



PROMA-X

DUST EXTRACTOR

INDUSTRIAL ELECTRO-PNEUMATIC DUST EXTRACTOR - M-CLASS & L-CLASS

INSTRUCTION MANUAL

PROMA-X DUST EXTRACTOR

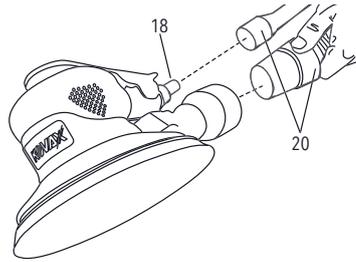
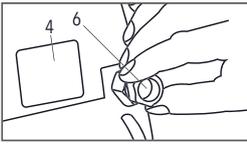
Industrial Electro-pneumatic Dust Extractor
M-class & L-class

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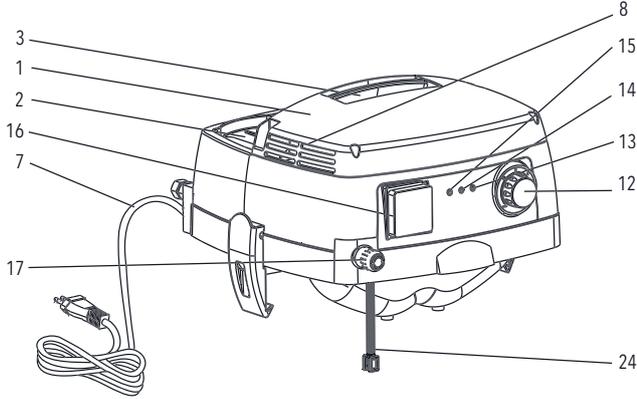
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OVERVIEW

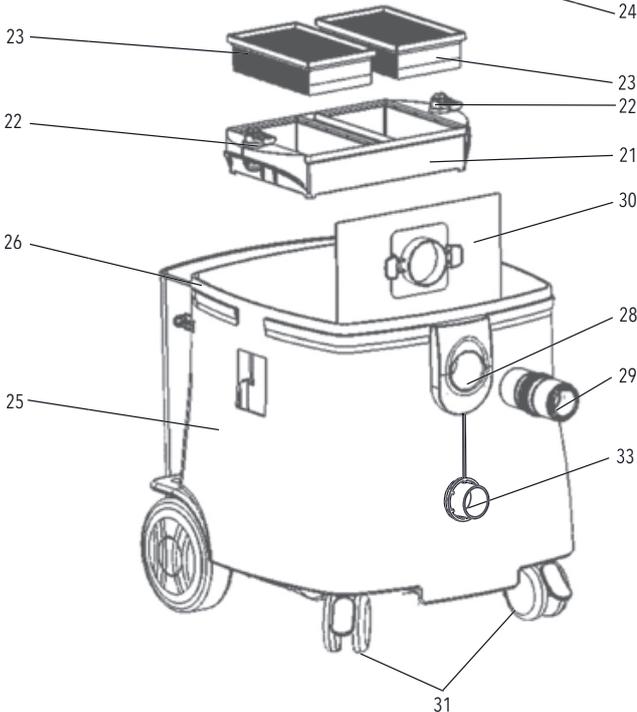
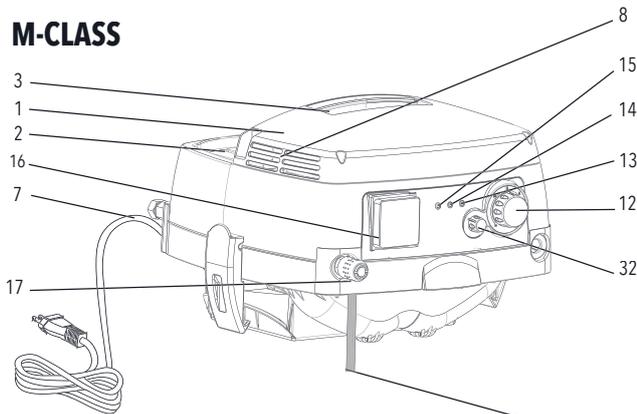
BACK OF THE MACHINE



