

DM-120 B



DM-160 B



DM-200 B



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The information and recommendations given in this instruction manual are based on the latest information that was available at the time of printing. The manufacturer maintains the right to make changes or include additional information in this user manual without giving a reason to do so.

This instruction manual has been compiled with the greatest of care. If, in spite of this, the instruction manual contains incorrect information, then you are kindly requested to inform the manufacturer of this.

The manufacturer rejects all liability for damage resulting from the use of the extraction unit or the information given in this instruction manual.

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## 1.0 USER MANUAL

### WARNINGS AND SYMBOLS

The following warnings and symbols are used in this manual:

The warnings contain important information. Make sure everybody who uses the extraction unit clearly understands this information.



#### TIP

Gives suggestions and advice so as to make certain tasks easier or more convenient.



#### NOTE

A comment with additional information, alerts you to potential problems.



#### WARNING

If the work is not carried out carefully, this may result in (serious) injury or even death.



#### DANGER

If these regulations are not observed, this may result in death.

Extraction units can be supplied with two types of cleaning: with compressed air (JET) or mechanical (M). The symbols on the left indicate that the relevant information only applies to a specific cleaning method.

**JET**

**M**

## USER MANUAL

This instruction manual describes the installation, operation, use and maintenance of the extraction unit. In some instances, the diagrams and drawings that have been used may deviate from the actual situation.

This instruction manual has been produced in accordance with the legal regulations as determined in the Machinery Directive, which has been included in the Dutch Machinery decree.

This instruction manual must be made available to anybody who works with or carries out work on the extraction unit. The instruction manual must be kept in a location where it is easily available. Keep this for future use. Ensure that the user manual is always within reach of the person who works with the machine or who maintains or repairs the machine.

## LAYOUT

This user manual contains information for users of the extraction unit. The manual is divided into various sections, the titles of which are stated at the top of each page.



### NOTE

Read this instruction manual carefully! Follow the instructions before using the extraction unit.



### NOTE

Also read the instruction manuals for the other machines, components and equipment that are used with the extraction unit.



### TIP

Contact the manufacturer if anything is not included in the instruction manual or if anything in the instruction manual is unclear.

## USERS

The term 'user' is defined as anyone who operates, maintains, adjusts, cleans, repairs or performs any other work on or with the extraction unit.

This user manual on the use of the extraction unit must be handed to the user, taking their level of education into consideration.

Work with or on the extraction unit may only be performed by personnel who:

- Are capable of performing the work independently and safely;
- Are under the supervision of someone who is familiar with the work and who has given them instructions;
- Is qualified in terms of training and/or experience.

## LIABILITY

All information and instructions in this user manual have been compiled in line with current legislation and technological developments. Read this manual carefully before commencing work on or with this machine. Neither the manufacturer nor its representatives can be held liable for damage and technical faults arising from non-compliance with this technical manual. The actual product may differ from the texts and illustrations. The actual unit supplied may vary from the illustrations due to special designs, the use of additional order options, or as a consequence of the latest technical modifications. The manufacturer reserves the right to make technical modifications to do with developing or improving the product's performance characteristics.

## WARRANTY

Free replacement of parts damaged by manufacturing or assembly defects for two years after delivery. Only original manufacturer's parts may be used.

## 2 GENERAL SAFETY REGULATIONS

The extraction unit meets all the relevant safety regulations and has, therefore, been awarded the CE mark.

Various technical measures have been taken in accordance with the CE guidelines and harmonized standards so that the extraction unit meets the safety requirements based on the current state of technology.

The manufacturer has carried out a risk analysis in accordance with NEN EN ISO 12100 and produced a technical construction file for the extraction unit.

### **CORRECT USE**

The extraction unit is exclusively intended for the extraction of dry dust and chips from wood or similar materials.\* Operational reliability is only guaranteed with proper use of the machine.

The switch-on frequency of the machine should not be more than 10 times per hour. If this switch-on frequency is exceeded, a basic machine recognition module, which is available as an option, must be used. If you have any questions, please contact your supplier.

Proper operation and separation quality are guaranteed if the extraction unit is properly connected to one or more woodworking machines and if used properly. When extracting a dust-tested machine with a dust source, it was determined that the maximum workplace concentration TRK value of 0,1 mg/m<sup>3</sup> is not exceeded.

\* provided that the combustion speed of the substance in question is less than 200 bar m s<sup>-1</sup>. See page 10 for an overview of extractable materials.



### **WARNING**

Observe the general safety regulations.



### **NOTE**

Any use other than described in this manual is not correct use. Use other than as directed will invalidate the warranty and deny any responsibility on the part of the manufacturer or its authorized representative. The user is solely responsible for any damage resulting from improper use.

**GUARDS**

Before using the extraction unit, fit all the doors and hatches to the machine and secure them using the correct attachment aids.

**VISITORS AND CHILDREN**

Keep visitors and, in particular, children, who are not aware of the dangers, away from the extraction unit's work area.

**INSTRUCTION MANUAL**

Read the instruction manual before using the extraction unit. The users of the extraction unit must be instructed in its use. In particular, the safety measures and the risks related to using this extraction unit must be known.

**WORK AREA**

Keep the work area clean and tidy. Do not place any inflammable materials against the extraction unit.

**UNINTENDED START-UP**

Always disconnect the power from the extraction unit and lock the main switch before carrying out work on it.

**PERSONAL PROTECTIVE EQUIPMENT**

Use a dust mask when replacing the collection bags. Always use protective equipment with a CE mark.

**CAPACITY OF THE EXTRACTION UNIT**

Only use the extraction unit within the predefined limits with regard to the capacity, the negative pressure and the use.

**ALERTNESS**

Remain alert to unusual situations, such as a strange noise (rattling, hissing or whistling) or dust escaping from the extraction unit.

**DANGER****RISK OF FIRE AND EXPLOSION**

Avoid sparks or other possible sources of ignition at all times. Suction hoses must be electrically conductive, earthed against electrostatic charges and fire-retardant. Install the electrical connection correctly. Do not suck in any sparking materials (such as nails, screws). Do not suck in any sources of ignition (such as cigarette butts, sparks by grinding, fire).

**NOTE**

Accidents are often caused by a succession of special and deviating circumstances from the normal situation. If an abnormal, unsafe or special circumstance occurs, resolve it first.



### WORK AREA

Ensure the work area is safe when the extraction unit is in use. Keep a safe distance from the suction openings.

### TOOLS

Always use the correct tools for the job at hand.

### ACCESS

Do not climb into the extraction unit when it is in use.

### RETURN AIR

The extraction unit is H3 certified (residual dust concentration in exhaust air less than  $0,1 \text{ mg/m}^3$ ). This means that the ejected air can be 100% re-circulated and that no air exchange is required. In that sense, the extraction unit even works as an air purifier. When processing carcinogenic (hard) woods, such as oak, beech, meranti and iroko, the expelled air may not flow to areas other than the one in which it is extracted.

### CHANGES AND ADJUSTMENTS TO THE MACHINE

In order to avoid risks and to ensure optimum performance, no changes, additions or modifications may be made to the machine that are not expressly approved by the manufacturer. All ideograms, stickers and labels must be kept in a legible condition.

### TYPE ZONING DM SERIES DUST EXTRACTION

Based on the EN-16770 and BGI-739, no zone 22 is applied to the return air of the DM series filters. The risk of formation of an explosive dust cloud ( $> 30 \text{ gr / m}^3 = \text{LEL}$ ) due to filter breakage due to material and / or mechanical failure is excluded by the design and construction of the filter.



## WARNING

### FIRE RISK!

Incorrect installation and operation can cause a fire.



## IN CASE OF FIRE

1. Stay calm
2. Switch off all power supplies (main switch, compressed air)
3. Report fire
4. Do not use filter cleaning
5. Try to remove ignition source

Note: Do not open shutters. Keep the extraction unit closed! Blast flames may occur when removing the waste container.

## ORIGINAL ACCESSORIES

Replacement parts and accessories must meet the requirements specified by the manufacturer. Therefore, only use original replacement parts and original accessories or the replacement parts and accessories approved by the manufacturer.

## APPLICATION

From a safety point of view, the device is **ONLY** suitable for the extraction of:

- dust from dust explosion class St 1 ( $\leq 200 \text{ bar m s}^{-1}$ );
- wood dust and wood chips (all types of solid wood);
- panel materials (laminated wood panels, medium density fiberboard (MDF), high density fiberboard (HDF), chipboard, plywood boards);
- panel materials with coatings or edges of plastic or light aluminum;
- woody materials (cork, plastic, hard rubber, bones, paper, cardboard, ...);

The extraction of dust other than wood dust is only permitted after consultation with the manufacturer. Woodworking machines, where ignition sparks are **EXCLUDED**. (Non-sparking woodworking machines according to BGI 739).

