting – Error codes

NOTE

If the error cannot be corrected by the customer, please contact the manufacturer's service department.

7.5 Troubleshooting – Warnings

Warning code	Possible cause	Information/Remedy
SEr	Service due	Have service performed
A03	Differential pressure at the filter too high, filter elements contaminated	Carry out a filter change
	No compressed air connected – Filter cleaning not working	Check and establish compressed air supply
A04	Volume flow cannot be calculated	Disconnect the product from the power supply for 30 seconds
A90	Fan error – Product is in emergency mode	Contact the manufacturer's service department

Table 27: Troubleshooting - Warnings

7.6 Emergency measures

In case of fire of the product or its detection elements, the following steps should be taken if necessary:

1. Disconnect the product from the mains! If present; pull out mains plug; set main switch to 0-position; disconnect supply fuses.
2. If present, disconnect the compressed air supply.
3. Fight fire with a commercially available dry powder extinguisher.
4. Notify local fire brigade if necessary.

⚠ WARNING

Do not open products with maintenance door. Flash flame formation!

In the event of a fire, do not touch the product under any circumstances without proper protective gloves. Risk of burns!

8 Disposal

⚠ WARNING

Skin contact with welding fumes, etc. can cause skin irritation in susceptible individuals.

Disassembly work on the product may only be carried out by trained and authorised personnel while complying with the safety rules and the applicable accident prevention regulations.

Serious injury to the lungs and respiratory tract is possible!

In order to avoid contact with and inhalation of dust particles, use protective clothing, gloves and a blower respirator system.

The release of hazardous dust particles must be avoided during dismantling work so that persons in the vicinity are not harmed.

⚠ CAUTION

All work on and with the product must comply with the legal obligations for waste avoidance and proper recycling/disposal.

8.1 Plastics

Plastics, if present, must be sorted as far as possible. Plastics must be disposed of in compliance with the legal requirements.

8.2 Metals

Metals, if present, must be separated and disposed of.
Disposal must be carried out by an authorised company.

8.3 Filter elements

Filter elements, if present, must be disposed of in compliance with the legal requirements.

9 Annex

9.1 EU Declaration of Conformity

Designation: General ventilation system
 Series: AirDome
 Type: 390650, 390655, 390660 (possibly different article numbers for other product variants)
 Machine ID: (serial number) see the name plate on the product
 This product is developed, designed and manufactured in accordance with EC directives
 2006/42/EC – Machinery Directive

The product continues to comply with the provisions of the
 2014/30/EU - EMC Directive
 2014/29/EU - Pressure Equipment Directive
 2011/65/EU - RoHS Directive

Company: At the sole responsibility of
 KEMPER GmbH
 Von-Siemens-Str. 20, D-48691 Vreden

The following harmonised standards are used:

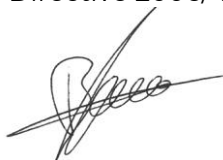
EN ISO 12100:2010 Safety of machinery - General principles for design
 EN ISO 13857:2019 Safety of machinery - Safety distances
 EN ISO 13854:2019 Safety of machinery - Minimum gaps
 EN ISO 4414:2010 fluid power - General rules and safety requirements for systems and their components
 EN 60204-1:2018 Safety of machinery - Electrical equipment of machines
 EN ISO 13849-1:2023 Safety of machinery - Safety-related parts of control systems
 EN IEC 61000-6-2:2019 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments
 EN IEC 61000-6-4:2019 Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments

A complete list of standards, directives and specifications applied is available from the manufacturer. The operating manual belonging to the product is available.

Authorised representative:

Kemper GmbH, Von-Siemens-Str. 20, 48691 Vreden, Germany

The aforementioned person is authorised to compile the technical documentation in accordance with Annex VII of Directive 2006/42/EC.