L-CLASS



M-CLASS



- 1 - VACUUM HEAD
- 2 - TOOL TRAY
- 3 - HANDLE
- 4 - IDENTIFICATION PLATE
- 5 - COMPRESSED AIR INLET
- 6 - AIR COUPLING FILTER
- 7 - POWER CORD
- 8 - COOLING AIR INLET
- 9 - COOLING AIR OUTLET
- 10 - OPERATING AIR OUTLET
- 11 - HEAD LOCKERS
- 12 - MAN-O-AUT SWITCH WITH SPEED CONTROL
- 13 - MOTOR ON INDICATOR
- 14 - LIQUID LEVEL INDICATOR
- 15 - SERVICE INDICATOR
- 16 - ELECTRIC TOOL SOCKET
- 17 - QUICK COUPLING FOR PNEUMATIC TOOL
- 18 - PNEUMATIC TOOL CONNECTION
- 19 - ELECTRIC TOOL HOSE
- 20 - PNEUMATIC TOOL HOSE (OPTIONAL)
- 21 - FILTER FRAME
- 22 - FILTER FRAMES LOCKERS
- 23 - FILTERS (PAPER OR POLYESTER)
- 24 - LIQUID LEVEL SENSOR
- 25 - DUST BIN
- 26 - ACCESSORIES COMPARTMENT
- 27 - ANTISTATIC CONNECTION
- 28 - HOSE NOZZLE
- 29 - UNIVERSAL SWIVELLING NOZZLE
- 30 - DUST COLLECTION BAG (PAPER OR PLASTIC)
- 31 - CASTOR WHEELS WITH LOCK
- 32 - SUCTION HOSE SETTING (M-CLASS)
- 33 - RUBBER CAP (M-CLASS)

INSPECTION OF PACKAGE CONTENTS

THE PACKAGE CONTAINS:

- THE MACHINE EQUIPPED WITH POWER CORD;
- 1 VACUUM HOSE (19);
- 1 PAPER DUST BAG (30);
- 1 SWIVELLING NOZZLE + N 2 FRONT WHEELS
+ N 2 RUBBER HOSE CUFFS.

DECLARATION OF CONFORMITY

Kovax Europe B.V. | 7602 KC Almelo | The Netherlands

We declare under our sole responsibility that the products ProMa-X Industrial Electro-pneumatic Dust Extractor M-class & L-class, to which this declaration relates is in conformity with the Essential Requirements of Safety of the following Directives: 2006/42/CE; 2014/35/CE; 2014/30/CE; 2011/65/CE. The tests have been carried out in accordance with the European Harmonised Regulations: EN 60335-1:2012/A11:2014 ; EN 60335-2-69 : 2012 ; EN 60704-3 : 2006 ; EN 61000-3-2:2014 ; EN 61000-3-3:2013 ; EN 62233 : 2008 ; EN 55014-1:2006/A2:2011 ; CISPR 14-1:2005/A2:2011 ; EN 55014-2:1997/A2:2008 ; CISPR 14-2:1997/A2:2008 ; EN 50581: 2012 ; EN 61000-3-3 :2008; EN 50581: 2012.

Almelo, 28.07.2017

Place and date of issue



Company

Willem Mulderij, Managing Director

Operating instructions include:

Overview, Declaration of Conformity, Warning, Specific use & Technical specifications, Getting started, Power supply, Compressed air mains, Assembling the swivelling adaptor, Electrical tool connections, Pneumatic tool connections, Preliminary checks, Machine use, Using the machine in automatic mode (A), Using the machine in manual mode (M), Adjusting the vacuum level, Automatic cleaning of the filters, Suction hose setting (M-class only, Acoustic alarm (M-class only)), Wet vacuum, Liquid level indicator, Maintenance, Service indicator, Ordinary operations check, Bag replacement, Filter replacement, Disposal information, Troubleshooting & Solutions.

Manufacturer / Supplier:

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We reserve the right to make changes to this manual without prior notice.

Important

Please read these safety and operating instructions carefully before installing, operating or maintaining this tool. Keep the instruction manual in a safe accessible location.

Required personal safety equipment



Read operator's manual
Wear ear protection
Wear safety glasses
Wear safety gloves
Wear face mask



WARNING: INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN DEATH OR SERIOUS INJURY AND/OR PROPERTY DAMAGE.
CAUTION: INDICATES A POTENTIALLY HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, MAY RESULT IN MINOR OR MODERATE INJURY AND/OR PROPERTY DAMAGE.