From a safety point of view, the device is **NOT** suitable for the suction or extraction of:

- explosive or equivalent substances within the meaning of § 1 SprengG;
- dust from dust explosion class St 2 en St 3 ( $\geq 200 \text{ bar m s}^{-1}$ );
- substances with a low minimum ignition energy (less than 10 MJ);
- explosive gases or gas-air mixtures;
- flammable liquids and mixtures of flammable dust with flammable liquids;
- woodworking machines where effective ignition sparks cannot be ruled out (e.g. multi-blade sawing machines).
- sticky and/or volatile hydrocarbon containing materials.

The extraction unit is **NOT** suitable for use in potentially explosive environments.



## NOTE

Any use of the machine outside of its intended use is prohibited and is considered improper. See also page 7.



## NOTE

Not suitable for:

- the extraction of four-sided planing benches
- intensive processing of plaster and fire-resistant board

### 3 SAFETY REGULATIONS FOR MAINTENANCE, REPAIRS AND ADJUSTMENTS

#### HOISTING

Always take the weight of components into consideration whenever they are hoisted. Use the correct tools and employ a safe hoisting method. Never stand or walk under hoisted components. Falling objects may cause serious injury.

#### REPAIR OF THE EXTRACTION UNIT

Never repair the extraction unit yourself; always contact the supplier. Repairs to the extraction unit may only be performed by a qualified technical service or by repairers approved by the manufacturer.

#### COMPONENTS

Only use original components or components that have the same specifications and properties.

#### DAMAGED COMPONENTS

Always trace the cause of damaged components or guards. Only use the extraction unit again once the component has been repaired and the cause of the problem has been rectified.

#### DIRECTION OF ROTATION

After completing work that may have an effect on the extraction unit's direction of rotation, check the direction of rotation when starting the extraction unit. Examples of such work include work on the plant's electrical installation.

#### RESTARTING

Pay extra attention when starting the extraction unit for the first time after carrying out work such as maintenance, repairs or adjustments. When doing so, pay attention to unusual situations and strange noises.



#### WARNING

Always observe the safety regulations for maintenance, repairs and adjustments.



#### DANGER

An electric shock can cause serious injury or even death. Always disconnect the extraction unit from the power supply before carrying out work on the extraction unit. Do not carry out work on the electrical components. Only qualified personnel from an authorized technical services company or the manufacturer may carry out work on these components under certain conditions.

#### WARNING! RISK OF INJURY OR DEATH!

- Hearing impairment due to noise
- Health effects due to exposure to dust, in particular when working with hardwood.



#### WARNING

Pay attention to the fire risk when working on the extraction unit. Smoking and open fire are prohibited.

## 4 SAFE WORK METHOD

### OPERATORS

The machine operators must read this instruction manual so that they can use the extraction unit safely and correctly.

### GENERAL INFORMATION

Always start the extraction unit first before using the machines. This will avoid the machines being used without the wood being extracted. Once the work has been completed, turn off the machines before turning off the extraction unit.

### FILTER FAILURE

Do not use the extraction unit if there is a filter failure, to prevent dust from getting into the fan compartment and around the extraction unit. If this does happen, then there may be a risk of exposure, a fire risk or risk of an explosion.

### ENTRAPMENT HAZARD

Never insert your hand or arm in the inlet or other parts of the extraction unit.

### SUPERVISION

Always pay attention to the extraction unit when it is in use.



### WARNING

Observe the following safety regulations to ensure the work is carried out safely.



### NOTE

To avoid the risk of an explosion, keep the area around the extraction unit clean and free of dust.

### **SOUND PRESSURE LEVEL**

The sound pressure level of the machine is less than 65 dB (A)\*. Hearing protection is recommended or prescribed in conjunction with other machines installed on the shop floor. We refer to the local legislation of the user's country. The specified sound pressure level values are emission values of the extraction unit and therefore not safe workplace values. Although there is a correlation between emission and immission values, it cannot be reliably determined whether additional precautions are needed in the workplace. Factors that can affect the existing workplace include the duration of exposure, the nature of the workplace and other influences nearby. The maximum workplace values allowed may also differ from country to country. This information must be retrieved by the user in order to make a proper assessment of the hazard or risk.

\* For the specified emission values, a permissible measurement uncertainty  $K = 4$  dB (A) applies. Measured at nominal volume flow in an unobstructed sound field. The measurement was carried out in accordance with EN ISO 11201 (without chip transport).

## 5 DESCRIPTION OF THE MACHINE

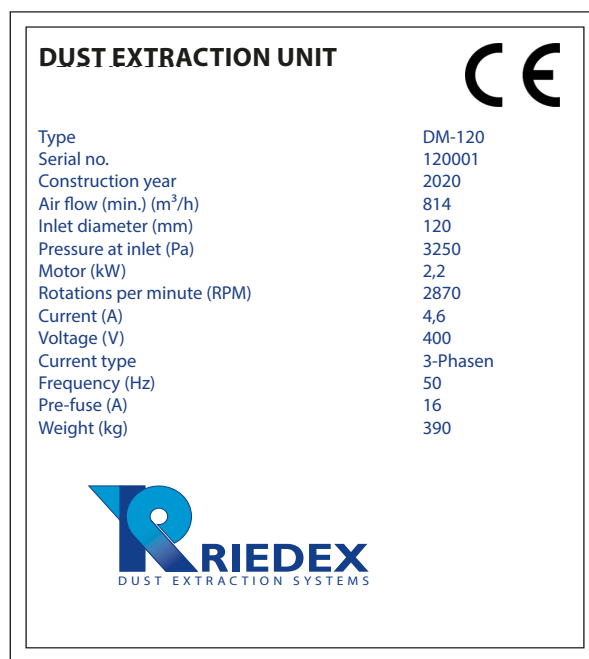
The extraction unit is a machine that can be used for:

Extraction of non-spark generating\* woodworking machines with recirculation of the used air. The extraction unit is intended for indoor installation and has the required safety level. Depending on the type, the waste is collected in plastic bags, placed in sheet steel bins (DM-xxxB, or the waste falls down via a rotary valve (DM-xxxRV). The types DM-xxxP can be assembled with a briquette press. It is also possible to opt for blowing the waste in a container (DM-xxxC).

\* According to the standard BGI 739, the following machines are defined as spark generating: crushers, multi-blade circular saws and wide-belt sanders used in chipboard, door, molding and parquet production.

The manufacturer of the extraction unit has made every effort to provide you with a safe product. Keep in mind that the extraction unit is only safe if it is used correctly. Therefore, read this manual carefully and make sure that anyone who starts using the extraction unit has done the same.

A CE-marked type plate with the data as shown in the adjacent figure is attached to the extractor unit.



CE mark (example)



### NOTE

Any other use of the extraction unit than described in this manual is not permitted!

### TECHNICAL DATA

	DM-120 B	DM-120 HD	DM-160 B	DM-200 B
Motor	2,2 kW	3 kW	3 kW	4 kW
Air flow (min.) at 20 m/s	814 m³/h	240 m³/h	1448 m³/h	2262 m³/h
Pressure at inlet	3250 Pa	8600 Pa	3000 Pa	3000 Pa
Air flow (max.)	1340 m³/h	1200 m³/h	2000 m³/h	3200 m³/h
Filter area	7,1 m²	7,1 m²	10,6 m²	14,1 m²
Filter regeneration	M/JET	M/JET	M/JET	M/JET
Residual dust content	<0,05 mg/m³	<0,05 mg/m³	<0,05 mg/m³	<0,05 mg/m³
Bin volume	175 Liter	175 Liter	175 Liter	350 Liter
Noise level	64 dB(A)	66 dB(A)	64 dB(A)	65 dB(A)
Voltage	400V/50Hz	400V/50Hz	400V/50Hz	400V/50Hz
Current	4,6 [A]	5,9 [A]	6,0 [A]	7,7 [A]
Weight	390 kg	390 kg	440 kg	520 kg
Dimensions (LxBxH), max.	1600 x 840 x 2150 mm	1745 x 840 x 2150 mm	1875 x 840 x 2150 mm	2390 x 840 x 2150 mm
Inlet diameter	120 mm	100 mm	160 mm	200 mm

## 6 INSTALLATION

### TRANSPORT

The extraction unit is supplied completely assembled. The shipment is on a pallet and the machine can be unloaded with a forklift. The device can be removed from the pallet by means of the lifting eyes (with forklift truck or crane). Beware, the maximum allowable inclination of the unit is 10°! Pay attention to the center of gravity when lifting (see illustrations on pages 25, 27 and 29).