Vreden, 27.02.2026

Place, date

B. KEMPER

CEO

Identification of the signatory

9.2 UKCA Declaration of Conformity

Designation: General ventilation system
 Series: AirDome
 Type: **390650, 390655, 390660** (possibly different article numbers for other product variants)
 Machine ID: (Serial number) see type plate on product
 This product is developed, designed and manufactured in accordance with the UKCA directives
 Supply of Machinery (safety) Regulations 2008

The product continues to comply with the provisions of the
 Electromagnetic Compatibility Regulations 2016
 Electrical Equipment (Safety) Regulations 2016
 Pressure Equipment Regulations 2016

At the sole responsibility of
 Company: **KEMPER GmbH**
 Von-Siemens-Str. 20, D-48691 Vreden

The following designated standards and technical specifications have been applied:

BS EN ISO 12100:2010 Safety of machinery - General principles for design
 BS EN ISO 13857:2019 Safety of machinery - Safety distances
 BS EN ISO 13854:2019 Safety of machinery
 BS EN ISO 4414:2010 fluid power - General rules and safety requirements for systems and their components
 BS EN IEC 61000-6-2:2019 Electromagnetic compatibility (EMC) - Part 6-2: Generic standards - Immunity standard for industrial environments
 BS EN IEC 61000-6-4:2019 Electromagnetic compatibility (EMC) - Part 6-4: Generic standards - Emission standard for industrial environments
 BS EN 60204-1:2018 Safety of machinery - Electrical equipment of machines
 BS EN ISO 13849-1:2023 Safety of machinery - Safety-related parts of control systems
 BS EN IEC 63000:2018 Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

A complete list of standards, directives and specifications applied is available from the manufacturer. The operating manual belonging to the product is available.
 Additional information:

UK Authorised Representative:
 United Kingdom KEMPER (U.K.) Ltd.
 Venture Court, 2 Debdale Road, Wellingborough, Northamptonshire NN8 5AA
 The above-mentioned person is authorized to compile the technical documentation in Schedule 2 of the Supply of Machinery (Safety) Regulations 2008.

Vreden, 27.02.2026

Place, date

B. Kemper

CEO

Identification of the signatory

9.3 Technical data

Designation	Type		
Filters	390650	390655	390660
Filter stages	1		
Filter method	Cleanable filter		
Cleaning method	Rotating nozzle		
Filter surface m² [ft²]	30 [323]		
Number of filter elements	6		
Total filter surface m² [ft²]	180 [1938]		
Type of filter	Filter cartridge		
Filter material	ePTFE membrane		
Filter efficiency ≥ %	99.9		
Welding fumes class	--		
Test standard	--		
Filter class/dust classification	M		
Basic data			
Maximum fan capacity m³/h [CFM]	28,000 [16,478]	30,000 [17,655]	
Extraction capacity m³/h [CFM]	8000-20,000 [4708-11,770]		
Vacuum Pa [inch WC]	1625-2370 [7-10]	1500-2290 [6-9]	
Motor power kW [hp]	15.4 [20.65]	14.32 [19.20]	
Power supply/rated current/protection type/ISO class	See name plate		
Permissible ambient temperature (operation) °C [°F]	+5 to +40 [+41 to +104]		
Duty cycle %	100		
Noise level dB(A)	72		
Compressed air supply bar [PSI]	5 – 6 [73 – 87]		
Compressed air consumption NI/min [CFM]	240 [8]		
Compressed air class	2:4:2 ISO 8573-1		
Dimensions of the basic product (W x H x D)	See Dimensions sheet		
Basic product weight kg [lbs]	875 [1930]		