Please read and comply with

- The Safety Data Sheets (SDS). Contact the suppliers for copies of the material SDS's.
- General Industry Safety & Health Regulations. State and local regulations.

WARNING

WARNING

- Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.
- Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.
- Read the Safety Data Sheet (SDS) for the work piece or abrasive materials. Contact the suppliers for a copy of the SDS.
- Before use, users should be provided with information, instruction and training for the use of the appliance and the pollutant it is used for, including the right method for the safe removal and disposal of the substances collected.

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- It is necessary to provide an adequate air change rate in the room if the exhaust air is returned in the room. Reference to National Regulations is necessary.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- The temperature of the work area must be between 10°C and 35°C with humidity between 50% and 90%.
- The surface on which the machine rests must not exceed a maximum 10-degree gradient.
- When operating a power tool in a damp location, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

- Always ensure that the power tool specifications correspond to the power source.
- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- The electrical safety of the tool is granted only by using original Kovax parts.
- Check the tool, filters, dust bag, power cord and fittings regularly for wear.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- In the event of a blackout, turn the tool switch in OFF position to avoid accidental start when power comes back.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Always wear required personal safety protection in accordance with manufacturer's instructions and local/national standards while using this tool.

WARNING

- Do not wear loose clothing or jewellery. Keep hair, clothing and gloves away from suction parts. Loose clothes, jewellery or long hair can get caught in suction parts.
- Do not overreach. The operator must always stand in a secure position with a firm grip and firm footing on a solid floor.
- If any physical hand/wrist discomfort is experienced, stop working and seek medical attention. Hand, wrist and arm injury may result from repetitive work, motion and overexposure to vibrations.
- Always unplug the machine when not in use, before maintenance or cleaning and before replacing the dust bag or filters.
- Prevent unintentional starting. Ensure the switch is in the off mode before connecting to power source, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- Do not lift and transport the machine by the handle with a lifting device.
- Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.
- Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may effect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.
- Immediately disconnect the vacuum from the electrical mains if dust is ejected from air outlet.
- Immediately disconnect the machine from the power supply if you notice the presence of foam or liquid leaking during the vacuuming of liquid.

DO NOT VACUUM THE FOLLOWING MATERIALS

- Flammable or explosive dust (i.e. magnesium, aluminium, etc.).
- Sanding dust from surfaces treated with paints that have not completed the catalyst cycle.
- Sparks or white hot shavings.
- Flammable or explosive liquids (i.e. petrol, thinners, etc.).
- Aggressive liquids or substances (i.e. acids, bases, solvents, etc.).

ADDITIONAL SAFETY WARNINGS

- All maintenance must be carried out by trained personnel. For service, contact your Kovax Dealer.

SPECIFIC USE & TECHNICAL SPECIFICATIONS

Specific use

- This appliance is suitable for heavy duty and industrial operations in accordance with EN60335-1 and EN60335-2-69.
- This appliance is suitable for commercial use: i.e. hotels, school, hospitals, factories, shops, offices and rental business.
- The front power socket is only intended for specific use as indicated in the present instruction manual.
- This appliance is suitable for liquids suction.



L-Class

Separation of dusts with OEL (occupational exposure limit) values $> 1 \text{ mg/m}^3$, (dust class L - light dust HAZARD). Please observe regulations valid in your country.



M-Class

Separation of dusts with OEL values $> 0.1 \text{ mg/m}^3$ and wood dusts. (dust class M - medium dust HAZARD). Please observe regulations valid in your country.



CAUTION! THIS APPLIANCE CONTAINS DUST HAZARDOUS TO HEALTH. EMPTYING AND MAINTENANCE OPERATIONS, INCLUDING REMOVAL OF THE DUST COLLECTION MEANS, MUST ONLY BE CARRIED OUT BY AUTHORIZED PERSONNEL WEARING SUITABLE PERSONAL PROTECTIONS. DO NOT OPERATE WITHOUT THE FULL FILTRATION SYSTEM FITTED.