### ARRIVAL

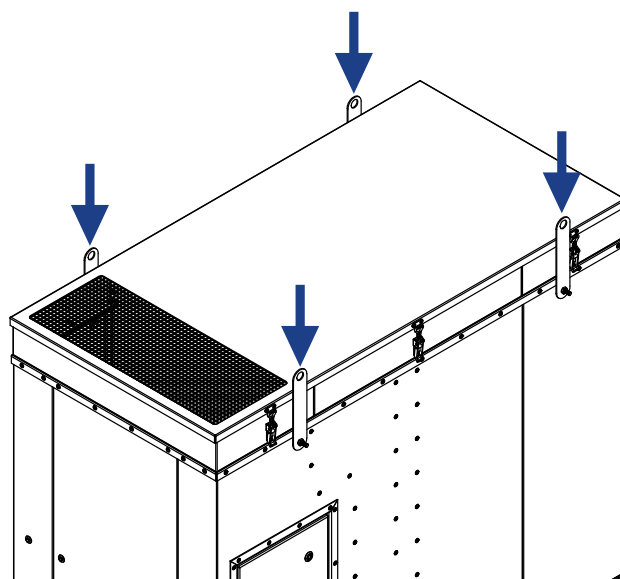
The machine must be checked immediately upon arrival! For transport damage or missing parts you must immediately submit a written claim to the carrier and document the damage. Inform your supplier immediately!

The mounted swivel wheels make it possible to move the extraction unit to the work location. In order to subsequently position the extraction unit securely on a level surface, 2 of the wheels are braked.

### PLACEMENT

Placing of the dust extractor is prepared as follows:

- Remove the packaging
- Place a plastic bag in the waste container
- Fold the plastic bag over the edges of the waste container(s).
- The waste container is then driven between the guide rails under the extraction unit up to the stop. When the waste container is subsequently closed upwards, it is sealed airtight on the bottom of the extraction unit.
- The extraction unit is supplied with a 5-pole CEE phase exchanger, the electrical connection must be made according to the locally applicable standards.
- Only operate the extraction system on a flat surface.
- The free height above the return air outlet must be at least 200 mm.



Fastening points for lifting eyes (4x)



### NOTE

Installation site requirements:

- Dry, closed space
- Operational room temperature: + 10 ° to + 40 ° C
- Sufficient supply air or air circulation for adequate engine cooling
- Flat floor without slope

## ELECTRICAL CONNECTION

The extraction unit requires a 400 V, 50 Hz three-phase power supply with zero and ground to function. A fuse with class K16A must be used.

- Write down the connection values on the type plate and check whether your mains voltage corresponds to the voltage stated on the type plate.
- The mains plug may not be plugged into the socket until the igniter has been set up at the place of use. Connection to CEE socket (eg wall socket).
- Fuse protection - see nameplate.
- The device must be connected to the protective conductor and electrically grounded.
- Make sure that the power cord is not damaged by being run over, pinched, pulled or the like.
- The mains connection cable should be checked regularly for signs of damage or aging.
- The exchange of the mains connection cable and the mains plug may only be carried out by a trained person.
- For warranty reasons, no changes may be made to the electrical installation of the appliance.
- Only plug-in devices in accordance with VDE 0165 may be used to connect electrically powered machines.
- The connection cable must be of the type 5 x 2.5 mm<sup>2</sup> or 5 x 4 mm<sup>2</sup> (DM-350) H07RN-F or at least equivalent.



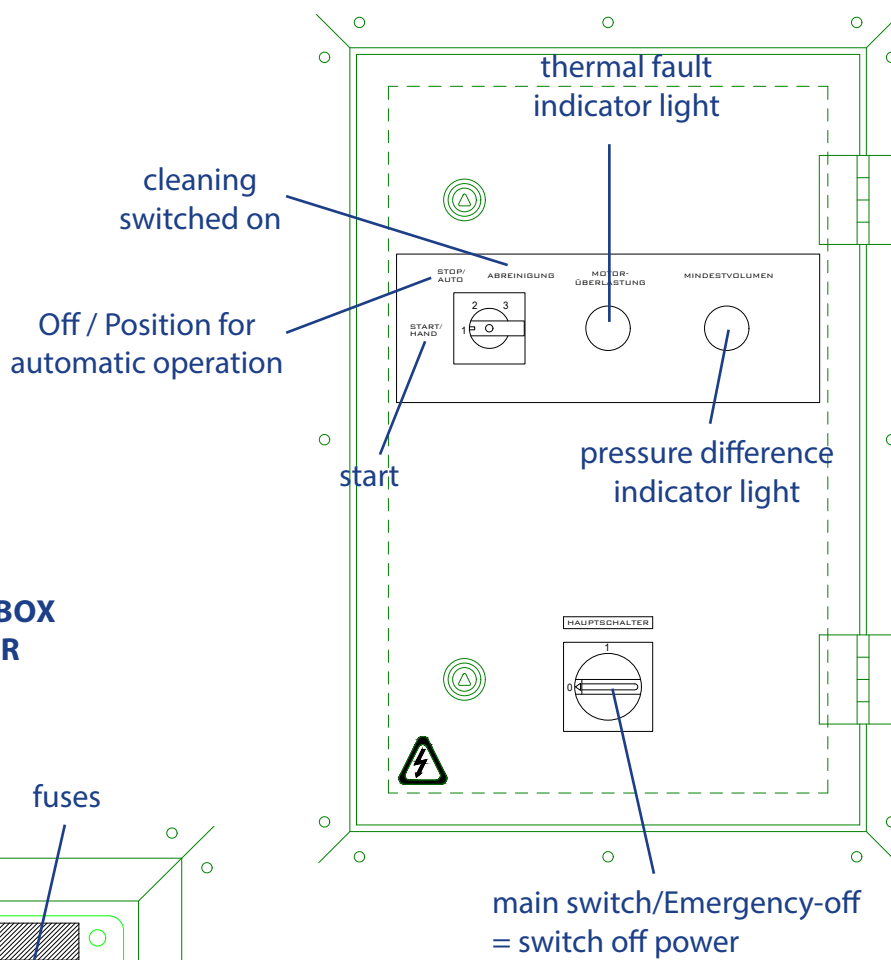
## WARNING

**Danger of electric current!**

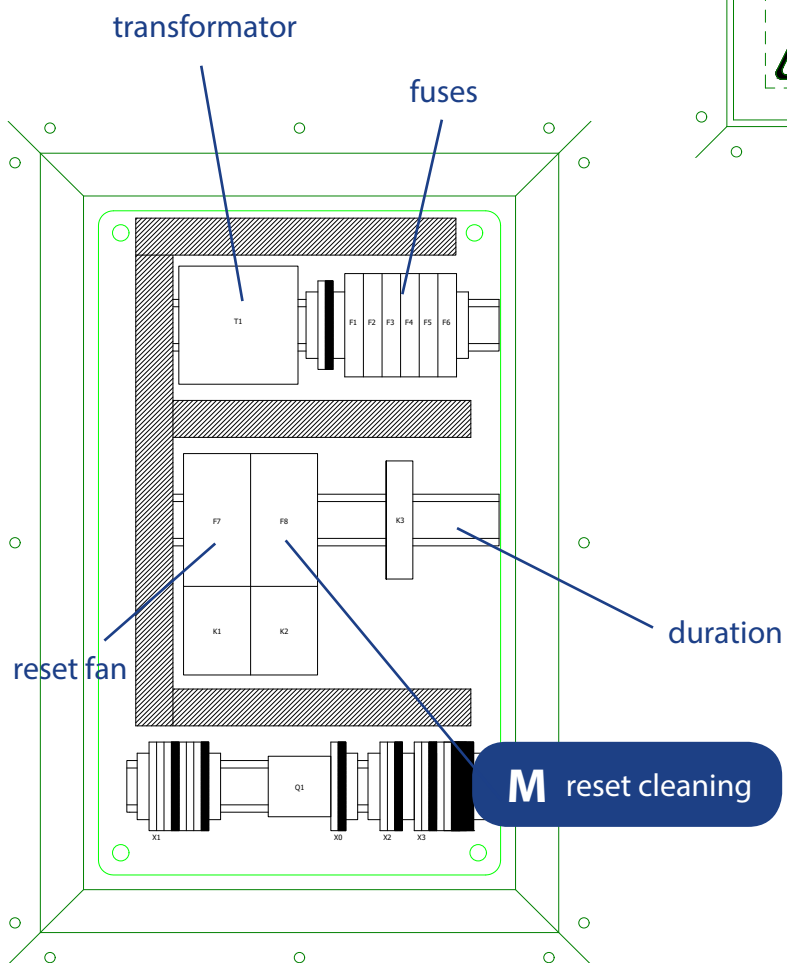
Work on electrical equipment may only be carried out by qualified personnel in compliance with the safety regulations. The impedance of the fault loop and the suitability of the overcurrent protection must be checked at the installation site of the machine!