Additional information	
Fan type	Radial fan, direct driven

Table 28: Technical data

9.4 Dimensions sheet

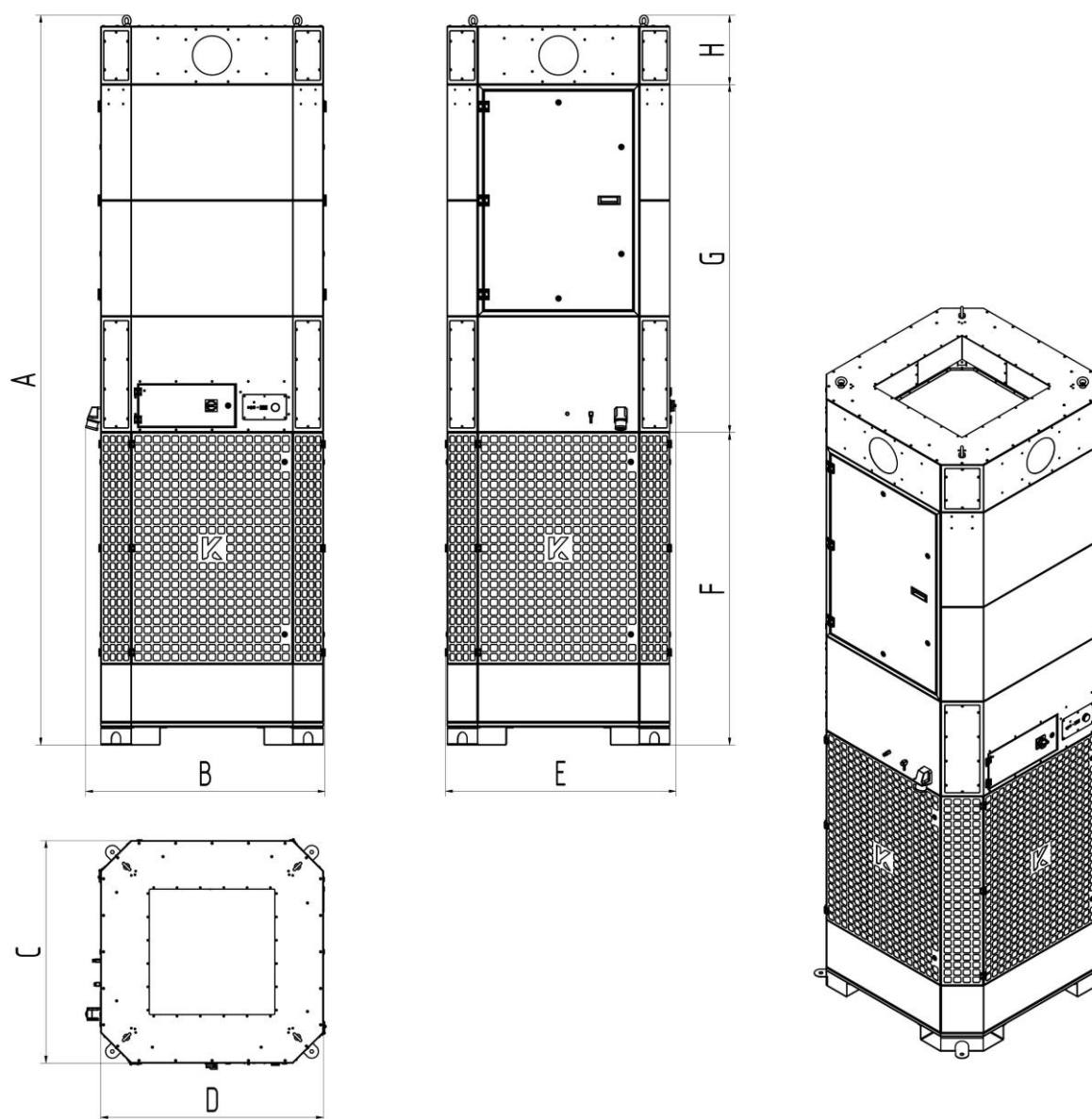


Fig. 33: Dimensions sheet

Symbol	Dimension mm [in]	Symbol	Dimension mm [in]
A	4100 [161.4]	E	1295 [51.0]
B	1345 [53.0]	F	1758 [69.2]
C	1250 [49.2]	G	1952 [76.9]

D	1250 [49.2]	H	390 [15.4]
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Table 29: Dimensions table

9.5 Spare parts and accessories

Description	Article No.
Disposal container set (4 pcs.)	1190335
1x main filter element filter 30 m ² (6x are required)	1090729
Set of clean air outlet pre-filter mats	1990050

Tab. 30: Spare parts

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