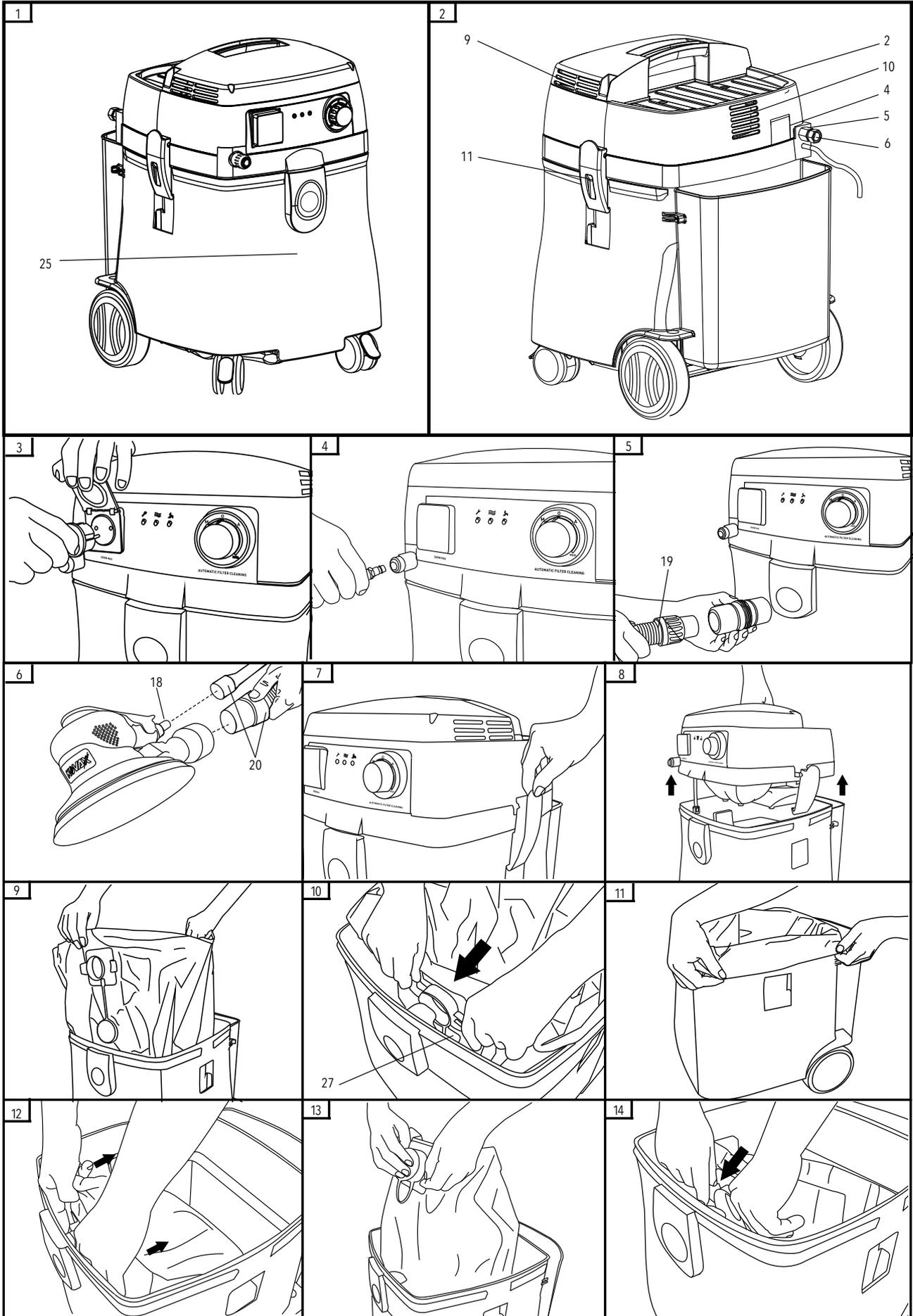


ALWAYS DETERMINE THE DUST KIND BEFORE USAGE AND CHOOSE THE RIGHT DUST EXTRACTOR ACCORDINGLY.