## CONTROL BOX EXTERIOR



## CONTROL BOX INTERIOR



### CONNECTING HOSE AND/OR PIPING

When connecting a hose, only conductive and flame-retardant hoses may be used. It is important that the electrical connection between the hose and the inlet of the extraction unit is proper. Only hoses with a metal coil may be used. When attaching the hose, the metal coil must be stripped for proper contact with the suction unit. When connecting piping, only metal pipes may be used. The connection between the different pipe sections must be airtight and electrically conductive.\* Only use aerodynamically optimized bends and manifolds. If the sum of the connected cross-sections is greater than the connection diameter of the dust extractor, slides must be applied.

*\*a continuous earthing must be ensured.*

## JET

For the operation of the filter cleaning it is necessary to connect the dust extractor to a compressed air supply by means of a ½ "hose.



### NOTE

- Free of compressed air oil, condensate and particles according to: ISO 8573-1 5-4-3
- Working pressure 6 bar
- The air requirement is standard 56 norm liters per pulse for the DM-120 to DM-200, and 116 norm liters per pulse for the DM-250 to DM-350.



### NOTE

The extraction unit must be placed as close as possible to the woodworking machines. The suction diameter of the woodworking machines must not be greater than the connection diameter of the extraction unit.

## 7 USE

### FIRST COMMISSIONING

The following steps must be carried out during the initial commissioning of the extraction unit:

- Check the direction of rotation of the fan. This must match the arrow stickers. A wrong direction of rotation can be recognized by a very low suction power. If the direction of rotation is wrong, it must be reversed. This can be done with the help of the CEE phase exchanger. Turn 2 of the plug pins with a screwdriver. Both pins are recognizable by the black circle on which they turn.
- Check that there are no unwanted leaks. (A leak may be identified by a whistle).
- Before using the extraction unit for the first time, it is important to check the extraction performance first.

### STARTING UP

Set the main switch to position I. The extraction unit will start when the control switch is set to the START / HAND position or when a potential-free contact is used in the STOP / AUTO position. After starting the extraction unit, full suction power is immediately available.

### STOP

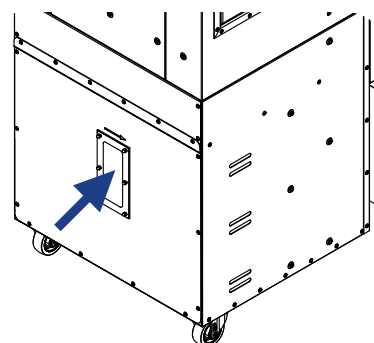
The extractor will stop immediately when the control switch is turned to the STOP / AUTO position. Note: a cleaning cycle takes place after every shutdown. When using automatic switch-on, the multiple switch is set to the Stop-Auto position: See the accompanying manual.



### NOTE

#### DIRECTION OF ROTATION

Stop the machine immediately if a wrong direction of rotation is detected, to prevent excessive heating.



Viewing window to check the direction of rotation



### NOTE

Only use the machine at an operating / room temperature of + 10 to + 40 °C. Failure to observe this will lead to bearing damage!

## WASTE DISPOSAL

Dust and chips are collected in the waste containers during operation. The level can be checked through the viewing window. Dust may only be stored temporarily up to a total volume of 500 liters. The maximum collection volume per waste container is 175 liters. When the waste container(s) is/are full, the extraction unit must be switched off. Wait for the end of the cleaning cycle before detaching the waste container so that dust and chips don't fall from the extraction unit. By pulling the container lock, the waste container can be rolled forward from under the extraction unit. Use the necessary PPE (P2) to perform this task. Carefully remove and seal the plastic waste bag before disposing of the bag according to local guidelines. When placing a new plastic waste bag, it should lie flat against the walls and have as few folds as possible on the edges of the container.

## M

### Mechanical filter cleaning

Every time the extraction unit is switched off, an automatic cleaning cycle follows by means of the motorized vibration of the filter hoses. If the indicator lamp of the differential pressure switch illuminates during use, the extraction unit must be switched off as soon as possible so that the cleaning cycle can be carried out.

## JET

### Filter cleaning with compressed air (jet-cleaning)

Filter cleaning is performed automatically by the controller mounted on the extraction unit. The filter cleaning cycle starts automatically after the extraction unit is switched off. The pause times between the pressure surges are fixed and cannot be changed by the user. If desired, the cleaning can also be operated manually when the extraction unit is at a standstill (position 3 on the control switch). If most dust-producing machines are extracted, it is recommended to switch off the extraction unit briefly after a consecutive working time of 30 minutes. This will start the automatic cleaning process and after approximately 2 minutes the extraction unit is ready for operation again.

## CONNECTING MULTIPLE MACHINES

If more than one machine is connected to the extraction unit, each machine must be shut off with a slider from the extraction unit. Make sure that the sliders on the machines that are not being used are closed. Use of automatic sliders is recommended.

## RESTRICTIONS ON USE

DM extraction units are built according to the GS-HO-07, version 11.2015, and are tested to this standard by the Prüf- und Zertifizierungsstelle der Holzgenossenschaft, Vollmoellerstrasse 11, D-70563 Stuttgart. The extraction units are therefore suitable for extracting and separating dry (moisture content <30%) dust and chips, whereby the residual material standard 3 (H3): 0.1 mg/m<sup>3</sup> is certainly achieved.

The extraction unit is not suitable for the extraction of:

- Sticky substances such as glue residues and overspray
- Welding smoke, smoke, etc.
- Spark-forming machines, such as metal grinding machines
- Liquids
- Explosive or equivalent substances, according to §1 of the German explosives law, SprengG, or substances from dust explosion class St 3.

## RESTRICTIONS ON SETUP

The extraction unit must not be placed in a potentially explosive environment.

The extraction unit can only be set up outside if it is sufficiently protected against rainwater.



## TIP

If the yellow 'pressure difference indicator' light lights up, it means that the extraction unit is loaded with fine dust to such an extent that the minimum extraction capacity can no longer be guaranteed. Switch off the unit and set the control switch to position 3 for additional filter cleaning.



## WARNING

### **Danger from inhalation of dust:**

When working with wood dust, a dust mask must in any case be used (filter mask with particle filter, class 2). It must be avoided that bystanders can come into contact with the dust. Avoid ignition sources and electrostatic charge.



GS-mark

## 8 MAINTENANCE

### PERIODIC MAINTENANCE

The extraction unit is low in maintenance. The bearings of all applied motors are lubricated for life.

Continuous work:

DAILY:

- check waste container level
- visual inspection for visible defects
- clean the machine

MONTHLY:

- check the clean side of the filter for dust deposits. If dust is found, report this to the supplier, perhaps a filter leak has occurred\*
- check the rubber seals of the waste bin(s)\*
- check valve\*

ANNUALLY:

- checking the screw connections and switches\*
- volume flow test\*

### JET

DAILY:

- compressed air control via pressure gauge

MONTHLY:

- emptying the compressed air tank\*

ANNUALLY:

- visual inspection of the compressed air tank\*

The activities marked with a \* must be carried out by an authorized person



### WARNING

Repairing the extraction unit is only permitted by authorized and qualified personnel, with sufficient training/experience to perform maintenance and repair work.



### NOTE

Maintenance and repair work must be regularly documented. Avoid electrostatic charge when performing maintenance or repair work. Only use original parts. No changes may be made to the extraction unit. This could have consequences for the type approval!



### NOTE

Before starting work, the machine must be disconnected from the power supply.

## 9 MALFUNCTIONS

### THE EXTRACTION UNIT WON'T START

- No main voltage, check the fuses.
- Main switch is set to 0/Off.
- Error in the slider control (if used). See the corresponding user manual.

### REDUCED SUCTION

- possible blockage of the pipes or suction hose (always use a dust mask when removing the blockage!).
- Internal blockage of the filters in the extraction unit due to accumulated chips. The cause may be an overloaded waste bin (B version), bridging in the funnel (P version) or a blocked free passage at the rotary valve (RV version). Chips can accumulate between the filter hoses and obstruct the air flow. In this case, the chips must be manually removed from the extraction unit (always use a dust mask when performing this work!).
- Check the direction of rotation of the fan.

### THERMAL FAILURE

- One or two pre-fuses may have jumped. Replace all 3 fuses. Set the main switch to 0 / Off, open the control cabinet and put the motor protection switch back into operation by pressing the black (1) button \* (after the switch has cooled). Then close the switch box and set the main switch to 1/On. Restart the extraction unit. If the motor protection switch is triggered again, contact your supplier.

\*See page 16

### DUST IS ESCAPING FROM THE RETURN AIR OPENING

- One of the filter hoses is loose or torn. Switch off the extraction unit immediately and may only be switched on again when the filter hose has been repaired or replaced (always use a dust mask when performing this work!).  
Note: Only use undamaged original filter hoses!



## WARNING

Do not work on the electrical components. Only qualified personnel may perform this work under certain conditions.

**DE PLASTIC WASTE BAG IS PULLED INTO THE EXTRACTION UNIT**

- The waste bag is torn.
- The waste container has not been slid far enough under the extraction unit.
- The rubber seal on the bottom of the extraction unit is damaged.

For all other possible errors please contact your supplier.



## 10 DISPOSAL

If, after many years of use, the extraction unit reaches the end of its lifecycle, then remove it and dispose of it appropriately. Disconnect the extraction unit from the power supply by disconnecting the power from the machinery. Remove the fuses from the machinery. Remove any dust and chips. Disconnect the cables and the suction duct from the extraction unit.

The extraction unit is mostly made of steel and can be recycled in the usual manner where the various materials are separated as much as possible so that they can be reused. Pay attention to the applicable regulations when disposing of the unit.

### WASTE

Waste, used materials and other substances must be disposed of in accordance with the applicable regulations.

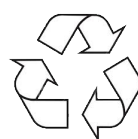
The following materials are used on the extraction unit:

- Galvanized steel
- Copper (cables)
- Plastic (cables, etc)
- Polyester (filter hoses)
- Glass wool (insulation)

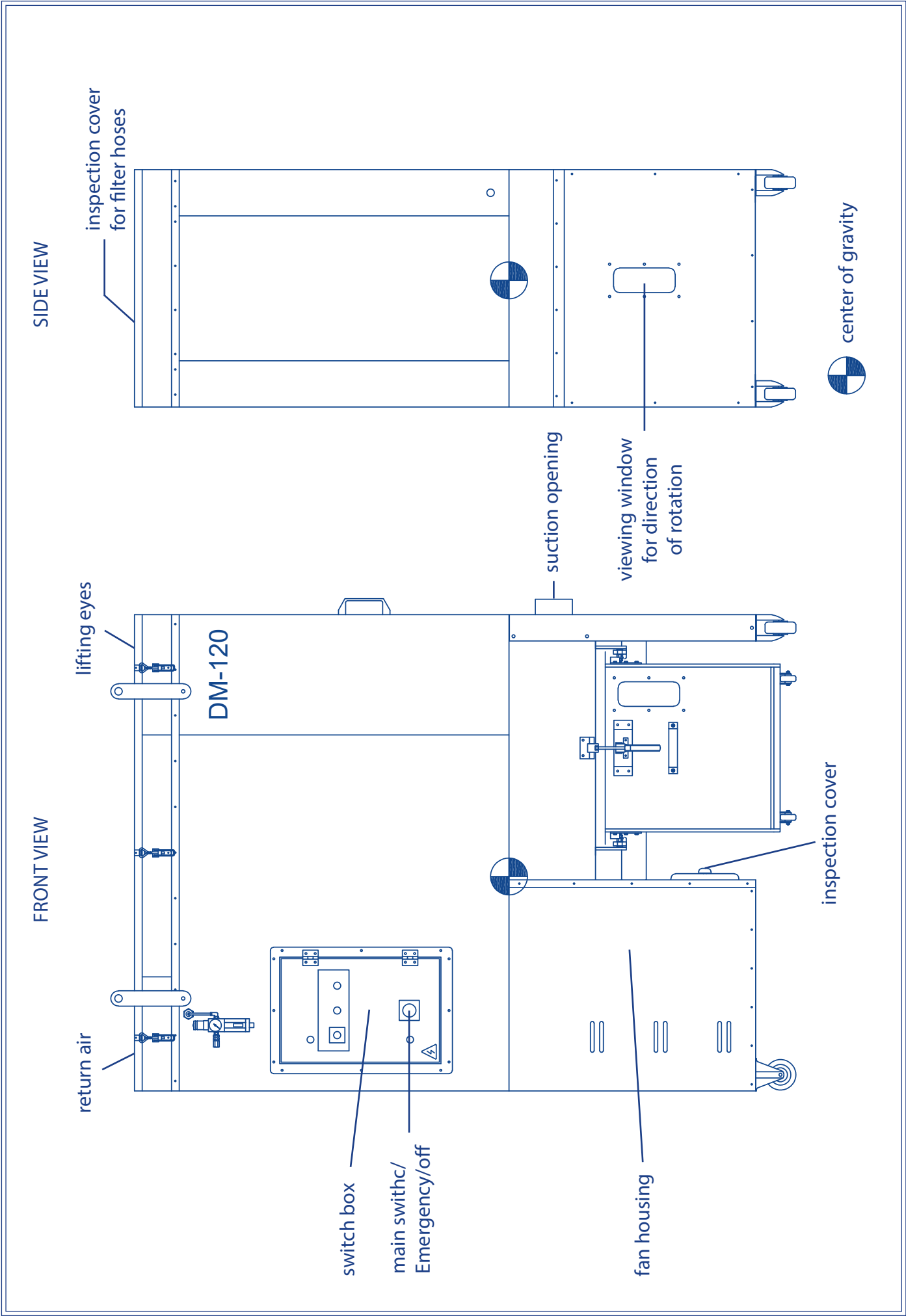


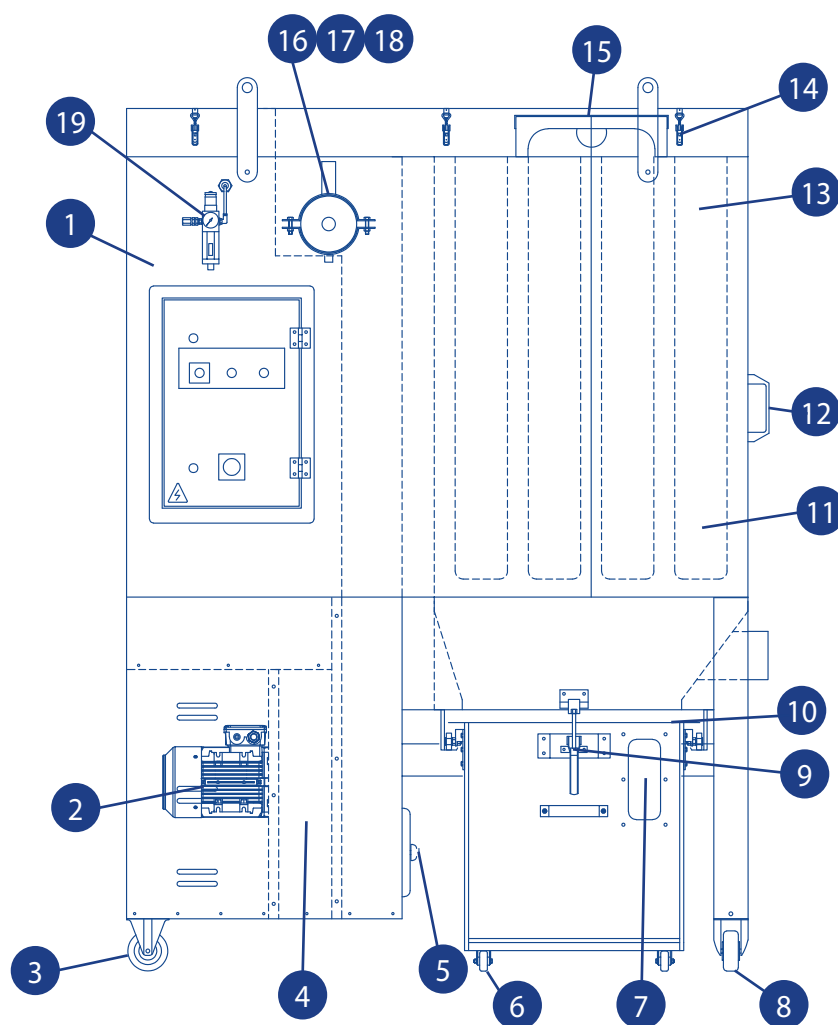
### WARNING

Be aware of possible risk of being cut by sharp edges and wear a dust mask to prevent exposure to wood dust.