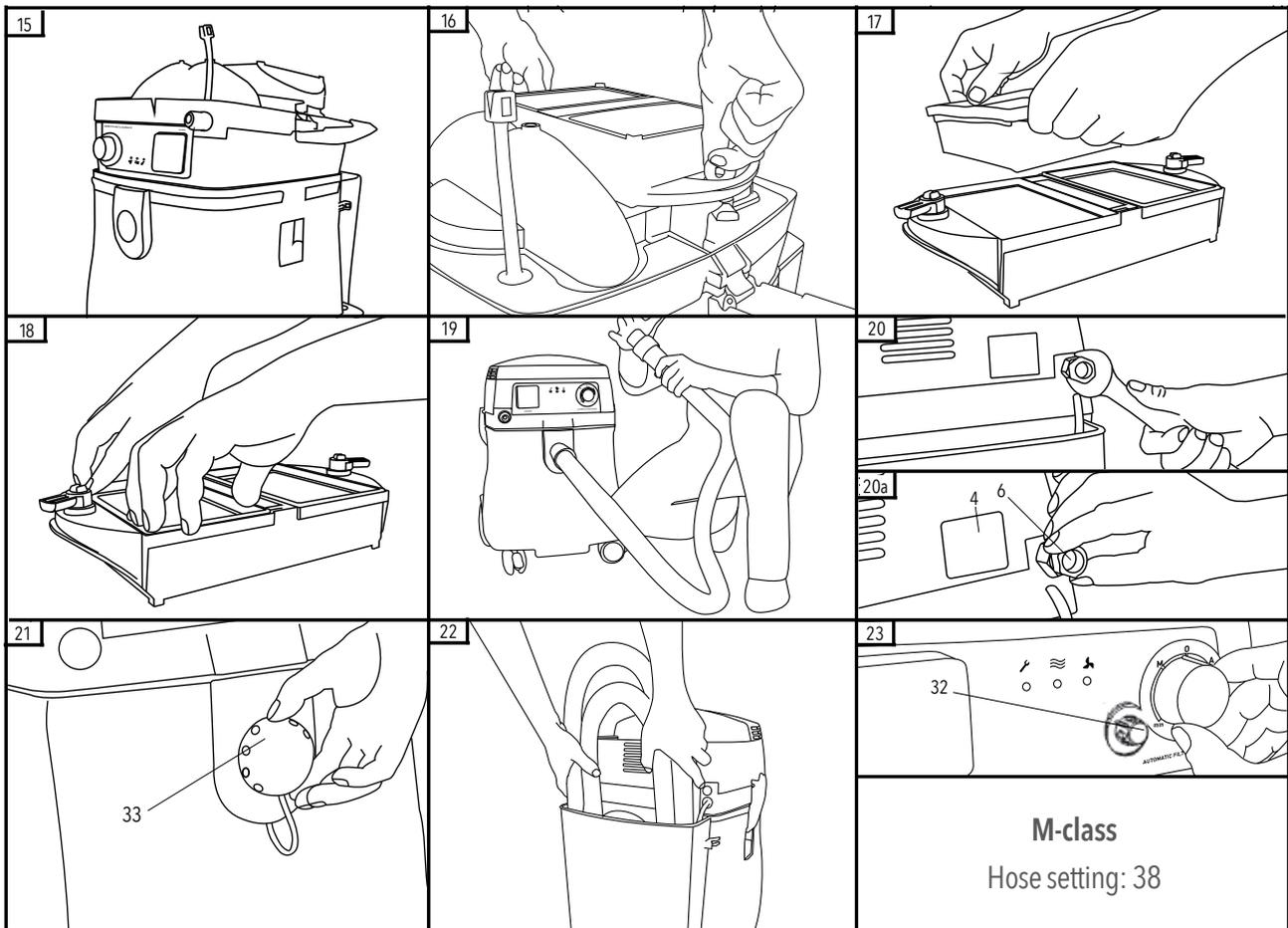
TECHNICAL SPECIFICATIONS

OPERATING VOLTAGE AND FREQUENCY	230 V - 50/60 HZ
POWER	1200 W
POWER AT SOCKET (MAX)	EU 2400 W
TOTAL POWER (MAX)	EU 3600 W
AIR CAPACITY EN 60335-2-69	165 M ³ /H
VACUUM LEVEL	215 HPA
WEIGHT	13,5 KG
DIMENSIONS	47 X 45 X 63,5 CM
CLASS OF PROTECTION	IP X 4
NOISE LEVEL EN 60704-3	73 DB (A)
FILTERS SURFACES	2 X 0,50 M ²
CAPACITY OF DUST COLLECTION BAG	MAX 5 KG
CONTAINER CAPACITY	45 L
POWER CONTROL SWITCH	MAN - O - AUT
PNEUMATIC SECTION	YES
INLET AIR PRESSURE	6 BAR
MAX COMPRESSED AIR FLOW	1450 L/MIN
INLET FITTING	3/8" G FEMALE