11 ANNEXES





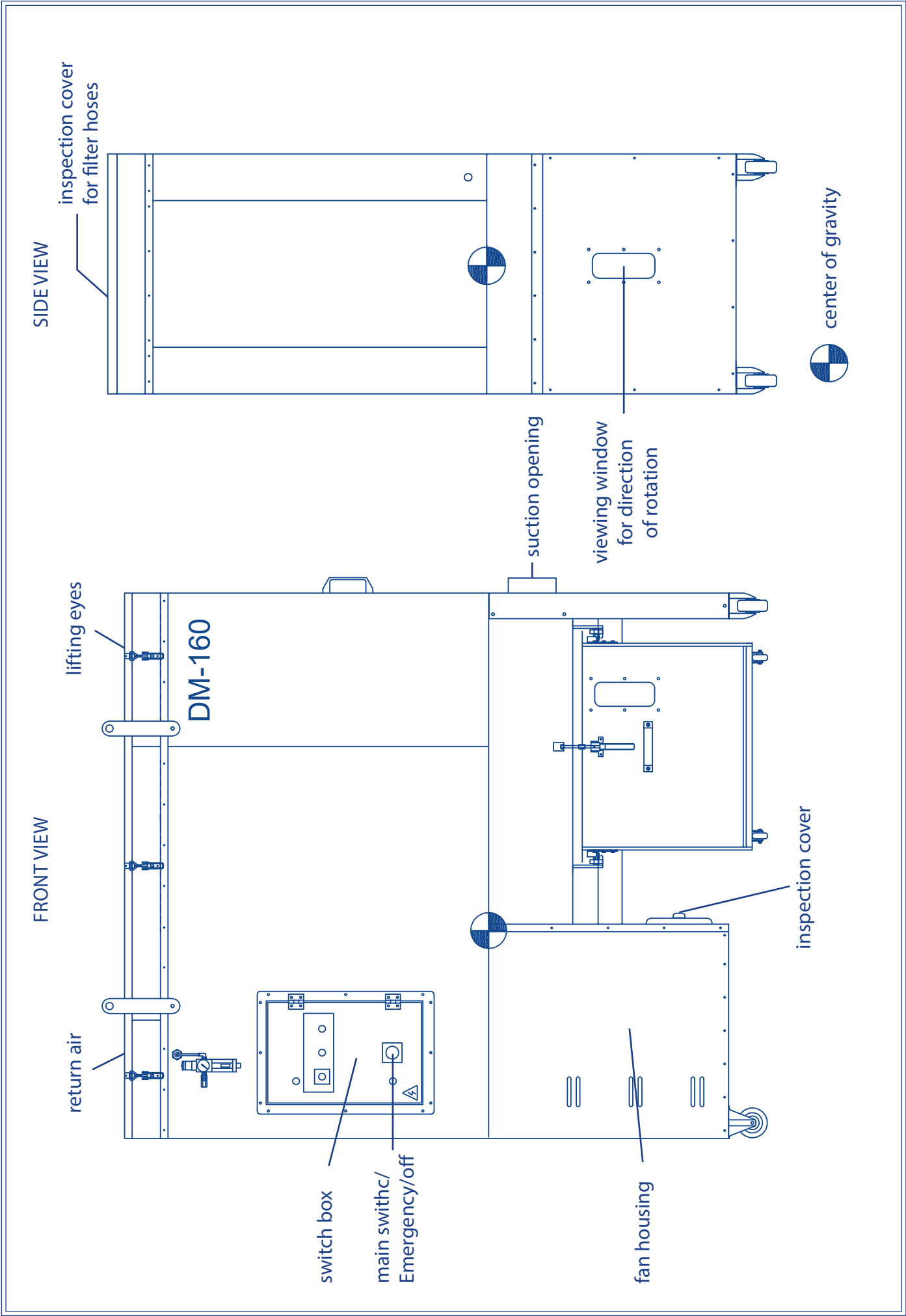
Pos	Item no.	Pce.	Description
1	F 162.100	1	Differential pressure switch
2	F 160.370	1	2-pin three-phase motor 2,2 kW B5/1/2 M
3	F 160.252	2	Ø 80 fixed wheel
4	F 161.380	1	RRD-120 fan
5	F 161.325	1	Inspection cover
6	F 160.250	4	Ø 50x19/40 kg wheel for waste bin
7	F 168.999	1	Viewing window
8	F 160.251	2	Ø 80 braked swivel wheel
9	F 161.326	1	Bin clasp
10	C 460.041	2	Edge softener
11	B 134.020	16	PE/PE 354/90 PZZ DN 135 x 1050 filter sleeve
12	F 161.320	3	Plastic handle
13	F 161.321	16	Spiral spring
14	F 161.400	6	Locking mechanism

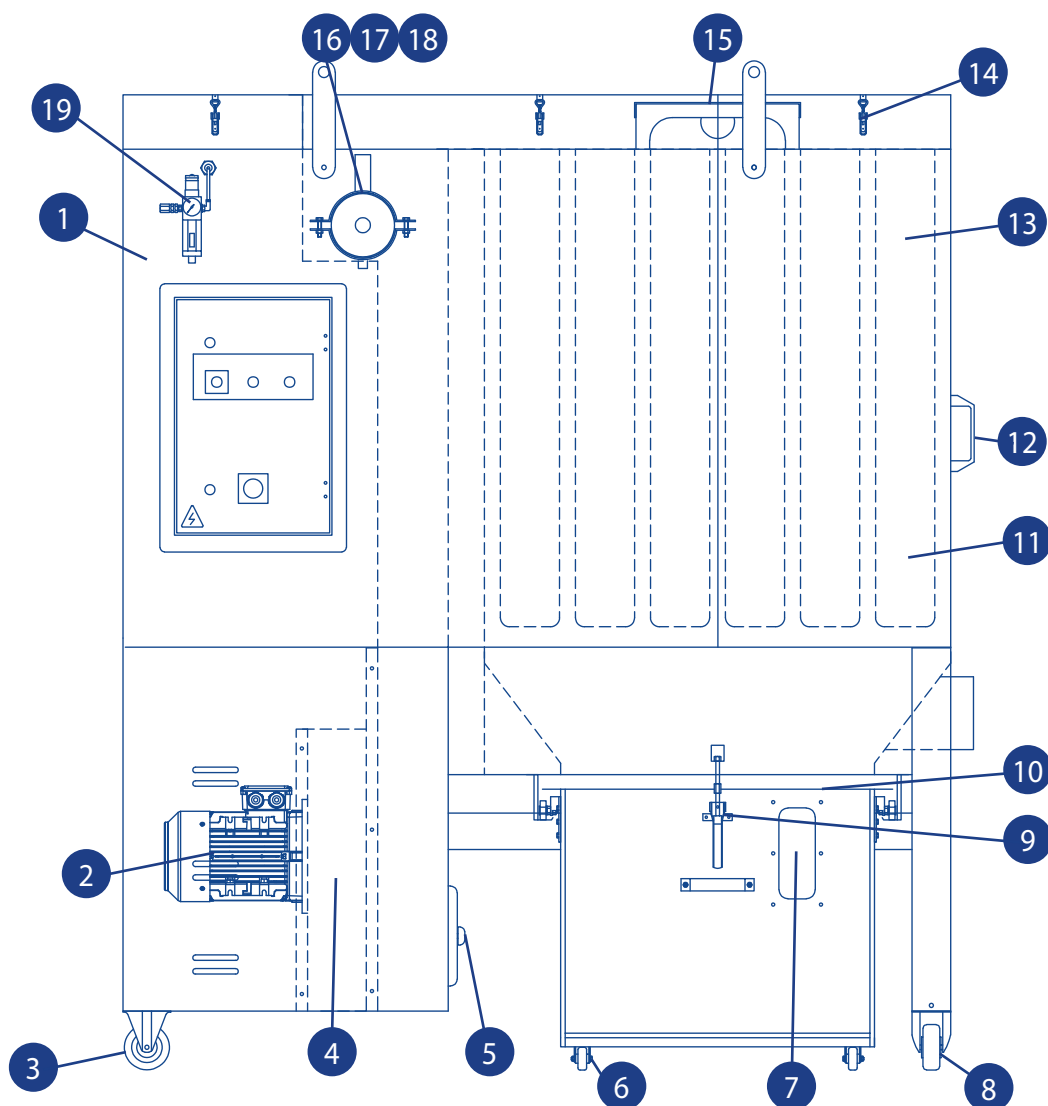
## M

Pos	Item no.	Pce.	Description
15	F 169.500	1	Vibration motor

## JET

Pos	Item no.	Pce.	Description
16	F 169.600	1	Compressed air tank 6"
17	F 169.601	2	Solenoid valve 1/2" (not depicted)
18	F 169.602	2	Bobbin for valve (not depicted)
19	F 169.603	1	Filter pressure regulator LFR-1/2-D





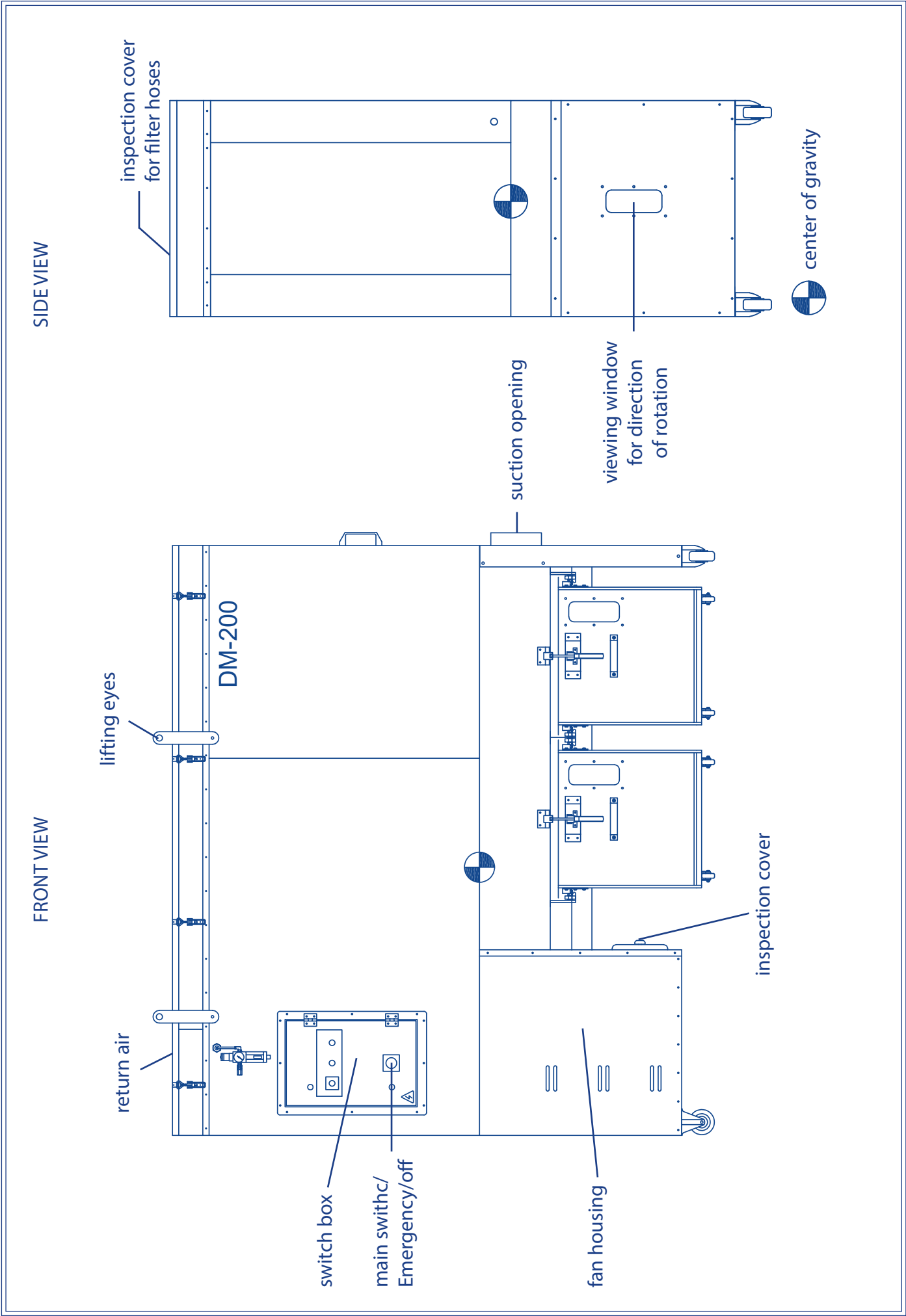
Pos	Item no.	Pce.	Description
1	F 162.100	1	Differential pressure switch
2	F 160.370	1	2-pin three-phase motor 3 kW B5/1/2 M
3	F 160.252	2	Ø 80 fixed wheel
4	F 161.380	1	RRD-160 fan
5	F 161.325	1	Inspection cover
6	F 160.250	4	Ø 50x19/40 kg wheel for waste bin
7	F 168.999	1	Viewing window
8	F 160.251	2	Ø 80 braked swivel wheel
9	F 161.326	1	Bin clasp
10	C 460.041	2	Edge softener
11	B 134.020	24	PE/PE 354/90 PZZ DN 135 x 1050 filter sleeve
12	F 161.320	3	Plastic handle
13	F 161.321	24	Spiral spring
14	F 161.400	6	Locking mechanism

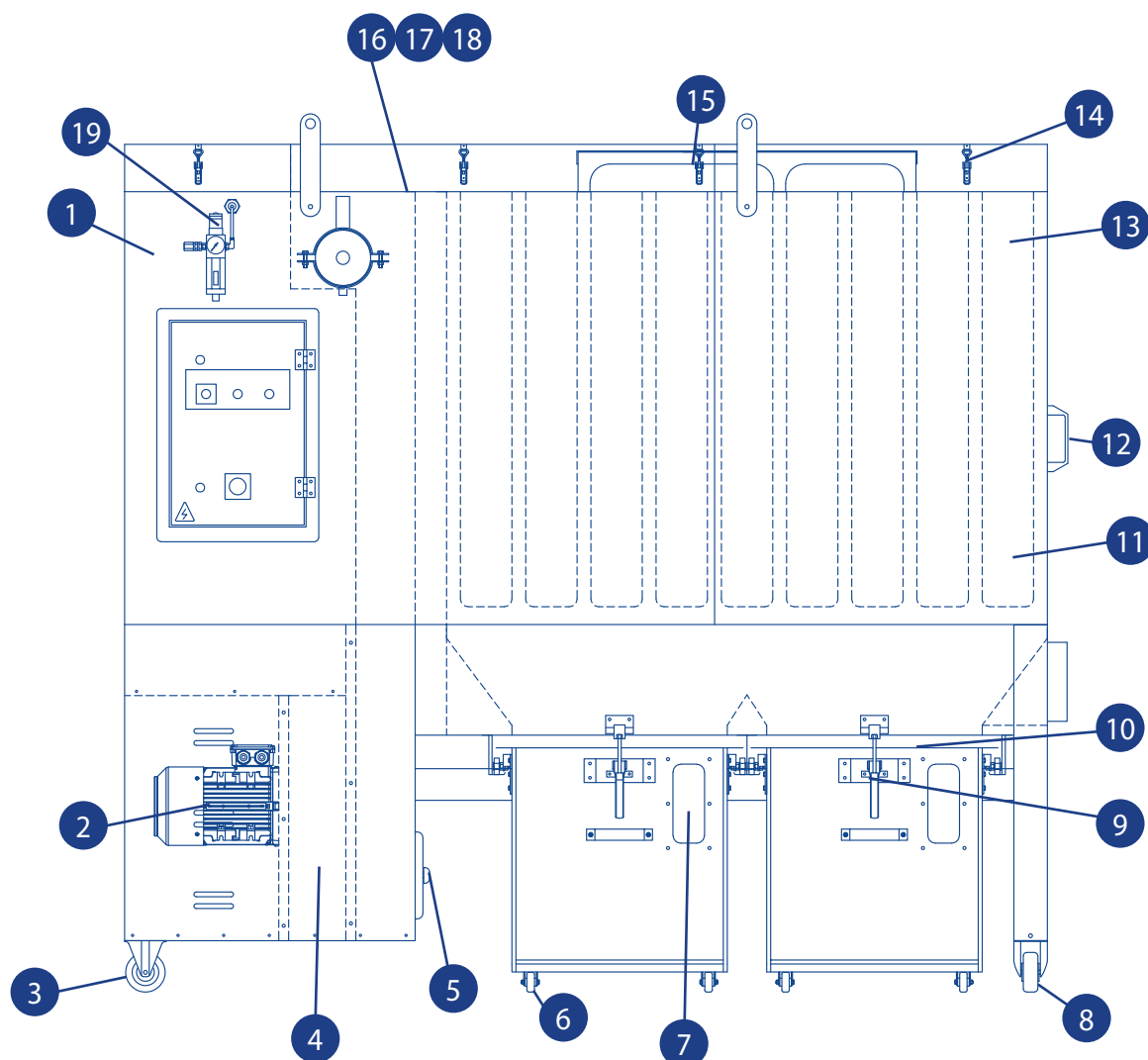
## M

Pos	Item no.	Pce.	Description
15	F 169.500	1	Vibration motor

## JET

Pos	Item no.	Pce.	Description
16	F 169.600	1	Compressed air tank 6"
17	F 169.601	2	Solenoid valve 1/2" (not depicted)
18	F 169.602	2	Bobbin for valve (niet afgebeeld)
19	F 169.603	1	Filter pressure regulator LFR-1/2-D





Pos	Item no.	Pce.	Description
1	F 162.100	1	Differential pressure switch
2	F 160.370	1	2-pin three-phase motor 4 kW B5/1/2 M
3	F 160.252	2	Ø 80 fixed wheel
4	F 161.380	1	RRD-200 fan
5	F 161.325	1	Inspection cover
6	F 160.250	8	Ø 50x19/40 kg wheel for waste bin
7	F 168.999	2	Viewing window
8	F 160.251	2	Ø 80 braked swivel wheel
9	F 161.326	2	Bin clasp
10	C 460.041	4	Edge softener
11	B 134.020	36	PE/PE 354/90 PZZ DN 135 x 1050 filter sleeve
12	F 161.320	4	Plastic handle
13	F 161.321	36	Spiral spring
14	F 161.400	8	Locking mechanism