GETTING STARTED



GETTING STARTED



Power supply

- Turn the main switch (12) to "0" (off) before connecting this appliance to the supply mains;
- supply mains voltage and frequency must match the identification plate;
- connect to power socket outlets provided with earth conductor and adequate protections.

Compressed air mains

- Do not exceed 6 bar;
- dehumidified and filtered air required;
- connect the appliance to the compressed air main with an hose suitable for the air pressure and int. diam. 10 mm min.

Assembling the swivelling adaptor (29)

Insert the adaptor in the inlet nozzle (28).

Electrical tool connections

- Check for the tool switch turned off before connecting it to the front panel socket outlet.
- Insert the tool plug into the front panel socket (16) (pic. 3).
- Connect the tool to the swivelling nozzle with the hose (19) (pic. 5).
- Do not plug electric tools exceeding the power indicated on the front panel.

GETTING STARTED & MACHINE USE

Pneumatic tool connections

- Check for the tool switch turned off before connecting it to the front panel quick coupling.
- Connect the tool to the appliance with the quick couplings (17) (pic. 4) and (18) (pic. 6).
- Connect the coaxial hose (optional) to the quick coupling (20) (pic.6).

Preliminary checks

- Check the tool functioning as indicated on their instructions manual.
- Check that the dust collection bag (30) has been fitted in the container (25) and that the filters (23) have been fitted on the head.
- Check that the vacuum hose is properly fixed and does not hinder tool movement.
- Check that there are no leaks in the compressed air supply system.

Machine use

The machine can operate in manual or automatic mode: to select the mode, turn the switch (12) to the right (automatic mode) or to the left (manual mode) (pic. 23). The green indicator (13) turns on when the vacuum motor starts.

Using the machine in automatic mode (A)

Automatic operations mean that the vacuum starts when an electrical or pneumatic tool is turned on. The vacuum will automatically turn off eight seconds after the tool is turned off.

Using the machine in manual mode (M)

Manual operations mean that the vacuum runs continuously. Power on the front panel outlet socket is permanently active during manual running.

Adjusting the vacuum level

The vacuum level can be adjusted in both operating modes by turning the knob (12) towards the "min" position until the desired power is reached.

Automatic cleaning of the filters

The machine has a timed filter cleaning system that maintains the vacuum strength constant.

It is also possible to perform a complete cleaning cycle as follows (pic. 19):

- switch the machine off;
- cap the vacuum sleeve;
- restart the machine keeping the sleeve capped for 15 seconds.

Suction hose setting (M-class only)

For operator's safety the appliance for M-class dust are provided with an indicator which operates in case of the air velocity through the hose falling below 20 m/sec. Check the hose diameter and set the correct value on the front panel throttle (32) (pic. 23). Always use genuine Kovax hoses.

Acoustic alarm (M-class only)

In case of acoustic alarm on locate the causes (C.) and redress (R.) it with the action recommended in the following procedure:

C: Power set-up too low;

R: Increase the suction power;

C: The hose diameter doesn't match with the hose set-up on the front panel;

R: Set the hose diameter knob (32) on the right diameter;

C: Clogged or bended hose;

R: Check and set straight the hose;

C: Dust bag full;

R: See dust bag "REPLACEMENT SECTION";

C: Clogged filers;

R: See filter cartridges "REPLACEMENT SECTION".



AFTER OPERATING IN HAZARDOUS DUST CONTAMINATED ENVIRONMENT ALL APPLIANCE PARTS MUST BE CONSIDERED AS CONTAMINATED; BEFORE HANDLING THE APPLIANCE OUT THE CONTAMINATED AREA OR SERVICING IT, REMOVE ALL THE DUST FROM IT WITH VACUUM OR CLOTH, SEAL THE DUST CONTAINER WITH THE RUBBER CAP (33), AND STORE HOSE AND ACCESSORIES IN A SEALED BAG (M-CLASS ONLY).