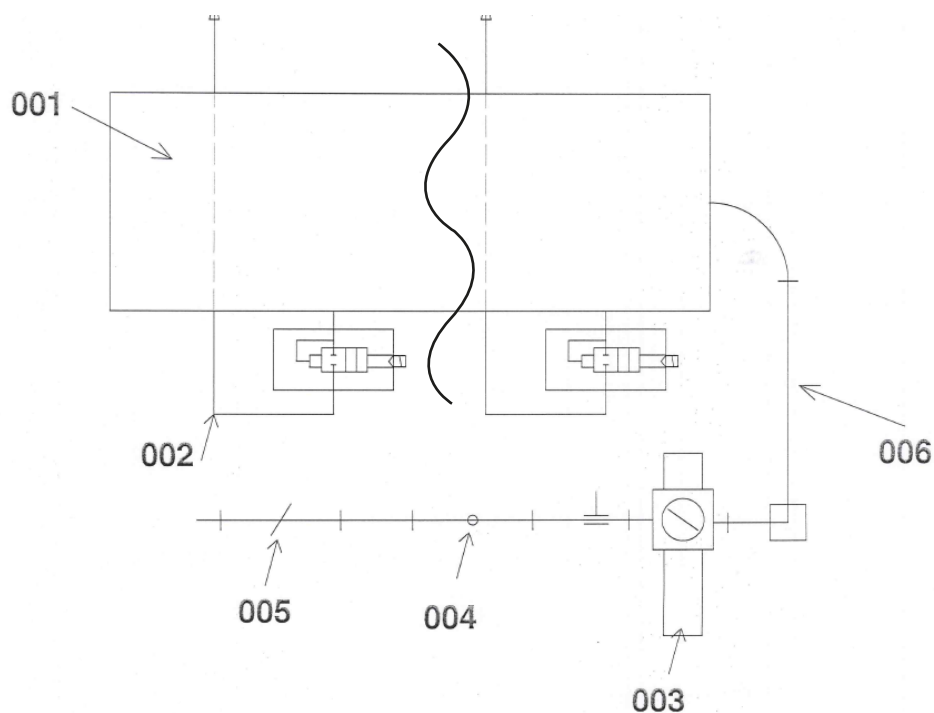
## M

Pos	Item no.	Pce.	Description
15	F 169.500	1	Vibration motor

## JET

Pos	Item no.	Pce.	Description
16	F 169.600	1	Compressed air tank 6"
17	F 169.601	2	Solenoid valve 1/2" (not depicted)
18	F 169.602	2	Bobbin for valve (niet afgebeeld)
19	F 169.603	1	Filter pressure regulator LFR-1/2-D

Compressed air tank				
	DM-120 t/m DM-200	DM-250	DM-300	DM-350
Content (liter)	9,4	15,1	18,6	22,9
Max. limit pressure	8	8	8	8
Operating pressure	6	6	6	6
Number of valves	2	4	5	6



Pos.	Item no.	Description
001	F200.001	Compressed air tank
002	F200.002	Solenoid valve C25DD 1" 224 VD
003	F200.003	Filter pressure regulator NL G½ "with manometer
004	F200.004	Ball valve ½"
005	F200.005	Brass non-return valve ½"
006	F200.006	Nylon hose 6 mm

**Relieving the pressure of the compressed air cleaning**

- 1. Close the ball valve
- 2. Loosen the bleeder screw until compressed air escapes
- 3. When the pressure gauge is at 0 and no more compressed air is released, the system (tank, valve and pipe) is completely empty
- 4. Close the bleeder screw again





## EG-DECLARATION OF CONFORMITY

According to the Machinery Directive 2006/42/EG Annex II A

Manufacturer:

**Riedex BV**

Hoofdstraat 17

8811 HD RIED

NEDERLAND

Tel. +31 (0) 517 26 92 41

Hereby declares that the machines listed below, on the basis of their concept, construction and execution, meet the fundamental health and safety requirements of the CE Machine Directive.

Product name: Mobile extraction unit for indoor installation

Brand: Riedex

Type designation: DM-120, DM-160, DM-200

The following European standards have been applied:

2006/42/EG	Machinery Directive
2014/35/EU	Low Voltage Directive
PED 2014/68/EU	PED-Directive
EN-16770	Safety of woodworking machines - Chip and dust extraction systems for indoor installation - Safety requirements

The extraction unit has been tested by the German Notified Body DGUV Test, D-70563 Stuttgart (NB 0392), according to protocol GS-HO-07, version November 2015 and has been awarded the GS certificate on the basis thereof. GS stands for Geprüfte Sicherheit.

This certificate guarantees on the one hand a residual emission of less than 0.1 mg / m<sup>3</sup> (H3) and on the other hand guarantees safety against dust explosions (see explanation below).

### NOTES TO THE ATEX DIRECTIVE 2014/34 / EU:

The compact construction of the extraction unit, as well as the internal geometry, result in that any sparks that are sucked in can only lead to a violent ignition (deflagration) and not to an explosion in the sense of a detonation with uncontrollable consequences. The occurring pressure increase will not cause the unit to rupture. The European standard EN-16770 has been fully complied with in this regard.

Based on the BGI 739-2 (version 2012), no zone 22 is set around the exhaust of the extraction unit. The formation of an explosive dust cloud here, i.e. a situation with more than 30 grams of wood dust per ejected m<sup>3</sup> (= LEL), due to filter rupture or as a result of any other mechanical failure, is excluded by the design and construction of the device.

This CE declaration of conformity is only valid if the machine has received the CE mark. Any change to the machine that has not been agreed with us will result in the immediate loss of the declaration of validity.

The undersigned of this declaration is the authorized representative for compiling the technical documentation.

Ried, The Netherlands, 17.8.2020

Ing. R. Faber, director Riedex BV

**EG-DECLARATION OF CONFORMITY**

According to the Machinery Directive 2006/42/EG Annex II A

Manufacturer:

**Riedex BV**

Hoofdstraat 17

8811 HD RIED

NEDERLAND

*Tel. +31 (0) 517 26 92 41*

Hereby declares that the machines listed below, on the basis of their concept, construction and execution, meet the fundamental health and safety requirements of the CE Machine Directive.

Product name: control box dust extraction unit  
Brand: Riedex  
Type designation: DM-120, DM-160, DM-200, DM-250, DM-300, DM-350  
Degree of protection: IP54

The following European standards have been applied:

2006/42/EG	Machinery Directive
2014/35/EU	Low Voltage Directive
PED 2014/68/EU	PED-Directive

IEC 60529	Degrees of protection provided by enclosures
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This CE declaration of conformity is only valid if the machine has received the CE mark. Any change to the machine that has not been agreed with us will result in the immediate loss of the declaration of validity.

The undersigned of this declaration is the authorized representative for compiling the technical documentation.

Ried, The Netherlands, 17.8.2020

Ing. R. Faber, director Riedex BV

Zertifikat  
Nr. HO 173003  
vom 24.04.2017



## GS - Zertifikat

Name und Anschrift des  
Zertifikatsinhabers:  
(Auftraggeber) Riedex BV  
Hoofstraat 17  
8811 HD RIED  
NIEDERLANDE

Produktbezeichnung: **Entstauber**

Typ: DM-120, DM-160, DM-200

Prüfgrundlage: GS-HO-07: 11.2015 Entstauber (Holzbearbeitung) mit einem  
Nennvolumenstrom < 8.000 m³/h

Zugehöriger Prüfbericht: 314021

Weitere Angaben: Bestimmungsgemäße Verwendung:  
Erfassen, Fördern und Abscheiden von Holzstaub und -spänen an  
einzelnen oder mehreren Staubquellen.

Die Bescheinigung gilt nur für Maschinen, für die eine  
Konformitätserklärung ausgestellt ist.

Das geprüfte Baumuster stimmt mit den in § 21 Absatz 1 des Produktsicherheitsgesetzes  
genannten Anforderungen überein. Der Zertifikatsinhaber ist berechtigt, das umseitig abgebildete  
GS-Zeichen an den mit dem geprüften Baumuster übereinstimmenden Produkten anzubringen.  
Der Zertifikatsinhaber hat dabei die umseitig aufgeführten Bedingungen zu beachten.

Dieses Zertifikat einschließlich der Berechtigung zur Anbringung des GS-Zeichens ist  
gültig bis: **23.04.2022**

Weiteres über die Gültigkeit, eine Gültigkeitsverlängerung und andere Bedingungen regelt die  
Prüf- und Zertifizierungsordnung.



*F. Hagendorf*

Frank Hagendorf  
Leiter der Prüf- und Zertifizierungsstelle



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