Wet vacuum

Before vacuuming liquids, remove the dust bag(paper or plastic) and replace the paper filters cartridges with polyester ones. The filters should be damp after vacuuming. Do not operate with dry dust with wet filters!

Liquid level indicator

The vacuum motor stops and the liquid level indicator (14) turns on when the liquid sensor (24) detects the bin (25) full. Empty the bin to reset (25).

Service indicator (15)

The indicator turns on for scheduled service to keep the machine working conditions. When warning light is on contact Kovax to check and service the appliance and reset the warning light. The prolonged use of the vacuum cleaner with the warning light on can cause more maintenance operation.

Ordinary operations check

- Check the vacuum hose conditions.
- Clean the liquid level sensor (24).
- Check the power cord, plug and outlet socket conditions: in case contact Kovax for replacement.
- Check the dust bag: do not exceed recommended weight and capacity! In case of laceration or perforation of the dust bag check the filter cartridge and eventually ask Kovax for replacement.
- Check filter cartridges condition (23). In case of lacerations or perforations contact Kovax for replacement.

MAINTENANCE

Bag replacement

- Wear an adequate dust mask.
- Detach the vacuum head pushing the side hooks (11) and remove the vacuum head (1) (pic. 7-8).

Paper bag:

- M-class: seal the dust container with the appropriate cap (33).
- Remove the full bag closing the nozzle with the cap provided (pic. 12 and 13).
- Put the new bag inserting the nozzle as illustrated (pic. 14).

Plastic bag:

- Remove the full plastic bag (pic. 9).
- Place the new bag, verifying that the nozzle is positioned on the inlet (pic. 10).
- Turn the bag edge as shown (pic. 11); make sure to keep the compensation holes inside the bin.



DO NOT USE THE APPLIANCE WITHOUT THE FULL FILTER SET FITTED!
DO NOT SPREAD DUST DURING DUST BAG OR FILTER REPLACEMENT!

Filter replacement

- Wear adequate filter mask.
- M-class: seal the dust container with the appropriate cap (33).
- detach the vacuum head pushing the side hooks (11) (pic.7-8).
- turn the vacuum head upside down (pic.15).
- remove the filter frame (21) turning the hooks (22) (pic. 16).
- remove the filter cartridges (pic. 17) and fit them into a sealed disposal bag.
- fit new filter cartridges in the filter frame (pic.18) and reassemble it on the vacuum head.



USE GENUINE KOVAX SPARE PARTS ONLY.
CONTACT KOVAX FOR PART CODES.

Kovax Europe B.V. will not be held responsible for direct or indirect damages resulting from non-compliance with the requirements of this manual.

Disposal

For EC countries only: According to the European Directive on Waste from electrical and electronic equipment and its implementation in conformity with national standards, exhausted electrical equipment must be collected separately, in order to be recycled in an environmentally friendly way. The product, when it reaches the end of its life, must not be dispersed in the environment or thrown away as household waste. It must be disposed at authorized recycling centres (contact your local authorities to know where to dispose of the product according to the law). The correct disposal of the product contributes to the health and preservation of the environment. Illegal disposal of the product will entail penalties against the offenders.

TROUBLESHOOTING & SOLUTIONS

EFFECTS	CAUSES	SOLUTIONS
The motor will not start	No power	Make sure the unit is plugged in
	Power cord, switch or motor defective	Contact Kovax
The vacuum does not start automatically	Electronic module	Contact Kovax
Vacuum flow is insufficient	Bag full	Check the filter bag
	One of the hoses or accessories is clogged	Check the flexible hose and the accessories
	Clogged filters	Check the filters cartridges
Dust from the exhaust (10)	Filter cartridge torn ripped	Contact Kovax
Tools do not start	3-way switch malfunction	Contact Kovax
Insufficient Power for pneumatic tool	Insufficient compressed air feeding	Check air passage
Red indicator on	Ordinary maintenance limit exceeded	Contact Kovax
Yellow indicator on	Max. liquid level exceeded	Empty the bin



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